

Social Action to Promote Clothing Sustainability:
The role of transformative learning in the transition towards sustainability

by

Lisa Quinn

A Thesis Submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfillment of the requirements of the degree of

Doctor of Philosophy

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Winnipeg

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FACULTY OF GRADUATE STUDIES

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ABSTRACT

Sustainability is a journey, not a destination is an adage which certainly holds true for those seeking to live a sustainable lifestyle. Perhaps the essential factor inducing and guiding this movement towards a sustainable consciousness is *learning*. This study explores a select group of individuals' continuing journey towards a more sustainable way of life, focusing specifically on clothing sustainability. Mezirow's transformative learning theory provides the theoretical foundation for this exploration, offering an explanation of the learning process underlying these journeys. According to Mezirow's critics, however, his theory does not adequately delve into the relationship between transformative learning and social action, such as that taken to promote and support sustainability. This research sought not only to understand the learning process in the context of sustainability and the thoughts and actions of those committed to clothing sustainability, but also to bridge the gap between transformations and social action.

Thirty-two individuals participated in Phase One of this two-part study, engaging in an interview and a survey. Seventeen of these individuals, those demonstrating either a steady commitment to a sustainable way of life or a strong desire to adopt a more sustainable lifestyle, participated in Phase Two, which included a life-grid interview. A small subset of this group also took part in a journaling exercise.

Drawing on these data sources, this thesis provides insight into transformative learning, namely the key introductory points for sustainability during the lifespan, the types of experiences triggering learning for sustainability, the essential role of instrumental learning in transformative learning and social action, and the complexity of

the frame of reference. It also provides a greater understanding of social action, identifying the variables of social action, the different layers of barriers participants encountered in putting their learning into action, and the vital importance of a strong support network to both learning and action. Finally, this thesis proposes a model for depicting the relationship between transformative learning and social action.

ACKNOWLEDGEMENTS

As this journey ends and another begins, I want to stop and take a moment to thank everyone who has contributed to my learning experiences and helped me to complete this study. I would like to begin by thanking my amazing advisor, John Sinclair, who has been unbelievably supportive, understanding and encouraging, in addition to being a great guide and a valuable source of academic advice. Thank you also to my advisory committee - Alan Diduck, Lena Horne and Bob Gibson – for posing challenging questions, providing thought-provoking recommendations and sharing their perspectives and experience.

I want to thank my incredible participants. Each shared their journeys so readily, revealing poignant memories such as spending time in small villages with little money, but much happiness; sewing a quilt with their partner for their baby daughter, or starting a new sustainable business. It was a privilege to hear their stories and, by calling on them to critically reflect on their experiences, I was honoured to play a small role in their continued transformation. I am also greatly appreciative to them for inspiring me to further my own personal exploration of sustainable attitudes, beliefs and actions.

I also wish to acknowledge the support of my generous funders, the Social Sciences and Humanities Research Council and the Province of Manitoba.

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8.3 Enriched Theory of Planned Behaviour Model 342

Shaw, D., Shiu, E., Hassan, L., Bekin, C. & Hogg, G. (2007). Intending to be ethical: an examination of consumer choice in sweatshop avoidance. In G. Fitzsimons & V. Morwitz (Eds.), *NA - Advances in Consumer Research Volume 34* (pp. 31-38). Duluth, MN: Association for Consumer Research.

Chapter 1

INTRODUCTION

1.0 Adverse Impacts of Apparel Production and Consumption

Clothing is a necessity for human survival. It provides physical protection against the elements and bodily injury. Clothing is also an integral part of our self-image, a means of consciously or unconsciously expressing ourselves and communicating with others (Cunningham & Voso Lab, 1991; Damhorst, Miller-Spillman & Michelman, 2005). Along with air, water, food and shelter, clothing is universally demanded across the globe, with virtually every member of our species requiring apparel in some form or another. Unfortunately, conventional modes of producing, using and disposing of apparel can have significant adverse impacts on the environment, as well as people and communities. Throughout their lifecycle, garments diminish natural resources, including fossil fuels, soil, air and water, and generate emissions, effluent and solid waste. Further, the demand for lower-priced goods has led to a reduction in garment workers' wages and a decline in working conditions.

These adverse impacts are exacerbated by the developed world's excessive consumption of clothing. The design and mass production of apparel is greatly influenced by the fashion industry, a powerful entity that thrives on continual change and the constant introduction of new or adapted styles. Many individuals living in the western world have been indoctrinated by the philosophies of the fashion industry and our consumer-culture, eagerly parading the latest clothing trends and/or critiquing those who do not. For many people, garments are no longer a necessity, but a luxury good, and for some of these individuals clothing serves primarily as a means of adorning

themselves and conspicuously displaying their affluence (Slater, 2003). Such consumers may deem garments “old” before they have reached the end of their life and dispose of them in what may be considered an unsustainable manner, thereby filling landfills and wasting valuable resources. With significant recent economic growth in China and India, the drive to consume in excess of that which is needed to survive is only expected to increase. Between these two nations, there is the potential for an additional two billion people demanding luxury consumer products (Kalish, 2007), including fashion apparel.

Despite the environmental damage and social ills associated with apparel production and consumption, at a basic level, clothing is a necessity of life. Eliminating production to combat its impacts is not an option. However, efforts can be made to reduce the ecological footprint and negative social consequences of clothing production, to extend the life-span of apparel items, to improve end-of-life management, to alter detrimental consumption patterns, and to build upon positive elements of our existing production and consumption practices. Producers, governments, educators, researchers, information providers, the media and consumers/individuals all have key roles to play in achieving these ends (Allwood, Laurson, de Rodriguez & Bocken, 2006). For example, apparel producers might integrate environmental concerns, such as resource use, pollution and final disposal, in the development of new lines. This integration could lead to clothing that uses fewer resources and employs greener materials. The clothing itself could have longer life spans and be easily repaired, remanufactured and recycled (Allwood et al., 2006; Claudio, 2007; Fletcher, 2008). They could also ensure that their operations, as well as those of their suppliers and contractors, provide for fair and safe work conditions. Governments might develop and enforce regulations to protect

resources and human health within their jurisdiction (Fletcher, 2008). They might also take measures to ensure imported products are manufactured in a sustainable manner and are safe to consumers, which may include voluntary initiatives with producers and consumer education (Firoz & Ammaturo, 2002; Rudell, 2006). In addition, governments might also work internationally, with corporations and other governments, to help ensure global environmental and human rights protection. Finally, consumers/individuals might factor ethical considerations into their purchasing decisions, take steps to reduce their consumption, explore ways to extend the lifespan of their wardrobe, and clean their clothing in a manner which uses less energy, water and chemicals (Allwood et al., 2006; Fletcher, 2008; Shaw, Hogg, Wilson, Shui & Hassan, 2006).

The focus of this research was the actions of consumers/individuals. It explored why some individuals have chosen to engage in social action in an effort to change unsustainable attitudes and practices related to clothing. Of those who are making the effort, some may resolve to dramatically modify their individual behaviour (e.g., vowing to consume only sustainable goods or to reduce their consumption significantly), while others may elect to engage in collective action, attempting to influence the attitudes and behaviour of others and, ideally, change society (e.g., participating in a letter writing campaign protesting worker abuse) (McGregor, 2002; Micheletti & Stolle, 2007; Nelson, Rademacher & Paek, 2007; Sandlin, 2004b; Shove, 2003).

1.1 Transformative Learning Theory

Adult learning, both formal and informal, is vital to the transformation of individuals and social institutions, and an essential element in our path towards a

sustainable society (Keen & Mahanty, 2006). The theory of transformative learning provides a comprehensive explanation of individual learning in adulthood. This includes transformative experiences, a profound type of learning in which an individual, by critically reflecting on his or her personal experiences, revises or develops a new awareness that influences his or her comprehension, perceptions and actions (Fitzpatrick & Sinclair, 2003; Mezirow, 1990a, 1994).

All individuals function within a structure of deeply ingrained assumptions, attitudes and values typically assimilated in childhood. This structure is referred to as a frame of reference and acts as a filter, allowing adults to assess and interpret their experiences (Clark, 1993; Merizow, 1990a, 1994). Although the theory includes several types of learning that can lead to changes in our frame of reference (Chapter 2), it is the learning that results in transformations of our worldviews that dominates the literature. These experiences are far more substantial than general learning and can have a significant impact on one's understanding and views of the world, influencing future interactions and decisions (Clark, 1993). A transformation begins with a disorienting dilemma (or series of disorienting occurrences) that contradict deeply-rooted assumptions, attitudes and values, compelling an individual to reflect upon their experiences and potentially revise their frame of reference (McDonald, Cervero & Courtenay, 1999; Mezirow, 1994).

The outcome of the reflection process is ideally a more independent, open-minded, socially-conscious learner who critically evaluates the prevailing ideologies and actively participates in guiding social change (Diduck & Mitchell, 2003; McDonald, Cervero & Courtenay, 1999; Merizow, 1990a, 1994; Merriam, 1993). As such, learning that

precedes a perspective transformation is viewed as a powerful tool for inspiring individual and collective social action, leading many in the natural resource management and education fields to regard this form of learning as a possible means of attaining a sustainable society (Feinstein, 2004; Fitzpatrick & Sinclair, 2003; Lange, 2004; Sinclair & Diduck, 1995). However, there is a dearth of research that considers how an individual's transformation leads to collective social action and societal change (Collard & Law, 1989; Scott, 2003). To date, academics have focused on analyzing the individual learning and transformation process without fully exploring if, when, and how such transformations lead individuals to take collective social action.

1.2 Purpose

The purpose of this research was to examine the role of transformative learning in adults' adoption of sustainable clothing practices and their engagement in other forms of social action to advance clothing sustainability, and the implications of such shifts for sustainability.

1.3 Objectives & Research Questions

The objectives of the project were:

- i) To examine the learning associated with the decision to adopt sustainable clothing practices and/or engage in other forms of social action to promote clothing sustainability.

- (a) What were the triggers (e.g., information, events, and/or activities) which led to participants' shift in attitudes and behaviours?
 - (b) What instrumental and communicative learning outcomes did participants gain?
 - (c) What role did discourse and critical reflection play in the learning process?
 - (d) Did the process described by participants correspond with the transformative learning process as described by Mezirow?
 - (e) What did participants believe may have eased and/or improved their learning experiences?
- ii) To explore the concept of social action in the context of advocacy for clothing sustainability.
- (a) What are the key elements of social action?
 - (b) What types of sustainable clothing practices and other forms of social action have participants engaged in?
 - (c) What barriers did participants encounter which may have hindered their participation in social action and how were these overcome?
- iii) To describe the linkages among learning, transformation and social action.
- (a) How have participants' attitudes and behaviours related to clothing changed?
 - (b) What role did participants' support networks play in the learning process and social action related to the sustainability of clothing?
 - (c) What is the role of transformative learning in the social action process?

- iv) To explore the extent to which an individual's clothing practices may affect or otherwise be related to other sustainable lifestyle choices.
 - (a) What other sustainable lifestyle activities did participants engage in?
 - (b) Was engagement in sustainable clothing practices the participant's introduction to sustainable lifestyle choices or one of many steps they had taken in their transition to a sustainable lifestyle?

1.4 Research Plan

To address the proposed objectives and research questions, I reviewed the fundamental literature related to this topic and, using a mixed method, case study approach, I conducted a series of in-depth interviews, administered a survey, guided a journal exercise and led a set of life-grid interviews.

1.4.1 Literature Review

A review of the literature related to transformative learning theory, social action, and clothing sustainability was conducted (Chapter 2). Materials were gathered from a variety of sources, including academic journals and books, textile and apparel trade journals and magazines, newspapers, and government reports.

1.4.2 Case Study

A case study approach was used to explore individuals' learning and behavioural change. Case studies are an effective research tool when refining an existing theory

(Berg, 2004; Creswell, 1994) and allow for the use of an array of data collection methods (Yin, 2009). Case studies are also a commonly used research framework among those exploring transformative learning (e.g., Kovan & Dirkx, 2003; McDonald, Cervero & Courtenay, 1999; Merriam, 2006; Sims & Sinclair, 2008). Using a single, holistic, instrumental case study (Berg, 2001; Yin, 2009), this research focused on individuals engaged in sustainable clothing practices and other forms of social action in Winnipeg, Manitoba, Canada. The case study was divided into two phases. Phase One provided an overview of participants' attitudes, beliefs and actions in relation to clothing sustainability. It included a semi-structured, in-depth interview and a survey (Appendices A and B). Phase Two explored the learning process, learning outcomes, transformations, and subsequent behavioural changes in greater detail, through an in-depth life-grid interview. A life-grid is a temporal referencing tool used to help in the collection of retrospective data. It is used to gather pertinent information about significant occurrences in an individual's life (e.g., births, marriages, jobs, and holidays) which are then used to help trigger memories of events under study (Appendix C) (Berney & Blane, 1997; Blane, 1996; Parry, Thomson & Fowkes, 1999). In addition, a subset of the interview participants in this phase was invited to participate in a six-month journaling exercise intended to gain insight into the transformative learning process as it was happening. These five participants were struggling to adopt more sustainable practices, but were being hindered by their frames of reference.

1.5 Scope

To allow for an in-depth exploration of the attitudes and behaviours of a select group of individuals, this study was geographically limited to the Winnipeg area, the researcher's place of residence. It should also be noted that this research did not seek to assess or verify the actual behaviour of manufacturers or retailers with regards to environmental claims or sweatshop and child labour practices; rather it focused on the attitudes and behaviours of individuals choosing to purchase clothing they perceived to be sustainably produced.

1.6 Thesis Organization

This thesis is organized into nine chapters. Chapter 1 provides an overview of the research study. Chapter 2 considers the critical literature surrounding this study – namely, the transformative learning theory, the concept of social action, and issues related to clothing sustainability. Chapter 3 describes the two-phased, mixed-methods, case study approach used to address the purpose and objectives of this study.

Laying the groundwork for this study's exploration of transformative learning and social action, Chapters 4 and 5 establish participants' present-day thinking and behaviours related to clothing and sustainability. Specifically, Chapter 4 introduces the participants, in particular their concerns, motivations, attitudes and beliefs, while Chapter 5 shares the breadth of their sustainable clothing practices and other social actions.

Chapters 6 and 7 are dedicated to examining transformative learning in the context of clothing sustainability. Chapter 6 delves into the origins of participants' frames of

references, exploring the role of sustainability in participants' upbringings and the subsequent impacts it had on their childhood foundations. It also investigates the triggers which called into question their frame of reference, leading to adult learning. Chapter 7 explores the participants' experiences with transformative learning. It addresses the essential aspects of the learning process, identifies the key learning outcomes and delves into the importance of instrumental learning in the shift to a sustainable lifestyle.

Chapter 8 examines the concept of social action, recognizing the fundamental variables shaping social action, investigating the barriers to action and assessing the means for overcoming barriers.

The final chapter, Chapter 9, presents an overview of the significant findings and conclusions of this research project, bridges key concepts from different chapters (e.g., role of support networks and the relationship between transformative learning and social action), and discusses opportunities for further research.

Chapter 2

LEARNING, ACTION AND SUSTAINABILITY

2.0 Consequences of Unsustainable Consumption

In the early 2000s, annual private consumption of goods and services on a global level surpassed a staggering \$20 trillion USD - 80-percent of which was consumed by the world's wealthiest, which comprise only 20-percent of the total population (McGregor, 2002; Worldwatch Institute, 2004). With a growing global population, an expanding consumer class in many developing nations, and the apparently insatiable appetite for consumer products in the industrialized world, the rates of consumption are only expected to increase. The result of such widespread consumption has been a rapid depletion in natural resources, rampant pollution and ever-increasing risks to human health, particularly in the developing world. In fact, environmental footprint calculations demonstrate that global consumption exceeded the earth's ecological capacity back in the late 1970s (Gardner, Assadourian & Sarin, 2004). If all the peoples of the earth chose to consume at a level equal to Canada and the United States, we would need more than five planet Earths to provide the necessary resources and environmental services (Worldwatch Institute, 2004, as cited in McGregor, 2007).

In addition to environmental damage, many researchers are also concerned about the impact of rampant consumption on the social fabric of both consuming and producing nations. As industrial societies readily embrace consumerism, many individuals have become "slaves to the market", working longer hours, and spending less time with family and community, in an effort to make more money to purchase goods and services (Nelson, Rademacher & Paek, 2007). Critics of consumerism note that problematic

consumption patterns often lead to a more individualistic and materialistic society, in which individual material pursuits outweigh societal goals. This leads to a decline in civic life and a waning sense of community (McGregor, 2001, 2002; van Koppen, 2007). In producing nations, societal concerns are related to the rapid expansion of the manufacturing sector, which has been a contributing factor in the migration from rural areas to urban centres. In many areas, this has resulted in significant changes to family life, community structure and traditional ways of life. Within the overpopulated urban centres, residents face severe issues such as poverty, social inequality, environmental degradation, and increased risk of disease and exposure to chemical hazards (McMichael, 2000). Furthermore, in many of the producing nations, regulations to protect workers' rights are non-existent or poorly enforced. As a result, workers often receive extremely low wages, are forced to work long hours without adequate compensation or rest, and must endure unsafe and abusive work environments (Cheek & Easterling Moore, 2003; Micheletti & Stolle, 2007; Ross, 2006; Weadick, 2002)¹.

Consumption, however, is necessary for the survival of a species. As humans, we must consume air, food, water, and the materials and energy necessary to construct shelter and clothing. It is not consumption, per se, which is the problem, but rather the *patterns of consumption* prevalent in modern western society; patterns which are increasingly being emulated in the more prosperous parts of the developing world (McGregor, 2002). It is the quantity of goods and services being consumed, the hasty pace of consumption, the types of goods and services consumed (e.g., items not required

¹ An overview of the adverse environmental and social effects of clothing production and consumption can be found in Appendix D.

for survival, goods produced in an environmentally or socially unsound manner, goods which require significant resources to be operated and maintained), the short period of use, and the premature disposal that is so destructive (McGregor, 2002; Schoot Uiterkamp, 2007; van Koppen, 2007).

Equated with the welfare of society, consumption became one of the primary goals of the 20th century. The belief that consumption would bring happiness, freedom, self-fulfillment, social status, prestige, and a higher standard of living has been the driving force of consumerism (McGregor, 2001, 2002, 2005b). However, over the last several decades, an increasing number of people have come to question these beliefs and the society they have built. We have been socialized to consume, often placing our own individual needs and wants above those of shared societal and ecological interests. Consumption has become embedded in our daily lives, which for many people, has led to “an inordinate attachment to material things and possessions. This materialism occurs at great cost to the person consuming, to those who make the goods and services, to other species, and to the natural environment” (McGregor, 2007, p. 16).

It has been suggested that addressing unsustainable consumption patterns and the related adverse effects can only be accomplished through the combined efforts of government, industry, educators, researchers, purveyors of information and consumers, acting both as individual entities and in concert (Allwood et al., 2006; Shaw, Hogg, Wilson & Hassan, 2006). The focus of this thesis is on the latter group, or more specifically those individual citizen-consumers who have taken action to either change their individual consumption practices or to affect a societal shift by transforming the perspectives and behaviours of industry, government or other citizen-consumers.

Learning is increasingly being recognized as an essential component in our transition to a sustainable society (Fitzpatrick & Sinclair, 2003; Keen, Brown & Dyball, 2005), playing a vital role in the transformation of individuals, and their subsequent efforts to instigating broad societal change. Thus, in preparation for undertaking this study, I began with a review of the literature on adult learning, specifically the theory of transformative learning, introducing its essential elements and discussing how it can lead to individual transformations. I then explored the concept of social action, studying how this form of action is addressed in the writings of Mezirow, Freire and Habermas, as well as in the literature on social learning and critical consumer education. Finally, I concluded this chapter with an overview of the problems associated with one of the most conspicuous consumer products – clothing. This section presented a survey of the literature on consumer attitudes and behaviour towards sustainable apparel and introduced various actions individual consumers could take to reduce their clothing footprint (termed sustainable clothing practices) and the collective action available to individuals to influence broader societal change in relation to clothing sustainability.

2.1 Transformative Learning Theory

Transformative learning (TL) is an evolving theory of learning in adulthood. Originated by Jack Mezirow, an adult educator, it has been adopted by a wide range of researchers to study a diverse array of learners, from AIDS patients and ethical vegans to Costa Rican farmers and university students studying traditional ecological knowledge (Feinstein, 2004; McDonald, Cervero & Courtenay, 1999; Sims & Sinclair, 2008; Taylor, 2007). Focused on the *process* of learning, TL is intended to be a comprehensive,

abstract and universally-applicable theory on how adults learn (Diduck & Mitchell, 2003; Mezirow, 1994; Sims & Sinclair, 2008).

According to the transformative learning theory, a disorienting dilemma (or series of occurrences) will lead individuals to question the frame of reference they use to interpret their experiences, which in turn may lead them to revise the way they think and act (Feinstein, 2004; Moore, 2005; Taylor, 2007). The outcome of transformative learning is ideally an emancipated, autonomous thinker – i.e., an individual who is willing to reflect upon his or her values, beliefs, and assumptions in order to develop a frame of reference that is more open and malleable, yet discriminating, rather than uncritically accepting and acting upon the opinions of others (McDonald et al, 1999; Mezirow, 1997a; Moore, 2005). In contemporary western culture, the rapid pace of societal change and the diminishing role of traditional authoritative figures (e.g., religious leaders, politicians, scientific experts) has increased the importance and value of autonomous thinking (Mezirow, 1994, 1997a), resulting in a growing interest in the exploration of Mezirow's theory on learning.

2.1.1 Frame of Reference

The process of learning involves interpreting and assigning meaning to our experiences. A frame of reference is comprised of the assumptions, values, and expectations we use to filter and shape our experiences. It is through our frame of reference that we are able to comprehend and make meaning of the world (Clark, 1993; Mezirow, 1990a, 1994). We typically resist concepts, views and information that do not

agree with our frame of reference – rejecting them as nonsense, irrelevant or wrong. However, there are times when we are confronted with an experience which conflicts with our frame of reference and we strive to understand it by examining our basic assumptions, values and expectations, and questioning whether they may in fact be distorting how we have interpreted the experience (Mezirow, 1994, 1997a; Moore, 2005). Ideally this process results in a more functional, superior frame of reference, which is,

...more inclusive, discriminating and integrative of experience, is based on fuller information, is freer from coercion or distorting self-deception, more open to other perspectives and points of views, more accepting of others as equal participants in discourse, more rational in assessing contending arguments and evidence, more critically reflective and more willing to accept an informed and rational consensus as the authority for adjudicating conflicting validity claims. (Mezirow, 1989, p. 171)

A frame of reference has two domains – meaning schemes (point of view) and meaning perspectives (habits of mind) (Mezirow 1994, 1997a). Meaning schemes are the specific beliefs, values, expectations, feelings and judgments we hold that permit us to interpret our experiences and guide our actions (Mezirow, 1991, 1994, 1996). They are the dynamic component of our frame of reference – constantly changing as we shape and refine our interpretations (Mezirow, 1997a; Moore, 2005). Our meaning perspectives, on the other hand, are constructed of clusters of meaning schemes. As a result, they are more deeply engrained and far less amenable to change (Mezirow, 1991, 1996, 1997a, 2000). Meaning perspectives “constitute codes that govern the activities of perceiving, comprehending, and remembering” (Mezirow, 1991, p. 4). They are comprised of three categories of assumption or sets of codes. These are epistemic codes, which encompass our knowledge and how we use it; socio-cultural codes, which include our social norms,

cultural structures and ideologies; and psychological codes, which consist of our self-concept, personality traits and attitudinal orientations (Mezirow, 1991, 1994; Moore, 2005).

Our frame of reference is established in childhood through the process of socialization. Through interactions with parents, close family members, teachers, and mentors, we uncritically accumulate our beliefs, assumptions and values, and establish our personal viewpoints and ideologies. These meaning structures are reinforced, expanded, refined, or transformed as we, as adults, encounter experiences which support or challenge our understanding of how the world works (Mezirow, 1990a).

2.1.2 Forms of Learning

As noted earlier, Mezirow's transformative learning theory is intended to be an all-encompassing theory of adult learning. But, of course, not all learning is transformative in nature. Thus, despite being termed the transformative learning theory, Mezirow (1991, 1994, 1997a) explains that his perspective includes four different processes for learning:

1. Developing a new meaning scheme
2. Refining or expanding an existing meaning scheme
3. Transforming a meaning scheme
4. Transforming a meaning perspective

In the first two processes of learning, what the individual learns easily fits within their frame of reference – he or she is simply elaborating or adding to their existing point

of view. However, the latter two processes of learning involve an individual encountering an experience that contradicts their frame of reference. In the case of my study, an example of a meaning scheme transformation may be an individual reading an article about the environmental impacts of conventional cotton production and deciding to try to buy organic cotton garments whenever possible. This would be a transformation in their attitudes and values related to cotton. If this individual continued to have enlightening experiences related to the environmental impacts of clothing, and each time takes further steps to rectify his or her purchasing behaviour, such an *accumulative transformation* in meaning schemes would likely result in a transformation of his or her related meaning perspective(s). This type of transformation is more common.

An *epochal transformation*, a dramatic shift in ones meaning perspective (i.e., the fourth learning process), is a far more intense and often difficult change, and is therefore less commonplace. An example, in the case of my study, may be that of an individual who, after suffering a severe health crisis, decides to eliminate all harmful chemicals and goods produced with harmful chemicals from his or her lifestyle. Or an individual who travels to a community involved in the production of textiles and, seeing first-hand the pollution and health impacts resulting from such production, decides to drastically alter their relationship with and practices related to clothing.

2.1.3 Transformation Process

Frames of reference are transformed through *critical reflection*, which involves contemplating and critiquing previously unquestioned assumptions (Clark, 1993;

Mezirow, 1990a). Critical reflection may be triggered by a disorienting dilemma, one which challenges our existing worldview and current way of thinking. As previously noted, our frame of reference is typically uncritically assimilated during childhood, and as a result, not all of these beliefs, feelings, values and attitudes remain practical in adulthood (Mezirow, 1994). Through examining the origins of our assumptions and the impact they have on our interpretations, we are able to determine which are functional and which are erroneous or distorted, and thus need to be revised (Mezirow, 1990a, 1994).

According to Mezirow, reflection typically occurs within a problem-solving context, with the learner assessing the content, process or premise(s) of his or her effort to understand and give meaning to an experience (Mezirow, 1991, 1994). *Content* reflection refers to examining the description of the problem, while *process* reflection entails an assessment of the strategies and procedures followed in order to address the problem. Content and process reflections are the way in which meaning schemes are transformed, an everyday event.

Premise reflection, however, is the process through which meaning perspectives are transformed. It involves reflecting upon the relevance and merit of the problem itself. Rather than concentrating on problem-solving, premise reflection focuses on problem-posing, which “involves making a taken-for-granted situation problematic, raising questions regarding its validity” (Mezirow, 1991, p. 105). Thus, when faced with a disorienting dilemma and seeing no successful results from their customary problem-solving approach, an individual may choose to reflect upon and change the assumptions which no longer work.

Based on empirical studies, Mezirow has identified the phases of a perspective transformation (i.e., the critical premise reflection process). After encountering a disorienting dilemma (or series of disorienting experiences), an individual may:

1. Engage in self-examination
2. Undertake a critical assessment of his or her dysfunctional assumptions
3. Appreciate others have experienced discontent and undergone similar changes
4. Explore new possible roles, relationships and actions
5. Develop a plan of action
6. Acquire the knowledge and skills necessary to implement the plan of action
7. Test out new roles, behaviours and actions
8. Renegotiate existing relationships and create new relationships
9. Develop self-confidence and grow comfortable with new roles and relationships
10. Incorporate the new perspective into one's frame of reference

(Mezirow, 1991, 1994, 2000).

It should be noted that not all individuals will necessarily experience these phases in this order, some may skip certain phases and others may backtrack, repeating several phases (Moore, 2005).

2.1.4 Instrumental and Communicative Learning

Mezirow's theory differentiates between learning that is instrumental and learning that is communicative. *Instrumental learning* involves learning to control or manipulate our environment (Mezirow, 1990a, 1994, 1997a). It involves acquiring the competencies

and technical understanding needed to cope in the world (Diduck & Mitchell, 2003). In contrast, *communicative learning* involves learning to understand the meaning of what others are communicating. It involves interpreting and understanding values, emotions, intentions, and beliefs relayed through speech, writing or other artistic means of communication (e.g., art, dance, drama) (Mezirow, 1990a, 1994, 1997a). If the learning experience corresponds with an individual's existing meaning schemes or perspectives, the experience will simply reinforce or expand these structures. If it is a new experience, the individual will create a new meaning scheme to accommodate the recently acquired skill, belief or knowledge. However, individuals are often faced with learning experiences which they do not understand, they question the truthfulness or validity of, or they find are in opposition to their previous understanding. Instrumental learning can be subjected to empirical testing, allowing individuals to test and verify assertions. Communicative learning, however, requires the individual to interpret the values, beliefs, motivations, feelings, and opinions of another person, and, therefore, cannot be empirically tested. An individual may turn to an authority figure to clarify (e.g. priest, teacher or expert) or rely on force to verify the assertion (e.g., government, court system or physical violence) (Mezirow, 1990a, 1994). Or, as advocated in transformative learning, they may engage in *discourse* to determine the validity of communicative assertions (Mezirow, 1994, 1997a). Discourse refers to an active dialogue in which an individual examines the evidence and arguments in support of and against a particular assertion. To do so, the individual will turn to others (including authors of published works) they consider well-informed, logical and impartial, to gather information in order to arrive at the best collective judgment with regards to the truth of the assertion. This

best judgment will stand until new evidence or arguments arise which present a strong and rational alternative viewpoint (Feinstein, 2004; Mezirow, 1994, 1997a). Discourse is considered emancipatory in that it frees the learner from having to rely on others to negotiate meaning, allowing them to independently interpret their experiences and guide their own action.

2.1.5 Transformative Learning in Practice

Since its introduction over thirty years ago, the transformative learning theory has been one of the most highly debated and studied theories in the field of adult education (Taylor, 2007). The aspects of transformative learning being researched and the subject matter to which the theory is applied vary widely, ranging from the study of how HIV-positive individuals make meaning of their lives (Courtenay, Merriam & Reeves, 1998) to the effectiveness of different educational tools in fostering transformative learning experiences in a high-school zoology class (Pugh, 2002). Of greatest relevance to this project were studies that explored transformative learning in the contexts of the natural resource and environmental management and/or environmental education (e.g., Diduck & Mitchell, 2003; Kerton & Sinclair, 2010; Sinclair, Collins & Spaling, 2011) and studies related to transformative learning in informal settings (e.g., Baumgartner, 2002; Kovan & Dirkx, 2003; McDonald, Cervero & Courtenay, 1999). Of those centered on natural resource issues, several studies focused on transformative learning experiences occurring as a result of public participation in environmental assessments (Diduck & Mitchell, 2003; Fitzpatrick & Sinclair, 2003) and a number of others concentrated on community involvement in the management of natural resources (Marschke & Sinclair, 2009; Sims &

Sinclair, 2008; Sinclair, Collins & Spaling 2011). In terms of the studies of informal learning, of greatest interest were those that focused on the learning that led to significant life changes. These included studies that delved into the path to ethical veganism (McDonald, Cervero & Courtenay, 1999), that explored how those working in the environmental non-profit sector came to their “calling” (Kovan & Dirkx, 2003) and that examined the learning which occurred in individuals purchasing local organic food (Kerton & Sinclair, 2010).

2.2 Social Action

Transformative learning is viewed as a valuable tool in the efforts of educators, natural resource managers, and environmental advocates to guide society towards sustainability. However, to achieve sustainability at a broader societal level, transformative learning must move beyond the individual. Individual transformations must be coupled with a desire and willingness to follow through on a new perspective and act in a manner which is beneficial to the environment and society – be it an individual effort to change personal habits to support or promote sustainability (e.g., reducing personal consumption), making others aware of a particular issue in hopes of changing their perspective (e.g., sharing the contents of an article with a colleague), or collaborating with others in an effort to change cultural, economic, or political structures unsupportive of sustainability (e.g., joining an ENGO which promotes voluntary simplicity).

Social action is a relatively vague concept, with people interpreting the term in diverse ways (Mezirow, 1991). Ideas surrounding social action emerged from a variety

of academic fields, ranging from sociology to education to health sciences (e.g., Bandura, 1986; Boggs, 1986; Freire, 1970; Habermas, 1984; Hollenbeck, 2005; Lange, 2004; Lavoie, 2012; Parsons, 1968; Scott, 1992; Walter, 2007; Weber, 1962; Williams, 2005). In order to develop an understanding of the concept of social action and a working definition for the purposes of this thesis, this section explores the thoughts of three theorists - Mezirow, Freire and Habermas – and the ideas emerging from two related learning frameworks – social learning and critical consumer education.

2.2.1 Mezirow's Thoughts on Social Action

Mezirow's theory of transformative learning neither explicitly addresses how a transformative experience leads to social action, nor does it incorporate inquiry into the nature of social action (Collard & Law, 1989). While action does play an essential role in transformation, it is very broadly defined as "making a decision, not necessarily an immediate behaviour change" (Mezirow, 1994, p. 226). Mezirow acknowledges transformative learning may motivate a learner to engage in social action. His theory, however, is intended to be an all encompassing explanation of adult learning, and not all adult learning culminates in social action. Some learning is directed at transforming how individuals view themselves or use knowledge (Mezirow, 1994). Furthermore, Mezirow strongly believes social change stems from individual transformations, and thus has focused his theory on the foundational learning that must occur in order for social action to take place, rather than on the nature and processes of social action itself (Hostetler, 2008).

There are several researchers and theorists exploring transformative learning who do not share Mezirow's position, and consider social action as a key outcome of a transformative experience. For example, Allman and Wallis (1990) state that "the intent, then, of critical transformative learning is not just personal transformation but societal transformation so that individuals can be creative producers of self and of society and its politics and economic relations" (as cited in Lange, 2004, p. 123). In relation to social action, critics have commented that transformative learning theory does not clearly articulate the link between individual transformation and social action. They feel it over-emphasizes the individual, fails to adequately address the issue of power, and does not place emphasis on analyzing and critiquing potentially oppressive societal structures and systems (Collard & Law, 1989; Hart, 1990; Inglis, 1997; Pietrykowski, 1996).

Mezirow shares his critics' sentiments that social action is vital, but does not believe it is the only goal of adult learning (Mezirow, 1989, 1991, 1994). He explains, as is alluded to above, that meaning perspective transformation may be epistemic, psychological or socio-cultural. Epistemic changes are related to how we organize and apply knowledge, while psychological transformations are linked to how we view ourselves. It is unlikely either of these types of transformations will inspire social action (Mezirow, 1989, 1990a, 1991). Conversely, transformations of socio-cultural perspectives often will result in a learner engaging in social action in an effort to change collective practices, assumptions, ideologies, and systems (Mezirow, 1994). In doing so, learners come to realize that they are not alone in grappling with a distorted perception and that others are also struggling with the problem. They might also come to understand that there are social conventions and institutions which support and promote these

distorted systems of belief. When learners see their experience is being shared by others, they may decide to participate with like-minded individuals in an effort to challenge and change the elements of the socio-cultural system promoting these distortions (Mezirow, 1989). Unfortunately, even if an individual's socio-cultural perspective is transformed, this does not necessarily mean that he or she will engage in social action. Several factors may impede participation in social action – including a lack of knowledge or skills, situational limitations, or psychological barriers (Mezirow, 1989, 1991).

According to Mezirow (1990b, 1991), social action can take a variety of forms. Social action may involve, in cooperation with others, examining and transforming collective frames of reference or instigating change in interpersonal relationships, organizations or even systems (e.g., political, social-cultural, economic, bureaucratic, educational, etc.). The transformation of systems is generally a complex and difficult process requiring a sustained commitment of time and effort.

2.2.2 Freire's and Habermas' Thoughts on Social Action

Mezirow's theory of transformative learning is based upon the writings and thoughts of two renowned theorists – Freire and Habermas – who were dedicated to exploring how people can achieve emancipation through dialogue, reflection and social action. Pietrykowski notes, “[t]he works of Paulo Freire on education and praxis and Jurgen Habermas on philosophy and critical social theory can be interpreted as complementary dimensions of a humanistic, modernist project oriented to the concrete goal of human emancipation from forms of material, culture and psychological

oppression” (1996, p. 83). Despite social action being an essential component of the works of both Freire and Habermas, as discussed above, it is a notion not well-developed by Mezirow. Thus, in an effort to better understand the concept of social action and how it might be linked to the transformative learning theory, I have reviewed how Freire and Habermas address social action in their writings. In particular, I explored their views of oppression and emancipation and the key concepts and terminology related to their views on social action.

In Freire’s work, the concepts of oppression and emancipation arise from his experiences in the developing world. He found that broad societal oppression was the result of the elite seeking to dominate other classes by following the principles of conquest, divide and rule, manipulation, and cultural invasion (Freire, 1970/2000). In his landmark book, *Pedagogy of the Oppressed*, Freire introduces what he deems to be the necessary elements of emancipation at both a societal level and an individual level. With regards to societal change, he introduced the *Dialogical Theory of Action*, the key features of which are in direct opposition to the tools of oppression and include:

- *Cooperation.* Subjects, through dialogue, engage in a critical analysis of their reality using a cooperative problem-solving approach.
- *Unity of liberation.* Subjects seek to identify what binds them to their oppressors, thereby allowing them to adhere to the concept of liberation and bringing them together with other subjects as they choose to collectively transform their reality.
- *Organization.* The educational component of the revolutionary process, through which the people learn to bear witness to their situation, explaining the struggle in their own words.

- *Cultural Synthesis*. The leader and the people mutually define and shape a plan of “systematic and deliberate” action for societal reform.

To participate in dialogical action, an individual must first become an engaged, critical-thinker. Freire (1970/2000) explains that within oppressive societies, traditional education – which he terms “banking education” – is one of the primary tools used by the elite to exert control. It is a top-down, non-reflective model of learning, in which students simply receive information from the teacher.

Education thus becomes an act of depositing, in which the students are the depositories and the teacher the depositor. Instead of communicating, the teacher issues communiqués and makes deposits which the students patiently receive, memorize, and repeat. This is the ‘banking’ concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing and storing the deposits. (Freire, 1970/2000, p. 72)

Freire advocates an alternative approach to education – termed liberating or problem-posing education - which involves people teaching one another through a process of dialogue and reflection. “The students – no longer docile listeners – are now critical co-investigators in the dialogue with the teacher. The teacher presents the material to the students for their consideration, and reconsiders her earlier considerations as the students express their own.” (Freire, 1970/2000, p. 81). The ultimate goal of this form of education is students reaching *conscientização*. *Conscientização* is described as a process in which learners “achieve a deepening awareness both of the socio-cultural reality which changes their lives and of their capacity to transform that reality” (Lloyd, 1972, p. 5). Through increased awareness, reflection and dialogue, the oppressed are able to identify the incongruities within social structures (e.g., cultural, political and economic systems) and collectively accepted values, beliefs, practices, and ideologies (Lloyd, 1972;

Mayo, 1999; Mezirow, 1991). A key aspect of conscientização is that it does not stop at the development of a more critical consciousness. As the oppressed increase their awareness of their social situation, and in turn of themselves, they are motivated to engage in action in order to change their social reality (Freire, 1970/2000).

Conscientization implies, then, that when I realize that I am oppressed, I also know I can liberate myself if I transform the concrete situation where I find myself oppressed. Obviously, I can't transform it in my head; that would be to fall into a philosophical error of thinking that awareness 'creates' reality, I would be decreeing that I am free, by my mind. And yet, the structures would continue to be the same as ever – so that I wouldn't be free. No, conscientization implies a critical insertion into a process, it implies a historical commitment to make changes. (Freire, 1972, as cited in Lloyd, 1972, p. 5)

Freire stresses, however, the vital importance of integrating action and reflection – a concept he refers to as *praxis* – for action without reflection is uninformed and ineffective and reflection without action is “just talk”.

When a word is deprived of its dimension of action, reflection automatically suffers as well; and the word is changed into idle chatter, into *verbalism*, into alienated and alienating “blah”. It becomes an empty word, one which cannot denounce the world, for denunciation is impossible without a commitment to transform, and there is not transformation without action.

On the other hand, if action is emphasized exclusively, to the detriment of reflection, the word is converted into *activism*. The latter – action for action's sake – negates the true *praxis* and makes dialogue impossible. (Freire, 1970/2000, p. 87)

Habermas approaches his theory from a different background and theoretical perspective. Unlike Freire, whose concepts of oppression and emancipation arose from his personal observations of the struggles within his country, Habermas' ideas stem primarily from the notions of social theorists such as Max Weber and Talcott Parsons. According to Habermas (1984), society is comprised of the Lifeworld and the System.

The Lifeworld is the stockpile of shared and unquestioned assumptions and cultural beliefs (e.g., norms, values, codes of conduct, social roles and interactive patterns) which form the basis for our actions and behaviour. Through the use of this communal cultural and linguistic “database”, we are able to communicate with one another and negotiate common understandings regarding shared experiences and situations (Mezirow, 1991; Pietrykowski, 1996). The System, on the other hand, encompasses our socially-constructed organizational structures – namely the economic and political systems – also referred to as the “mechanisms of modernity” (Mezirow, 1991). Habermas holds that the System is oriented towards success, with the prime measures of success being money and power (Pietrykowski, 1996). Unfortunately, the System often encroaches upon the Lifeworld, shaping and manoeuvring social interactions in ways which distort communication and hinder dialogue. Through the manipulation and distortion of communication, System forces can create oppressive conditions – a process referred to by Habermas as the “colonization of the Lifeworld” (Mezirow, 1991; Pietrykowski, 1996). However, emancipation can be achieved by establishing and securing a strong public sphere in which all people can actively engage in public dialogue. Such emancipation can often only be achieved through the actions of social movements (Mezirow, 1991).

Habermas (1984) identifies two categories of social action – purposive-rational action (which can be further divided into strategic and instrumental action)² and communicative action – which differ in how they are coordinated and what they intend to accomplish. Strategic action is action oriented “to egocentric calculations of success and

² Purposive-rational action can be divided into two categories – strategic action, which is action oriented towards people, and instrumental action, or action oriented towards objects. The former would be deemed a form of social action, while the latter would consider non-social action (Habermas, 1984).

coordinated on the basis of the complementarity of interests, such as we can find, for instance, in a market situation or a bureaucratically structured arrangement” (Brand, 1990, p. 15). In strategic action, language is often distorted and inappropriately used to intimidate and control others or to rationalize the existence of systems and structures which promote oppression (Hostetler, 2008). Motivation for strategic action is empirical (e.g., sanctions or gratification) and choices are influenced by self-interest (Brand, 1990). Communicative action, on the other hand, occurs:

...whenever the actions of the agents involved are coordinated not through egocentric calculations of success but through acts of reaching understanding. In communicative action participants are not primarily oriented to their own individual successes; they pursue their individual goals under the condition that they can harmonize their plans of action on the basis of common situation definitions. In this respect the negotiation of definitions of the situation is an essential element of the interpretive accomplishments required for communicative action. (Habermas, 1984, p.285-286)

In other words, it is action oriented towards attaining a mutual understanding and is coordinated through communication (i.e., language and the related non-verbal cues). As further described by Mezirow (1991), communicative action, or dialogue, “occurs whenever an individual with particular aims communicates with another person in order to arrive at an understanding about the meaning of a common experience so that they may coordinate their actions in pursuing their respective aims” (Mezirow, 1991, p. 65). Thus, the key elements of communicative action are an *interaction* between two or more people – verbal or written – in which they attempt to come to a *consensus* about a particular situation and, once reached, they *act together* to accomplish their mutually agreed upon goal (Brand, 1990).

Communicative action allows us to relate to one another and make ourselves understood (Mezirow, 1991). As the diversity and complexity of modern society deepens and our once shared perspectives and belief systems begin to diverge, the ability to work together to understand one another's unique worldviews becomes more of an imperative, in particular in light of alternatives such as coercion and violence. Habermas was resolute in his belief that the implications for communication action "are far reaching and indeed form a foundation for the democratic process through which we may create more humane and just societies" (Hostetler, 2008, p. 15).

2.3.3 Ideas from the Social Learning Literature

Another common learning framework used by academics and practitioners in natural resource and environmental management (NREM) is social learning (e.g., Blackmore, 2007; Finger & Verlaan, 1995; Ison, Roling & Watson, 2007; Keen, Brown & Dyball, 2005; Maarleveld & Dangebegnon, 2002; Steyaert & Jiggins, 2007; Wildemeersch, 2007). The concept of social learning has grown out of the recognition that learning typically involves some social component and, in most instances, is a product of our social and cultural exchanges (Salmon & Perkins, 1998). Derived from the theories and practices of a wide-range of disciplines, social learning itself is very diverse, ranging from individual learning occurring as a result of social interactions to collective learning (i.e., learning in which group members, typically in an attempt to solve a common problem, consciously construct shared meanings and plans of action) (Blackmore, 2007; de Laat & Simons, 2002; Kilgore, 1999; Wildemaarsch, 2007). The latter is the model of social learning generally used in NREM.

Even within the field of NREM, there can be differences in how social learning is defined, the particular elements which are emphasized, and how it is applied to a particular situation. Despite the variations, there a number of commonalities, several of which are relevant to the understanding of collective social action. These shared characteristics include:

- Multiple stakeholders working together in an effort to develop a commonly accepted solution or approach to dealing with a particular natural resource or environmental problem (Blackmore, 2007; Steyaert & Jiggins, 2007; Wildemeersch, 2007)
- The problem-solving process involves negotiation and consensus-building between the various stakeholders in an effort to co-construct common knowledge and a mutual understanding of the issues and alternative approaches, leading to an agreement on collective action (Blackmore, 2007; Kilgore, 1999; Steyaert & Jiggins, 2007).
- Due to the importance of the resources to the various stakeholders, ethics and values play a central role in the problem-solving process, often leading to power-struggles and conflict within and outside the group (Keen, Brown & Dyball, 2005; Steyaert & Jiggins, 2007; Wildemeersch, 2007).
- The end result of the process is a transformational change (Blackmore, 2007; Steyaert & Jiggins, 2007; Wildemeersch, 2007). However, what such a transformation looks like appears to differ between researchers. Steyaert and Jiggins (2007) describe a transformational change in the collective sense as a

transformation in how knowledge is constructed, with the new approaches being increasingly socially responsible, reflective and inclusive. They also acknowledge that transformational change in the individual sense may occur, which they describe as a change in stakeholder's "interconnected patterns of *knowing, doing and being*" (p. 582). Blackmore, on the other hand, describes seeing "a change in behaviours, norms and procedures arising from development of mutual understanding of issues as a result of shared action such as physical experiments, joint fact finding and participatory interpretation" (p. 516).

As noted above, an essential component of social learning is "group" action – which is referred to in the literature by a variety of terms, including social action, collective action, collective social action and concerted action. Emerging from these discussions are shared notions that action is coordinated, informed, and has a planned outcome.

- *Coordinated.* The efforts of the group are organized in some fashion in order to accomplish a shared goal (Boggs, 1986; Steyaert & Jiggins, 2007). In describing "concerted action", Blackmore (2007) used the metaphor of a concert – "...where all performers have different roles that need to be brought together in a particular way and at a particular time for favourable outcomes to emerge" (pg. 516).
- *Informed.* For action to be effective, group members must actively seek out information (through reading and research) and develop a shared

understanding (through group discussion and negotiation) of the issues, solutions and modes of action (Blackmore, 2007; Boggs, 1986).

- *Planned Outcome.* The intent of the action is to either maintain the status quo or bring about a social, economic or political change. In the case of the latter, change can be aimed at transforming individuals, in support of the belief that “collective emancipation will be achieved through individual growth, development and learning” (Finger, 1995, p. 111-12). Or it can be aimed at groups, for those who espouse that developing and implementing solutions to environmental and societal problems “...must be a collective and collaborative effort, because there is no individual way out” (Finger, 1995, p. 116).

2.2.4 Ideas from the Critical Consumer Education Literature

Critical consumer education is a growing informal education movement that seeks to create a consumer that has a moral consciousness in the marketplace – i.e., consumers that are aware, accountable and action-oriented³ (McGregor, 2005a, 2005b, 2005c). It involves educating consumers to critically evaluate their consumption behaviour, teaching them not to see consumption as an individualistic, isolated activity to be done

³ This is in contrast to traditional consumer education, which concentrates on creating better consumers, i.e., consumers that are able to navigate in the marketplace and make educated consumer decisions. These learners are taught to embrace and function within the existing consumer culture (McGregor, 2005c; Sandlin, 2004b). Learning may occur in a formal setting, such as adult literacy or EAL classes, or in informal settings, which may include reading government or NGO pamphlets, websites or other publications (e.g., Consumer Reports). Skills taught in these settings are generally instrumental, and may include learning how to develop a budget, how to calculate interest, how to get the best value for your dollar, or how to launch a complaint for faulty products or poor service (Sandlin, 2004b).

without thought (Sandlin, 2004b). Ideally, learners exposed to critical consumer education will undergo a profound transformation in their attitudes, values and behaviours related to consumption – moving from being a consumer to being a citizen-consumer. Citizen-consumers are aware of the environmental and social impacts of consumption; critically reflect before making a purchasing-decision; and try to put the common good ahead of their own materialistic desires (McGregor, 2002, 2005a; Sandlin 2004b). According to McGregor (2005b, 2005c), such a transformation frees the individual from the oppressive nature of the market and our consumer-culture. As they find their inner strength, they are inspired to change society, both by helping others to recognize the impacts of rampant consumerism and by taking social and political action to rectify the problems caused by the existing economic and cultural systems. Increased awareness and societal change can be attained through either *individual* or *collective* consumer action.

Individual Consumer Action

The individual behavioural change approach to critical consumer education involves consumers becoming aware of the shortcomings of our existing consumer culture and resolving to take action to change their *own* behaviour (Sandlin, 2004b). The most common individual way of changing behaviour is to purchase goods and services in a more sustainable manner. The term *sustainable consumption* has many interpretations (McGregor, 2002); however, for the purpose of this thesis, sustainable consumption will refer to fulfilling basic needs and improving quality of life through the consumption of goods and services in a manner that does not compromise the ability of the environment

to meet the needs of present or future generations (McGregor, 2002; Schoot Uiterkamp, 2007). Engaging in sustainable consumption requires that consumers: (a) incorporate sustainability criteria into the decision-making framework they use to guide product selection, (b) ensure products are properly handled during use, and (c) dispose of products in the most sound-manner available (van Koppen, 2007). It encompasses the concept of “green” consumption (buying products with a reduced environmental impact), “ethical” consumption (buying products for which the production, distribution, use and disposal does not rely on the exploitation of other people), and not consuming in excess of what is necessary for basic needs and a reasonable quality of life. This may include: selecting green, organic, locally-grown, or fair-trade products and services; purchasing goods in bulk; buying used instead of new; and engaging in swaps. Individual solutions to resisting consumerism may also extend beyond purchasing, and may involve reducing weekly work hours, increasing use of public transit or participating in active modes of transportation, investing in green or ethical funds, curtailing television viewing, practicing water and energy conservation techniques, and eliminating the use of toxic household chemicals (Sandlin, 2004b).

Advocates of the individualized approach to altering unsustainable consumption patterns believe that consumers have considerable power to influence change simply through their purchases, and the aggregate effect of their individual choices can reduce our negative planetary and societal impacts or enhance our positive environmental and social contributions. Change ultimately has to begin with the consumption patterns of individuals – “...consumers are positioned as key ‘switches’ in the environmental system. Turned in one direction and the ‘metabolism’ of society is endangered, turned another

way and it is potentially preserved” (Shove, 2003, p. 3). However, the majority of consumers require assistance in making the right decisions and overcoming barriers preventing sustainable consumption. This is one of the primary functions of critical consumer education (Shove, 2003).

Collective Consumer Action

Under the collective action approach to critical consumer education, learners work collectively with others in an effort to change our consumer culture. As described by Sandlin (2004b):

Like the individualized-focus consumer education ... this arena of consumer education seeks to problematize consumer culture; but does so in a way that moves beyond individual responsibility. Instead, this arena of consumer education often takes the form of social movements, made up of activists focusing on issues such as the environment, fair labour practices, and global capitalism (p. 30)

Collective consumer action encompasses a wide-range of activities, such as protests, awareness raising activities, email/letter writing campaigns, organized boycotts and buycotts, debates (in-person and on-line), anti-consumerism events (e.g. “Buy Nothing Day”), and consumer commitments to follow mutually-defined green or ethical purchasing guidelines (Micheletti & Stolle, 2007; Nelson, Rademacher & Paek, 2007; van Koppen, 2007).

Within the collective action approach, there is a further divide between those seeking to influence change by taking advantage of the power of critical mass and those working collectively “to fight against the dominance of consumerism and to make

consumer culture appear less natural” (Sandlin, 2004b, p. 30). The green/ethical consumer movement would fit the former category – with consumers endeavouring to use their collective buying power, in an organized manner, as a form of protest. Such consumers work in concert with other consumers to purchase products and services *collectively* deemed to be “friendly”, or to use their combined buying power to boycott products which are harmful, with the intent of influencing the design and production decisions of corporations (McGregor, 2005a; Micheletti & Stolle, 2007; van Koppen, 2007). There are numerous organizations which promote boycotts, buycotts and various events to rally masses of consumers. These groups may also ask consumers to participate in non-consumptive activities, such as letter writing campaigns, signing petitions or engaging in demonstrations. Working within the existing economic system, the goal of this movement is to ensure that production and trade are as responsible as possible. Critics feel this approach is flawed because it does not encourage consumers to advocate for changes to the economic system, but rather attempts to solve the environmental and social problems created by consumerism through production and consumption (McGregor, 2005a). Furthermore, they believe that in promoting the consumption of green goods and services, rather than challenging the status quo, these movements may be unintentionally legitimizing unsustainable consumption patterns (McGregor, 2002; Shove, 2003).

The second type of collective action movement involves consumers uniting to question and challenge the economic, political and social institutions which promote and sustain consumerism. It is a bottom up approach, in which consumers act as the instigators of environmental and social change. They recognize that our consumptive

patterns are not a law of nature, but a social construct, and as such can be reformed through collective action (Shove, 2003). Such consumers have come to question the common conventions and assumptions around which our social, cultural and economic systems are built. In doing so, these consumers are going beyond simply changing their consumption patterns - they seek to redefine societal norms, values and practices. Examples of movements which fall within this category of collective action are the voluntary simplicity and anti-consumerism movements. There are various different perspectives and interpretations of these movements, with new terms emerging on a regular-basis to describe different efforts and players. For example, within these movements there are downshiffters, freecyclers, cultural jammers, freegans, and Compacters, to name but a few (BBC Home - h2g2, 2007; Micheletti & Stolle, 2007; Nelson, Rademacher & Paek, 2007; Sandlin, 2004b). In general, the voluntary simplicity movement attempts to encourage a shift in societal values through encouraging people to simplify their lifestyles. They want to create a society which focuses around family cohesion, the common good, the environment, cultural diversity, sustainable economies, and meaningful community participation, rather than our existing society, which is centred on earning money and acquiring material goods (McGregor, 2005a; Nelson, Rademacher & Paek, 2007). "Downshiffters", one of the factions within this movement, are individuals who have chosen to reduce their work hours and/or reduce their consumption. Rather than purchasing new products, this group prefers to refurbish, reuse, trade, share or construct goods. While downshiffters operate within the existing economic and cultural system, they have voluntarily adopted to live an alternative lifestyle (Nelson, Rademacher & Paek, 2007).

Mounting trepidation over the sustainability of our culture's excessive consumption has given rise to the anti-consumerism movement. Anti-consumerists are "...concerned with the environmental, economic, political, labour, personal, societal and spiritual impact of excessive, run away consumption" (McGregor, 2002, p. 2). Consumerism is viewed as "a social and economic creed that encourages people to aspire to consume more than their share of the world's resources, regardless of the consequences" (McGregor, 2002, p. 2). These consumers believe that the globe's richest consumers are devastating the environment in their quest for more material goods. They seek to change assumptions about what constitutes quality of life, pushing for more than just adjustments in the products we buy. They advocate changes in our lifestyles, in particular reducing our environmental footprint and turning to activities other than consumption to generate self-satisfaction, provide entertainment, and boost self-esteem (McGregor, 2005a). A wide range of groups could be associated with the anti-consumerism movement, including cultural jammers who use subversive tactics to challenge consumerism and more radical anti-consumers who choose to live communally outside of our consumeristic culture and economic system (Nelson, Rademacher & Paek, 2007; Sandlin, 2004b).

2.2.5 Reflections on Social Action

Based on the literature reviewed, I defined social action as *informed action taken by an individual or group(s) for the purposes of bringing about a change in society which they deem beneficial to the welfare of human beings, the environment and/or other species. Individual social action* refers to the efforts of an individual to incite such

societal change, while *collective social action* will be used to refer to the efforts of a group (or groups working in unison) to induce these societal changes.

After reviewing the various bodies of knowledge on social action, I have identified three key variables to be aware of when studying action for social change – learning, action and outcome.

Learning is essential to informed action. As accentuated by Freire (1970/2000), action must be informed by reflection, otherwise it is simply “action for action’s sake” (p. 87). The learning process may be individual (such as the focus of this thesis), collective, or some combination thereof. Such learning will likely involve gathering new insights and reflecting on this knowledge in order to develop an understanding of the problem, the subsequent impacts, the possible solutions, and the range of actions available to influence change. *Action* itself can vary greatly in terms of the number of participants engaged in a particular action (e.g., individual, a group or groups working together) and in terms of the scale and complexity of an act (e.g., an individual sharing information with a friend, an NGO implementing a comprehensive, long-term strategy). The intended *outcome* of social action is to transform attitudes and behaviour; however, action will differ in terms of (a) the societal structure it is intended to influence and (b) whether it is aimed at transforming an individual or a collective. In terms of societal structures, the intended outcomes of social action will focus on transforming the political, economic and/or social framework of society. The intended outcome of the action may also differ in terms of the scope of the transformation. Some believe this change must take place within individuals, and the accrued effect of these transformed views and behaviour will result in a societal shift. Others contend that societal transformations must be a collective

effort, and therefore attempt to change the attitudes and behaviours of collectives, which may range from a small group (e.g., a family or community organization) to the global community.

Learning-Action-Outcome Continuum

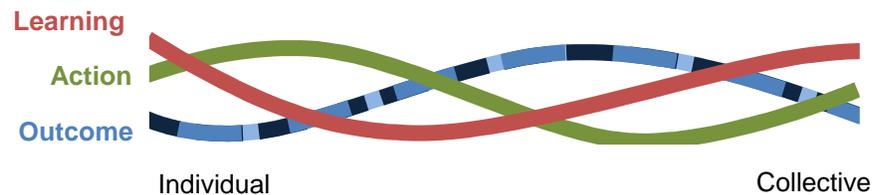
To bring together my understandings of social action, I have developed a diagram to explain these three variables (Figure 2.1). Learning, action and outcomes are interrelated, and as such cannot be explored in isolation. Therefore, a braid has been chosen to represent their interconnection. Furthermore, as implied in the above discussion, these three variables exist along a continuum with the “Individual” at one end and the “Collective” at the other. In the case of learning, the “Individual” end of the spectrum represents an individual learning experience, in which a single person gains new knowledge, reflects upon this knowledge and, as a result, develops a new understanding. For example, an individual reads an article about a company that has been found to be producing their clothing in a sweatshop and, concerned about this practice, gathers more information on the company. Reflecting upon this new knowledge may result in the individual wishing to take some form of social action (e.g., change their buying practices, share knowledge with others or join with a collective to protest). “Collective” learning, at the other end of the spectrum, represents a social learning experience in which a group, through collective negotiations, develops a mutual understanding. For example, an environmental group becomes aware of the use of formaldehyde in wrinkle-resistant finishes, and its stakeholders collectively gather and review information on the topic. Through a process of discussion, reflection and

negotiation, the group develops a shared understanding of the problem, potential solutions and action options. The group subsequently may work together to develop a mutually-agreed upon plan for collectively acting to effect change. Between these two poles lie the various possible combinations of individual and collective learning. For example, a couple may learn about the vast quantities of pesticides used to grow conventional cotton from watching a news report and share this knowledge with like-minded friends. Thus, where a particular learning experience sits on the continuum will depend upon the level of involvement of others in the learning experience.

Similarly, for the Action Continuum, at one end lies “Individual” action, (i.e., an individual acting alone) and at the other end lays “Collective” action (i.e., a group or groups acting together). Where a particular action sits on the continuum will depend upon the level of involvement of others in the particular action. Closely related to the act itself is the intended outcome of the act. As noted above, there are two key components to outcome – the societal structure the action is aiming to impact (e.g., political, economic or social) and the scope of the impact (i.e., individual or collective). To represent the three societal structures the action may target and how closely intertwined these systems are the Outcome Continuum is a three-toned line. At one end of this line lies “Individual” outcomes, in which the intended result of a particular social action is to transform the individual (e.g., a consumer, a government official, a retail chain executive) in the hopes of enacting societal change; while, at the other end lies “Collective” outcomes, in which the intended result of a particular social action is to transform a group (e.g., a community, a government department, a retailer or society as a whole). For example, an individual concerned about the labour practices of a particular retailer may

choose to share their concerns with a friend. This would be an individual action (i.e., acting alone) with an individual outcome (i.e., the action is intended to change the views or actions of their friend). The individual may also choose to join in a national email campaign organized by a human rights group. In that case, they would be engaging in a collective action (i.e., working to effect change in conjunction with others) with the intention of affecting a collective outcome (i.e., the action is intended to alter the views and practices of a retailer and their network of manufacturers).

Figure 2.1: Learning-Action-Outcome Continuum



It should be noted that this model, which was based upon my initial review of the literature, was proposed as a possible means to dissect and better understand social action. Chapter 8 explores how this model aligned with the data collected and provides additional insight into the variables of social action.

Social Action Stages

Based on the critical reflection process discussed by Mezirow (1991,1994) and Keen et al. (2005), and the ideas on social action proposed by the various theorists and practitioners discussed above, I also identified what I believe to be the general stages involved in the social action process. They are as follows:

- (1) *Learning about or becoming aware of an issue or problem.* An individual or group(s) may become aware of an issue or problem through a variety of means, such as popular media, books, blogs, websites, on-line networks, conversations with friends or colleagues, university courses, or first-hand experience. For example, an individual may learn from a colleague about the pesticide contamination of breast-milk in China or a human rights group, via a blog, may become aware of a specific case of child slave labour in India. For some individuals or groups this awareness will trigger the need to act.

- (2) *Identifying the cause of the problem.* In order to be able to effectively engage in action, the individual or group(s) must first identify the cause of the problem. Although aware of a particular issue, not all actors will necessarily arrive at the same conclusion regarding the cause. For example, in the case of pesticides in breast-milk, some may decide the cause of the problem is the use of pesticides, others may identify the problem as conventional modes of cotton production, some may believe it to be a more systemic problem with the conventional agricultural system, and some may conclude the problem is the over-consumption of apparel

(which leads to the use of mass amounts of pesticides in order to produce the quantities of cotton being demanded). Identifying the cause is often accomplished through a process of learning and negotiation. For an individual – the focus of this thesis - this likely involves gathering more information and, through a process of discourse, reflection and negotiation, finally incorporating this knowledge into their frame of reference. This can be achieved through expanding an existing meaning scheme, adding a new meaning scheme or transforming meaning structures and thereby allowing them to identify what they believe to be the cause of the problem.

- (3) *Identifying possible solutions.* Once the cause of the problem has been identified, the individual or group(s) must educate themselves as to the options available to counteract the problem. The possible solutions will vary depending upon the cause identified. For example, if the cause of the problem identified in the above example is the use of DDT, two possible solutions might include advocating for a global ban on that pesticide or encouraging the development of incentives to persuade farmers to use more benign pesticides. If, however, the problem is determined to be conventional cotton production practices, individuals or group(s) may advocate for organically-grown cotton, some may choose to encourage farmers to use genetically-modified cotton strains which are more resilient to insects, while others may attempt to persuade consumers to avoid cotton in favour of synthetic fibres such as polyester or nylon. From the range of possibilities identified through the learning and reflection process, an individual, a group, or a

collection of groups must then choose a solution which they judge to be most effective, which best suits their values and beliefs, and which they think they are capable of enacting.

- (4) *Developing a plan of action.* Once a solution (or combination of solutions) has been identified, a plan of action must be developed as to how to implement, or how best to influence others to implement, the solution. Four factors that must be considered when making a plan of action include: which societal structure(s) will the action seek to transform; who will the action target (e.g., retailers, manufacturers, foreign governments, national government, consumers, etc.); the scale of the transformation (i.e., is the action intended to change the behaviour of individuals or group(s)); and what type of action will be most effective. When considering the type of actions⁴, some of the general options available are modifying practices, relying on market forces and raising awareness. Actions to modify practices generally mean regulating⁵, incentivizing or penalizing particular behaviors. Such actions may include an email campaign to lobby a foreign government to enforce a particular labour or environmental law. Actions relying on market forces may involve an individual or group(s) using market forces to their advantage (e.g., boycotts, buycotts, “Buy Nothing Day”) or pushing for adjustments to market forces (e.g., a group may encourage the government to

⁴ Based on Ison, Roling and Watson’s (2007) description of conventional policy responses to environmental issues.

⁵ I am interpreting regulation in the broadest sense – using the term to refer to the legislation and regulations implemented by government, as well as the policies developed by corporations (e.g. codes of conduct or sustainable sourcing policies) or institutions (e.g. sustainable procurement policies).

develop an extended producer responsibility program for apparel⁶). The third option for action is raising awareness, which can be accomplished in a wide range of ways, from an individual sharing information about organic cotton with a friend to a student group organizing a sustainable apparel fashion show to a collective of NGOs developing a fair-trade labeling system for apparel. It should be noted that all previous examples include some element of collective action. In the case of an individual learning and acting independently for the purposes of changing their own behaviour, the action plan will likely be more simplistic and may entail reducing clothing purchases, hanging clothes to dry, or donating used clothing to charity.

- (5) *Acting*. In order to effectively implement a plan of action, the individual or group(s) may need to develop a new knowledge-base or skill set (instrumental learning). For example, they may need to learn how to develop a blog, where to shop for sustainable clothing, or techniques for effective lobbying.
- (6) *Evaluating Action*. Once a plan has been implemented, the individual or group(s) will often reflect upon the effectiveness of the plan of action. Did they accomplish their goals? What did they learn? Evaluation will likely involve a critical assessment of the content (i.e., their learning experience and the problem/issue, causes, solutions and action), process (i.e., the negotiation process, the plan of

⁶ Extended producer responsibility in its most basic form involves shifting the responsibility for end-of-life management for products from municipalities to producers. This principle has not yet been applied to apparel, but if it was it might involve producers taking back clothing at the end of its life and developing an environmentally-sound means of reusing, recycling or composting these garments.

action and its implementation), and premise (i.e., was their understanding of the problem correct?). Such critical reflection would presumably lead to revisions in their individual or collective frames of reference, altering how they approach learning, reflection and planning related to social action in the future.

It should be re-emphasized that this study will be concentrating on social action occurring as a result of individual learning, specifically Mezirow's transformative learning theory. Mezirow's ideas regarding learning, discourse, critical reflection, and transformation are an essential part of each of the social action stages described above. Further, as noted at the conclusion of the section on the Learning-Action-Outcome Continuum, these social action stages represented my understanding of social action concluding a review of and reflection on the ideas of Mezirow, Freire, and Habermas, the writings of academics-practitioners on social learning in NREM and critical consumer education. The ideas presented above are contained within my discussions of social action found in Chapter 8 and 9, although not as individual stages.

2.3 Clothing Sustainability

In the year 2000, consumers around the globe spent a total of 1 trillion USD on apparel (Allwood et al., 2006). Consumption is only expected to grow, with the UK Department of Environment, Food and Rural Affairs estimating a 90-percent growth in the textile market by the early 2020s (as cited in "Fast Fashion", 2007). Although this may be good news for textile and apparel manufacturers, it is extremely concerning from the perspective of sustainability. The conventional production, use and disposal of

clothing puts a considerable strain on natural resources, generates large quantities of air emissions, wastewater and solid waste, and may jeopardize the health of workers, communities surrounding production facilities and end-users. Workers may also be subject to low wages, unsafe work environments and abuses at the hands of their employers. As discussed above, these impacts are intensified by unsustainable consumption patterns, such as the frequency with which new garments are purchased, the volume of apparel items being purchased, and the short time span clothing is actually worn before being disposed of in what may be an environmentally unsound manner.

The focus of this study is on individuals who have chosen to adopt more sustainable practices related to clothing selection, use, maintenance and disposal (sustainable clothing practices) and/or engage in collective social action to improve the sustainability of clothing. The following section provides an overview of these activities, but begins with a review of the research that has been conducted on consumer behaviour in relation to sustainable apparel.

2.3.1 Consumer Attitudes and Behaviour Related to Sustainable Apparel

Although marketing scholars began exploring the relationship between environmental concern and consumer behaviour in the early 1970s, with the dawn of greater public awareness of environmental issues, it was not until the mid-nineties that the first studies focusing specifically on apparel were published. The studies conducted at that time examined how consumers' environmental concerns and attitudes impacted their clothing purchases (Butler & Francis, 1997; Kim & Damhorst, 1998); the response of consumers to environmental messages in fashion advertising (Kim, Forney & Arnold,

1997); and consumers' apparel disposal patterns (Shim, 1995). However, by the end of the 1990s academic interest had shifted towards the study of socially-responsible consumer behaviour, which concentrated on the influence of consumers' concerns related to sweatshops (e.g., Dickson, 1999; Dickson, 2000; Iwanow, McEachern & Jeffery, 2005; Kim, Littrell & Paff Ogle, 1999; Shaw, Hogg, Wilson, Shui & Hassan, 2006; Shaw, Shiu, Hassan, Bekin & Hogg, 2007; Rudell, 2006). More recently, a few researchers have begun to recognize how interrelated consumer behaviour is with these exogenous, societal factors, and have broadened their focus to incorporate both social and environmental concerns in their work (e.g., Joergens, 2006; Shaw & Tomolillo, 2004).

There have been two general approaches to these studies: to examine the general population (i.e., average consumers) (e.g., Butler & Francis, 1997; Dickson, 1999, 2000; Iwanow et al., 2005; Joergens, 2006; Kim & Damhorst, 1998; Ruddell, 2006) or to narrow the inquiry to consumers actively practising sustainable consumption (i.e., ethical consumers) (e.g., Dickson & Littrell, 1996; Kim, Littrell & Paff Ogle, 1999; Shaw & Tomolillo, 2004; Shaw et al., 2006; Shaw et al. 2007). The majority of the studies were survey-based studies, while only a few were qualitative studies, employing interview and focus group research techniques (Joergens, 2006; Shaw & Tomolillo, 2004; Shaw et al., 2006). There has been a further divide in location of the studies between the United States (Butler & Francis, 1997; Dickson, 1999, 2000; Kim & Damhorst, 1998; Ruddell, 2006) and the United Kingdom (Iwanow et al., 2005; Joergens, 2006; Shaw & Tomolillo, 2004; Shaw et al., 2006; Shaw et al. 2007). The primary findings emerging from these research studies have been related to consumer knowledge, attitudes and concern, and the barriers to buying sustainable apparel.

Consumer Knowledge, Attitudes & Concern

Early studies focusing on environmental concern found that the “average” consumer expressed an overall concern for the environment; however, when questions specifically addressed environmental issues and apparel, participants reported both a lack of knowledge and concern, and acknowledged that they did not consider the environment when purchasing clothing (Butler & Francis, 1997; Joergens, 2006; Kim & Damhorst, 1998). In the case of social concerns, the results, in terms of knowledge and concern were mixed. Early studies out of the U.S. found that although “average” consumers were not knowledgeable, they were concerned about the social problems within the apparel industry (Dickson, 1999, 2000). More recent UK studies found that “average” consumers were fairly knowledgeable, but only moderately concerned (Iwanow, McEachern & Jeffery, 2005; Joergens, 2006). Unfortunately, no matter the level of knowledge or concern, all of these studies determined that “average” consumers did not factor social concerns into their apparel decision-making scheme. In contrast, those identified as “ethical” consumers, expressed concern for an array of environmental and social issues related to apparel, ranging from chemical usage in textile processing to the poor treatment of sheep used in wool production to the exploitation of workers (Shaw & Tomolillo, 2004). However, even though these consumers did consider environmental and social concerns when shopping, they felt that they were often forced to purchase clothing which failed to meet their ethical criteria (Shaw & Tomolillo, 2004; Shaw et al., 2006).

Barriers to Purchasing Sustainable Apparel

A variety of reasons have been proposed by researchers and suggested by consumers for the discrepancy in reported environmental and ethical concerns and subsequent action – namely, the complexity of the decision-making process, cost, lack of information, and limited availability.

Complexity of the Decision-Making Process. The decision-making process used to select apparel is far more complex than for many other “green” or “ethical” products, such as food or cleaning products (Butler & Francis, 1997). A participant in Shaw & Tomolillo shared,

It is just really difficult trying to be an ethical consumer. I mean I guess the food sector has kind of got it cracked but the fashion industry seems a bit more off-the-beaten-track. There is just so much to consider when you buy clothes, where it is produced, how it is produced, what it is made of. It is difficult, it is just difficult! (2004, p. 141)

Similarly, Joergens (2006) noted, “Purchasing clothing is more complicated than purchasing fairly traded coffee. Coffee just has to taste good but not all clothing looks the same and fits to your personal style” (p. 364).

A number of factors contribute to the complexity of clothing choices. The first factor is that clothing is not only functional – protecting us from the environment and providing us with a means of achieving modesty (or immodesty, if that is the intention) – but it is also intimately intertwined with our sense of self and our relationships with others and society as a whole. Reviewing literature from the field of the socio-psychology of clothing, we come to understand that a single article of clothing can fulfill

a diverse array of needs (Damhorst, Miller-Spillman & Michelman, 2005; Kaiser, 1990).

Clothing is a means of sharing, but also can refine our concept of self.

Through clothing and other forms of appearance management, the body becomes a malleable form of self-expression. On a daily basis, individuals use clothes to communicate desired aspects about the self to others, and those others in turn, respond to this self-symbolizing and provide insight to others about themselves. (Kaiser, 1994, p. 146)

We use clothing to exhibit personality, identify social roles, demonstrate social status, express individuality, communicate personal values and interests, and reflect age and gender (Damhorst, Miller-Spillman & Michelman, 2005; Kim & Damhorst, 1998; Shaw et al., 2006; Sproles & Davis Burns, 1994). Clothing allows us to demonstrate membership in a social group, attract others and create a sense of belonging. It also can provide us with a measure of personal security – i.e., protecting us from the “psychological and social environments” (Damhorst, Miller-Spillman & Michelman, 2005). By adopting clothing which conforms to that of our peers, we can gain acceptance and avoid embarrassment and ridicule (Sproles & Davis Burns, 1994). As a result of the multi-dimensional nature of apparel, consumers rely on a wide range of decision-making factors when selecting garments. The garment must meet their expectations for *quality*, the *style* must correspond with their personal image and meet their wardrobe needs, the *fit* must flatter their figure, and a specified level of *comfort* must be afforded. Studies have found that an individual’s needs take precedence over environmental and social concern when selecting apparel. This is true of both “average” and the “ethical” consumer (Butler & Francis, 1997; Dickson, 1999; Iwanow, McEachern & Jefferey, 2005; Joergens, 2006; Shaw et al., 2006). Shaw et al., noted that “[r]esearch exploring decision-making among ethical consumer groups has revealed that while consumers place ethical concerns highly

on their purchase criteria this is often not at the expense of other more traditional factors important in choice” (2006, p. 429).

Now add to an already multifaceted decision-making process the complexities of personally defining what is and what is not environmentally and socially responsible, and then attempting, with little information, to assess which garments meet these criteria. It is not surprising that most consumers are unable or unwilling to take on this task. For example, Shaw and colleagues wrote:

Using the example of a t-shirt, consumer choice criteria may include the ‘people’ issue of whether the t-shirt is fairly traded or made under sweatshop conditions. The consumer may, therefore, consider the country of origin and working conditions important factors in choice and wish to purchase a garment produced in their home country to alleviate these concerns. Conflict can arise, for example, between a concern to trade fairly with poorer countries, to promote their economies and a desire to support home-country production. In such a situation the purchase of a traditionally low involvement product such as a t-shirt can require substantially more effort on the part of the consumer in decision-making. (2006, p. 428)

Similar complexities arise when including environmental factors in apparel selection criteria. For example, consumers may be faced with deciding between a cotton t-shirt made in North America and an organic cotton t-shirt made in China or they may have to assess whether a conventional cotton towel is superior to a bamboo towel. Consumers choosing to purchase sustainable apparel have very little information to direct them. Still, they must try to be knowledgeable of the impacts of apparel production, be aware of the alternatives to conventional clothing, and be able to weigh the pros and cons of these various alternatives in order to develop their own sustainable criteria to guide their purchases.

A number of the aforementioned studies have found that many “ethical” consumers are willing to make this effort. However, for the majority of individuals, the environmental and social impacts of their clothing purchases are far removed from their daily lives. For certain products, such as organic foods, the negative effects and benefits are borne directly by the consumer, but in the case of clothing, the adverse impacts are often experienced by workers and communities on the other side of the world. Without a direct link to their health or quality of life, many people are not willing to consider additional criteria when shopping for clothing (Kim & Damhorst, 1998; Joergens, 2006).

Cost. Sustainable apparel is typically more expensive than conventional garments. As such, the cost of sustainable apparel was identified as a significant concern in most of the studies (e.g., Dickson, 1999; Iwanow, McEachern & Jeffery, 2005; Joergens, 2006; Shaw & Tomolillo, 2004; Shaw et al. 2006). In one study of “average” consumers, participants reported that they would not be willing to pay more for an ethical garment, even if they could afford the price, and they would rather be able to purchase more apparel items and replace clothing seasonally than buy higher priced ethical goods (Joergens, 2006). For “ethical” consumers, some reported they simply could not afford sustainable apparel, while a few others felt resentment that they had to pay a higher price for ethical goods when the clothing supplied by mainstream retailers was cheaper and more readily accessible (Shaw et al., 2006). As a result of the cost of these garments, a number of participants reported being forced to make concessions. Shaw et al. (2006) wrote,

Clothing which the respondents considered unrelated to, or not worn to reflect their identity was viewed as not worth the extra money or hassle to ensure fair trade and ethical manufacturing practices had been adhered to. In contrast, it

was considered important to ensure the ethical credentials of those items and/or outfits which the consumer perceived as being connected to the projection of their identity. (p. 437)

Lack of Information. “Average” and “ethical” consumers alike reported the lack of credible information as a significant barrier to buying sustainable apparel. In an attempt to ensure their apparel was produced in an sustainable manner, “ethical” consumers reported that they conducted research into the company’s codes of conduct, only purchased clothing from retailers they trusted, made decisions based on country-of-origin labels, and boycotted companies they knew to have poor ethical practices (Shaw et al., 2006). However, their confidence in these techniques was relatively low – “[d]espite reporting a high intention to purchase sweatshop-free clothing, the lack of information forced many respondents to ‘just take a gamble’” (Shaw et al., 2006, p. 437). Although many clothing retailers have developed codes of conduct, the voluntary-nature of these programs has resulted in consumers questioning their sincerity and commitment. Devised by the company and lacking external verification, these codes are often viewed as a public relations strategy and not as a reliable source of information regarding the conditions under which a garment was made (Iwanow, McEachern & Jeffery, 2005; Shaw et al., 2006; Shaw et al. 2007). Similarly, country-of-origin (or “Made in”) labels did not provide meaningful insight into the manufacturing processes and conditions (Joergens, 2006). In addition, several studies found that unlike the “ethical” consumer, the “average” consumer did not typically research the codes of conduct of the retailers or brands they favoured (Joergens, 2006) and they rarely, if ever, checked the “Made in” label (Iwanow, McEachern & Jeffery, 2005; Joergens, 2006). Although Dickson (1999) reported that over 60 percent of her respondents (“average” consumers) stated they would

boycott a socially irresponsible company; several other researchers found that in practice, few consumers actually boycotted specific retailers or brands, feeling they did not have enough information as to which companies were “bad” and which were “good” (Iwanow, McEachern & Jeffery, 2005; Joergens, 2006). One of Joergens’ participants explained,

But where should I start? Gap is like H&M; there is no big difference. Where am I supposed to buy my clothes then? If I start to boycott Gap, I will buy more products from H&M, which is probably no better. I boycott the brand which is under media pressure, but the conclusion is that nothing improves just because I boycott one brand. At the end it is just a shifting of buying from another unethically acting company. (2006, p. 364)

Although many of the “ethical” consumers interviewed by Shaw and colleagues (2006) did participate in boycotts, several shared that they felt bombarded with negative information, and believed there was a dearth of positive information, leaving them uncertain as to where to shop and which companies to support.

Labeling is one of the primary tools discussed in these studies for ensuring consumer access to trustworthy information about garments. Many “ethical” consumers reported looking for labels when they shopped; but, unfortunately, they were and still are rarely found (Iwanow, McEachern & Jeffery, 2005; Shaw et al., 2007). At this time, there is no standard national or international labeling system for sustainable apparel that is readily recognizable and easy to understand; instead, there are over 100 different independent third-party programs for textiles world-wide (Ecolabel Index Pro, as of July 24, 2013). Each verify different aspects of sustainability, leaving many consumers confused. It has also been suggested that for the “average” consumer, labels may act as an education tool, potentially encouraging them to reconsider their shopping criteria to include sustainable factors (Ruddell, 2006). While the prospective benefits of such a

program exist, some researchers question whether, from a marketing perspective, a labeling program would be effective, considering the “average” consumer rarely checks labels and sustainable concerns are typically not a factor in their apparel purchases (Dickson, 1999; Iwanow, McEachern & Jeffery, 2005; Joergens, 2006; Rudell, 2006).

Limited Availability. Finally, a number of the studies of both “average” and “ethical” consumers identified limited availability as a primary constraint to buying sustainable apparel (Joergens, 2006; Shaw & Tomolillo, 2004; Shaw et al., 2006; Shaw et al. 2007). Sustainable apparel is not readily available in mainstream retailers, and often consumers seeking this type of clothing must order it on-line or from a catalogue (Joergens, 2006; Shaw et al. 2006), which “entails greater perceived risk than store shopping because consumers do not have an opportunity to evaluate merchandise attributes physically” (Kim, Littrell & Paff Ogle, 1999, p. 210). Furthermore, several of the studies found that when consumers could locate sustainable apparel, it was generally only basic items (e.g., t-shirts, socks). Suitable formal and business attire was not available (Shaw & Tomollilo, 2004; Shaw et al., 2006), nor were fashionable items (Joergens, 2006; Shaw et al., 2006; Shaw et al., 2007). Thus, “[c]onsumers frequently felt they were unable to marry their ethical identity and their fashion identity due to poor selection of ethically produced clothing. If they wanted to convey their ethical beliefs they could not also be fashionable, and vice versa” (Shaw et al., 2006, p. 434).

2.3.4 *Sustainable Clothing Practices*

For the purposes of this study, the term *sustainable clothing practices* (SCP) will refer to consumer activities directly related to the clothing (i.e., selection, use, maintenance, and disposal), performed in a manner which either reduces their adverse environmental and social impact or promotes their positive environmental or social impacts. These sustainable practices, which will be discussed below, include:

- purchasing sustainable apparel,
- extending the life of garments (e.g., leasing, reuse, repair and remanufacturing),
- reducing the consumption of new clothing,
- maintaining apparel a more benign way, and
- disposing of garments in an environmentally sound manner (e.g., recycling and composting).

According to the previous discussion on social action, SCP would be considered to be individual acts taken in the belief that one's personal choices can influence societal and environmental effects, be they positive or negative. It should be noted that what will be discussed below is related to *actions* that people can take, not an analysis of the products (e.g., sustainable apparel, second-hand clothing, green detergents).

Purchasing Sustainable Apparel

Sustainable apparel will be the term used to refer collectively to environmentally improved apparel and socially conscious apparel. Environmentally improved apparel is

clothing constructed of materials and/or using production processes that have either a minimal adverse environmental impact or a positive environmental impact. The term also encompasses clothing that has been intentionally designed to facilitate reuse, remanufacturing, repairing, recycling or composting. Such products may range from a t-shirt made of a certified organic cotton fibres to a t-shirt made locally of naturally-coloured certified organic cotton, processed using a mild soap, instead of caustic soda and chlorine bleach, and for which the retailer selling the item operates a recycling program. Socially conscious apparel is clothing produced by manufacturers following fair labour practices and providing safe working conditions. Such practices include paying a living wage, providing paid overtime, ensuring shifts are a reasonable length and adequate downtime is given, prohibiting all forms of abuse, not employing children under the legal age, and allowing employees to partake in union activities⁷.

Consumers concerned with the adverse environmental and social impacts of their clothing may opt to purchase clothing from retailers or brands that they feel confident are supplying sustainable apparel. The barriers to purchasing sustainable apparel have been discussed in detail above, and include: the complexity of the decision-making process, the lack of reliable information on materials and production practices, the limited number of stores supplying sustainable apparel, the limited range of garment types and styles, and the high costs. Conversely, individuals may choose to avoid clothing known to be manufactured in an unsustainable manner – i.e., boycotting brands or retailers infamous for poor working conditions or unsound environmental practices.

⁷ It should be noted that for the purposes of this study I did not develop a set of criteria for what constitutes sustainable apparel. Rather, I provided participants with this definition and allowed them to determine what products they felt complied with this definition.

Extending Garment Lifespan

When assessing the effects of a garment, its lifespan is a vital factor in determining its environmental impact. If a garment has a long lifespan, the consumer can continue to use the item and does not need to replace it as quickly, thereby reducing the use of natural resources, the generation of pollution and the negative impacts on human well-being resulting from production (Kalliala & Nousiainen, 1999; Smith & Barker, 1995).

Factors which influence the lifespan of a garment include the quality of the fabric and garment construction, the durability of the fabric and findings (e.g., zippers, buttons, facing), and the styling of the garment. These three factors are determined by the manufacturer, who selects the materials, sets the quality level, and determines, through the design features, whether the garment is a fashion piece (i.e., designed for a very limited time span and intended to be replaced before it has reached the end of its lifespan) or a basic/classic item (i.e., pieces that do not tend to go out of style and can be worn until the end of its useful life). It is the consumers who select the particular garment – choosing the quality, durability and styling that best meets their needs. Through their choices, consumers send a message to manufacturers regarding the types of garments they want and expect. If they continually select low-quality, cheap fashion pieces, which have a limited lifespan, manufacturers will continue to provide such garments.

In addition to selecting higher quality, more durable, and more classically-styled apparel, there are several activities available to consumers for extending the lifespan of garments – including leasing, repairing, remanufacturing, and reusing (Allwood et al., 2006).

Apparel Leasing. Traditionally, garment leasing has been limited to work apparel or apparel used for specific short-term purposes (e.g., formal attire). Leasing has not been readily used for personal, everyday clothing items. However, most of our attire is under-utilized and disposed of before it reaches the end-of-its-useful life; therefore, the leasing of everyday, fashion apparel may be a means to reduce the environmental footprint of clothing (Allwood et al., 2006). From a customer perspective, leasing:

- Provides access to a broad assortment of types, styles and colours of clothing at a lower cost per garment wearing;
- Allows for a rapid turnover in garments in one's wardrobe;
- Requires less storage space at home for clothing; and
- Eliminates the need for garment maintenance (i.e., simply return after wearing) (Allwood et al., 2006).

From an environmental perspective, leasing:

- Allows consumers to still enjoy a rapid turnover in apparel, but reduces the number of garments being produced and lowers the disposal rate;
- Ensures each garment is used more intensely than items belonging to individuals; and
- Allows garment repair and maintenance to be carried out on a large scale, reducing costs and environment effects, as professional cleaning tends to use less water, energy and chemicals than home laundering and the economies of scale allow for investments in the latest green cleaning technologies (Allwood et al., 2006).

Repair. In less prosperous parts of the world, extending the lifespan of a garment through repair is common practice. However, in North America and Western Europe, due to the decreased ability of the populace to conduct repairs, the low cost of apparel and the high-labour rates for professional tailors, repairing garments is less economical than buying new. However, lengthening the life of garments is an essential step in reducing environmental and social harm. A recent report on the impact of clothing in the UK, entitled *Well Dressed*, suggested that manufacturers could play a role in encouraging repair by making changes to their designs and offerings. For example, certain garment components, such as collars and cuffs on dress shirts, could be designed to be easily removed, allowing apparel manufacturers to sell spare replacement parts, thereby making repairs less costly and less of an inconvenience (Allwood et al., 2006). If such were the case, consumers would then have the responsibility of selecting garments for which replacement parts existed and ensuring they took garments in for repair, or conducted the repairs themselves, rather than disposing of the article of clothing. Another approach would be to increase people's abilities to conduct repairs.

Remanufacturing. Another means of extending the lifespan of a garment recommended in the *Well Dressed* report, was that of remanufacturing. Apparel manufacturers could design garments to be upgraded. For example, as with repair, certain components of the garment could be designed to be easily removed, such as the sleeves on a blouse or the panels on a dress, and replaced with a more fashionable and up-to-date component. Another study recommended the use of post-consumer garments as raw materials for designers creating new apparel items, suggesting the new garments would be one-of-a-

kind, higher-priced goods, due to the need for individualized design and production processes (Young, Jirousek & Ashdown, 2004). Some specialty boutiques in Europe and North America are already supplying this type of designer garment (Hawley, 2006). Once again, consumers would have the responsibility of selecting garments designed to be remanufactured and/or for returning garments to either the manufacturer or designers specializing in remanufacturing to have them turned into something new. Consumers themselves may also make their own redesigned garments, combining different garments in their wardrobe or ones obtained second-hand.

Apparel Reuse. As noted above, most garments are not used to their fullest potential and are often discarded before the end of their useful life. Selling or donating these garments to other consumers, through the internet, consignment shops, thrift stores, or clothing swaps, reduces the demand for new apparel and decreases the amount of clothing entering landfills. Due to the immense volume of donated apparel, only roughly a fifth of the garments given to thrift shops in North America and Western Europe ends up being sold domestically (Claudio, 2007). The remainder is sold to “rag graders” who either export the used garments to developing countries, recycle the materials into lower-grade textile products (e.g. upholstery stuffing, insulation, paper products), or cut up the fabric and sell it as industrial rags (Claudio, 2007; Domina & Kosh, 1997; Hawley, 2006).

Reducing Consumption

Consumers also determine how often they purchase new garments, the quantity of garments in their wardrobe and whether they retire a garment before the end of its

lifecycle. The more new garments purchased, the greater the strain on our environment and social structure. Regrettably, a recent UK-based study found that on an annual basis, female consumers buy an average of 14 new apparel or accessory items that they never end up wearing (“Fast Fashion”, 2007).

A disturbing trend, from a sustainability perspective, is that of *fast fashion*. Traditionally, apparel manufacturers designed and produced collections for four to five seasons a year (spring, summer, transitional, fall, and holiday or resort) (Fringes, 1994) and it could take upwards of a year for a style to make it from the run-way to a mainstream retail store. Today, however, there are a growing number of retailers providing what has been termed fast fashion. Analogous to fast food, fast fashion is basically disposable clothing – inexpensive, poorly constructed apparel made from low quality fabrics. It is intended to be worn only a short period of time and then discarded (Claudio, 2007; “Fast Fashion”, 2007). The styling represents the latest in fashion trends, often appearing in retail stores only six weeks after parading down the catwalk (“Fast Fashion”, 2007). Merchandise turnover in fast fashion retail outlets is significantly higher than traditional stores, with stock being replaced every two to three weeks (Allwood et al., 2006). This constant introduction of new styles, combined with extremely low prices, encourages consumers to buy more frequently and makes disposal relatively effortless. Retailers leading the fast fashion trend include H&M, Zara, Topshop and Forever 21. In the United Kingdom, one of the countries where fast fashion originated, this trend has led to an increase in the volume of apparel being consumed and a rapid growth in the rate of garments being sent for disposal (Allwood et al., 2007). Over the last decade, the price of women’s clothing has decreased by one-third and,

between 2001 and 2005, the number of apparel items purchased in the UK, per person, rose by over one-third (“Fast Fashion”, 2007). Further, these garments, although perhaps not intentionally, are designed to be landfilled. The excessive poor quality makes them unsuitable for reuse. Sherburne notes that, “when the quality of those clothes diminishes, their potential reuse becomes increasingly compromised” (2009, p. 5)

Garment Maintenance

In order to maintain a garment’s cleanliness, eliminate odour and restore appearance, garments must be either home laundered or dry-cleaned. Home laundering requires significant energy to heat the water and operate the washer, dryer and iron. Home laundering also utilizes significant quantities of water and produces nearly an equal amount of wastewater, which often contains detergents, bleaches, fabric softeners, stain removers, as well as dirt and other materials removed from the garments during cleaning.

Comparing the two most commonly used apparel fibres – cotton and polyester – the maintenance of cotton typically requires more energy than polyester, as it necessitates a higher wash temperature, longer dry-time and pressing to restore its appearance (Donnell, 1995). A recent study estimated that of the total energy used by a cotton t-shirt from fibre production to final disposal, 40-percent is utilized to produce and deliver the garment to the consumer, while the remaining 60-percent accounts for energy expenditures during laundering⁸. This maintenance regimen requires 1.7 kg of fossil

⁸ Assumes 25 launderings with a water temperature of 60°C, followed by tumble drying and ironing (Allwood et al., 2006).

fuels and emits an estimated 4 kg of carbon dioxide equivalents into our atmosphere (Allwood et al., 2006). The same study concluded that washing at a lower wash temperature, hanging the garment to dry and avoiding ironing could reduce climate change impacts by as much as 50 percent (Allwood et al., 2006). Of these three actions, the most important is eliminating the tumble dry cycle. Therefore, for cotton garments, in which the maintenance phase uses the bulk of the lifecycle energy, a change in consumer behaviour (i.e., laundering habits) is one of the best means of reducing environmental impact (Allwood et al., 2006).

Chemical finishes, such as wrinkle and soil-resistant finishes can be applied to ease the laundering process and reduce energy demand. However, these finishes generally involve the application of toxic and potentially carcinogenic chemicals, such as formaldehyde and organofluoro-chemicals. Fibre blends, such as cotton/polyester, can yield a fabric that is comfortable with a pleasant hand, but also has excellent washability and wrinkle resistance. However, blending natural and synthetic fibres significantly reduces the possibility of recycling and eliminates composting as an option for final disposal.

Dry cleaning is the second option for maintaining apparel. The most commonly used dry cleaning solvent – perchloroethylene (perc) – contains compounds such as tetrachloroethylene, which are toxic and persistent if released into the environment (Chen & Davis Burns, 2006). Perc has been deemed a probable carcinogen, a hazardous air pollutant and an ozone-depleting substance, and the waste generated by the cleaning process is considered hazardous (Chen & Davis Burns, 2006; Eckman, 2004; McCall, Patel, Mock & Grady, 1998). There are several green alternatives to traditional solvents -

including wet cleaning, liquid carbon dioxide, silicone solvents and ultrasound (Eckman, 2004; McCall et al., 1998) (see Appendix D for further discussion of these alternatives). Consumers interested in practicing sustainable cleaning methods, will either choose to avoid purchasing garments which require dry cleaning or select dry cleaners using greener alternatives.

Final Disposal

Once a garment is worn-out or damaged beyond repair, consumers' final disposal choices are limited. In fact, at this time, landfilling is the only viable option available to most North American consumers for disposing of their worn-out clothing and, unfortunately, it is the choice many still make for still useable apparel. According to the U.S. Environmental Protection Agency (Office of Solid Waste), each American sends more than 68 pounds of apparel and textile products to the landfill on an annual basis (as cited in Claudio, 2007).

For many other waste streams, there are two environmentally-sound waste management options available – recycling and composting. However, neither of these options are well-developed for used garments.

Recycling. The recycling of post-consumer apparel products, at this time, is negligible (Koch, Hergeth, Oxenham & Ghosh, 2000). Following a recent internet search, it appears that in Canada, textiles are not included in any provincial or municipal recycling programs. The challenges to recycling textiles are numerous, and include high

processing costs, poor quality waste materials (e.g., wide variety of dyes and finishes used, incompatible materials and accessories, fibre blends), lack of appropriate technology for processing and recycling, and limited end-markets for recycled materials (Allwood et al, 2006; Chen & Davis Burns, 2006; Domina & Koch, 1997; Hawley, 2006; Koch et al., 2000). Apparel manufacturers, through their garment designs, can help to improve recycling by using recycled fibres in their lines, thereby helping to build a market. They can also design their garments to be more easily recycled, which may involve avoiding blends or composite fabrics and using compatible accessories (e.g., trim fabrics, interfacing, linings) (Allwood et al, 2006; Bide 2001; Gulich, 2006)

Despite consumers' limited access to recycling programs, some unwanted garments are being recycled. As noted above, some charity organizations sell garments not suitable for reuse to garment reprocessors, who sometimes recycle them into other products. Furthermore, a few retailers are beginning to operate recycling programs, collecting the brands sold in their stores from consumers after use and sending them for recycling (e.g., Patagonia).

If garments are sent for recycling - there are two methods available - mechanical or chemical recycling. *Mechanical recycling* involves retrieving fibres by way of cutting and shredding, which has a downgrading effect on fibre quality and limits their possible end-uses (Koch et al, 2000; Hawley, 2006). *Chemical recycling* involves using chemical processes (e.g., enzymes, heat, solvents) to break a fabric down into its base components (Hawley, 2006; Koch et al., 2000). This form of recycling is limited to single-fibre synthetic fabrics and is not a commonly used process, due to its high costs (Koch et al,

2000). However, the outdoor company Patagonia is using this process to recycle their old garments in order to generate fibres for their new garments.

Composting. Natural fibres (e.g., cotton, wool, silk, flax, hemp), unlike synthetic fibres (e.g., polyester, nylon, olefin), are inherently biodegradable. If left to the elements, a cotton rag will completely degrade in one to five months and wool socks in one to five years (Worldwise, nd), while under ideal composting conditions, these timeframes would be considerably reduced. However, in practice there are a number of constraints which prevent natural-fibre garments from being composted. First, in order for any biodegradable material to be broken down, certain conditions must be met, namely the presence of moisture and an abundance of suitable microbes (Donnell, 1995). In modern-day landfills, once waste is covered over, moisture, light, oxygen and microbes are in short supply. As a result, even readily biodegradable materials, such as paper and food debris, can take hundreds of years to degrade once buried in a landfill. When organic materials do degrade in landfills, because there is no oxygen, methane is released, a greenhouse gas 21 times more potent than carbon dioxide (Environment Canada, 2006). Second, while there are a few composting programs in Canada which accept products other than kitchen scraps, the majority of consumers, if they own a bin, are left to add their natural fabrics to their backyard compost heap. Finally, the fibre itself can readily and safely be decomposed; however, as the material degrades into its base components, the wide-range of chemicals used to treat and finish it are also released and broken-down, some of which may be toxic, carcinogenic and persistent. Therefore, the compost generated by textile materials may be limited in its applications.

2.3.5 Collective Action related to the Promotion of Clothing Sustainability

No scholarly articles could be found which discussed collective action in relation to environmental concerns surrounding apparel. With regards to social concerns, a few of the articles reviewed made reference to some of the more recognized collective action groups – the Fair Labour Association, Clean Clothes Campaign and United Students Against Sweatshops (Firoz & Ammaturo, 2002; Ross, 2006; Rudell, 2006). The association and campaigns are operated by students’ unions, companies, college/university administrators, and non-government organizations, and are relatively inaccessible to the average consumer.

Finding limited information regarding collective action in academic journals, I turned to the websites of several social action-oriented NGOs concerned with the impacts of clothing, including the Sustainable Cotton Project, No Sweat, Maquila Solidarity Network, Labour Behind the Label, and Adbusters. Through the information and recommendations provided by these groups, I have identified a number of the collective action options available to consumers, including:

- Organizing or engaging in a letter writing/e-mail campaigns targeting retailers, manufacturers, institutions, or governments (national or international);
- Participating in blogs related to social or environmental concerns;
- Organizing or engaging in collective boycotts;
- Engaging in international events, such as “Buy Nothing Day”;

- Joining or providing financial support to non-government organizations working to improve the sustainability of clothing;
- Organizing or attending a sustainable apparel fashion show;
- Sharing information with others;
- Asking retailers to start carrying sustainable apparel;
- Organizing or attending a community meeting regarding social or environmental impacts and sound alternatives in the community;
- Lobbying local organizations (e.g., universities, institutions, government) to develop sustainable apparel purchasing policies; and
- Organizing or participating in a clothing swap.

2.5 Summary

Concerned with the environmental and social impacts of apparel production and consumption, I wanted to investigate why certain consumers opt to engage in more sustainable clothing practices or other actions to improve the sustainability of clothing. Transformative learning theory provided the theoretical foundation for this exploration, offering an explanation of how learning and reflection can lead to a transformation in a consumer's attitudes and behaviour. Transformative learning describes how individuals encountering situations, knowledge or attitudes which conflict with their understanding of the world, engage in a process of critical reflection and active dialogue in which they question and analyze their foundational beliefs, attitudes and perspectives. Such reflections may result in a transformation of their worldview. In applying this theory to clothing sustainability, I explored what prompted these consumers to engage in the

learning process, how they learned about the impacts of clothing and more sustainable practices, and how this new knowledge and/or experience changed their views, attitudes and behaviour in relation to clothing.

Unfortunately, while transformative learning theory provides a basis for understanding how an individual comes to change attitudes and behaviour towards clothing, it does not provide an explanation as to why some transformed individuals may act upon their perspective change, choosing to engage in collective social action. To fill this gap, I turned to a number of different theories on collective learning and action – including problem-posing education and the theory of dialogical action (Friere), the theory of communicative action (Habermas), social learning in NREM, and critical consumer education. From these theories, I gained a greater understanding of the stages involved in social action and the key variables of social action. Specifically, I determined that not only is learning essential to transformation, but it is also a vital element of social action. Learning that leads to social action may be individual, collective, or a combination of both. It involves gaining new knowledge, reflecting on this knowledge, and engaging in negotiation in order to develop an understanding of a societal problem, the impacts and cause of the problem and the possible solutions. Learning also occurs in relation to the action itself, with the learner needing to identify and understand the array of action options available to implement the preferred solution. Carrying out the chosen action may also require instrumental learning, as the learner may need to develop a new skill set or knowledge-base (e.g., learning to create a website or how to develop an effective public education campaign). With regard to the action itself, it may be undertaken by an individual or group(s) with the intended outcome varying in terms of

the societal structure it intends to transform (e.g., political, economic or social realm) and the scope (i.e., whether it is intended to transform an individual or a collective). Once implemented, the individual or group(s) will often evaluate the effectiveness of the action taken and reflect on successes and shortcomings. This, in turn, may result in a revision of their frame of reference and alter how they approach learning, reflection and planning related to social action in the future.

To ensure I had an adequate understanding of the problem, impacts, solutions and actions related to clothing sustainability, I conducted a thorough review of the literature on this topic. I examined what was currently known about consumers opting to buy sustainable apparel, with a specific focus on the barriers preventing purchases (i.e., complexity of decision-making process, lack of information, lack of availability and price). I also explored the adverse environmental and social impacts associated with the production and consumption of apparel (Appendix D), and finally I reviewed the action options available to consumers to reduce their clothing footprint, as both individuals (i.e., sustainable clothing practices) and as collectives (e.g., letter writing campaigns, collective boycotts, clothing swaps).

Chapter 3

RESEARCH APPROACH AND METHODS

3.0 Introduction

The previous chapter demonstrated that transformative learning has the potential to be a valuable tool for instigating and maintaining sustainable views and actions. It can help individuals to process new information, facilitate its integration into their thinking, and inspire and aid them to engage in social action. To study this theory in relation to clothing sustainability, I used a mixed methods approach which combines the traditions of qualitative and quantitative research. A case study strategy was used to frame the project, which explored the stories of individuals striving for clothing sustainability in Winnipeg, Manitoba. The methods employed included a series of interviews (qualitative), a consumer survey (quantitative), a journaling exercise (qualitative) and a life-grid exercise (qualitative).

3.1 Provisional Truth

Guiding a researcher's work are fundamental worldviews and philosophical perspectives regarding science. I come from an interdisciplinary background. My undergraduate degree is in Human Ecology (Clothing & Textiles) and my Master's degree is in Natural Resources Management, both of which are interdisciplinary fields of study. Each draws upon the literature, research tools and paradigms of various other disciplines such as chemistry, physics, biology, environmental studies, marketing, education, business administration, fine arts and law. Consequently, I have a great

appreciation for the value and strength which may be gained from differing approaches to and, perspectives on, research. With regards to research collection methods, I have used laboratory experiments, surveys, observations, document reviews, focus groups and interviews to provide insight into a wide array of research topics.

Pragmatism is the paradigm which most closely describes my perspective on research and is the paradigm in which this project will be grounded. Pragmatism is concerned with finding the solution to a problem. It does not emphasize a particular philosophical standpoint or view of reality, and does not specify the type of methods or approaches a researcher must employ (Creswell, 2003). Rather, researchers are encouraged to use the methods best suited to gathering the data necessary to answer the research question. As such, mixed-methods studies, in which the choice of methods is based on practical reasoning, rather than paradigmatic justifications, often rely on a pragmatic philosophy (Creswell, 2003; Johnson & Onwuegbuzie, 2004; Rosenberg & Yates, 2007).

Pragmatism “views current truth, meaning, and knowledge as tentative and as changing over time. What we obtain on a daily basis in research should be viewed only as provisional truth” (Johnson & Onwuegbuzie, 2004, p. 18). In other words, supporters of the pragmatic paradigm believe our concept of what is true will change as we gather new information through our research. This is similar to Mezirow’s descriptions of the transformative learning process, in that meaning structures are provisional, and as we gather new information and encounter new experiences, these structures change and evolve.

Furthermore, pragmatism is an action-oriented, practical approach to research. Most pragmatic-based studies support praxis (i.e., “theory that informs effective practice”) and seek to address value-oriented problems (Johnson & Obwuegenzie, 2004). Based upon the underlying premise that sustainability is essential to our survival, and deep-rooted changes are required to achieve a sustainable society, the intention of this study is to build upon a theory (transformative learning theory) that can be used to inspire individual and collective action to achieve sustainability (a value-based goal). In the case of this research, the findings were intended to expand our knowledge of clothing sustainability and TLT, thereby acting as a valuable resource for subsequent studies seeking to promote social action. I believe when one is pursuing a new area of research it is necessary to establish a fundamental understanding of the topic before initiating research which is aimed at encouraging action. In other words, a basic body of knowledge must be acquired to ensure a researcher is well-informed when commencing their research. This work is intended to establish the foundation needed to guide future action-oriented research in the areas of clothing sustainability and learning for living sustainably.

3.2 Mixed Methods

Traditionally, social science research falls into one of two spheres – quantitative or qualitative. Quantitative research involves developing knowledge through the exploration of causal relationships. Set on proving (or disproving) theories or explanations, quantitative researchers manipulate, observe and measure key variables. The data sets generated are numerical and are analyzed using statistical methods. Typical

data collection methods used for quantitative inquiries are experiments or surveys (Creswell, 2003). Qualitative research, on the other hand, seeks to build knowledge through the interpretation of social experiences and events. Researchers in this paradigm aim to develop theories or patterns by collecting and interpreting “open-ended, emergent” data (Creswell, 2003). Methods of inquiry typically include narratives, ethnographies, grounded theory studies, phenomenologies or case studies. These methods generate text or images which the researcher analyzes to identify themes.

More recently, a third research sphere has emerged in the literature – mixed methods – which involves bringing together quantitative and qualitative methods of inquiry. Mixed methods research is defined as “...the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study” (Johnson & Onwuegbuzie, 2004, p. 17). Rather than having a select number of research design options available, as occurs within the quantitative and qualitative paradigms, mixed method researchers are free to be creative in their design – using the best data collection tools, data analysis methods, and interpretative techniques, in the most efficient configuration, to allow them to answer their research question. What is fundamental in mixed methods research is that the researchers “collect multiple data using different strategies, approaches, and methods in such a way that the resulting mixture and combination is likely to result in complementary strengths and nonoverlapping weaknesses” (Johnson & Ownweugbuzie, 2004, p. 18).

One of the key strengths of the mixed methods approach is the ability to augment the understanding of numerical data with text and narratives, and conversely, to enhance

the precision of text and narratives with numerical and statistical information. Used together, quantitative and qualitative techniques can generate a more complete picture of the phenomenon under study and enable researchers to tackle a broader range of complex research questions (Johnson & Ownweugbuzie, 2004). However, there are challenges to conducting mixed method studies. They tend to be more expensive, time consuming and complex (i.e., researchers need to know how to use multiple methods and how to mix them properly) as compared to single-method studies, and often require a team to carry out the research. In addition, the mixed methods approach is relatively new and still under development. A number of methodological issues have yet to be addressed, including how contradictory findings should be interpreted (Johnson & Ownweugbuzie, 2004).

Given the strengths of the mixed methods approach and the nature of the purpose and objectives of this research project, I decided to combine quantitative (survey) and qualitative (interviews and journal) data collection processes and analysis methods. The general purpose of a survey is to generate “numeric descriptions of trends, attitudes, or opinions” (Creswell, 2003, p. 153). A number of the studies on ethical consumer behaviour related to clothing yielded statistical data (e.g., Butler & Francis, 1997; Dickson, 1999; Dickson, 2000; Iwanow, McEachern & Jeffery, 2005). My survey gathered basic numerical data on participants’ actions, decision-making, concerns, self-beliefs, and sources of knowledge. Drawn from this data were averages, means and ranges for the items of interest, which allowed for direct comparisons to be made amongst participants. In contrast, the in-depth interviews were preformed one-on-one, generating textual data, which required an analysis of the emerging themes, rather than

statistical analysis (Creswell, 2003). Through such interviews, I was able to elicit the reasoning behind the thoughts and behaviours recorded by the survey, as well as exploring more deeply the transformative learning process and its relationship with social action. The journaling exercise also produced extensive textual data, capturing, in their own words, the thoughts and actions of a select number of participants as they occurred. As in the case of the interview data, the journal entries were subject to a thematic analysis.

There are five basic reasons for undertaking mixed methods research: triangulation, complementarity, initiation, development and expansion (Caracelli & Greene, 1993; Johnson & Onwuegbuzie, 2004). In the case of my study, the purpose of selecting this approach was two-fold – complementarity and triangulation. Complementarity refers to the use of quantitative and qualitative techniques “to measure overlapping, but distinct facets of a phenomenon under investigation. Results from one method type are intended to enhance, illustrate, or clarify results from the other” (Caracelli & Greene, 1993, p. 196). For example, the interviews gathered narrative data on the types of sustainable clothing practices participants engaged in and explored why they adopted these practices. The survey, on the other hand, collected quantitative data on their behaviour, such as the frequency of clothing purchase, the importance of different clothing attributes, and the percentage of their wardrobe that was sustainable. While both methods examined participants’ actions, each data set provided unique insight into the phenomenon, with the survey establishing their commitment to their behaviour and the interviews determining what lead them to this commitment. The second reason for using a mixed methods approach is for the purpose of triangulation. According to Carcelli and Green,

“triangulation seeks convergence, corroboration, and correspondence of results across different methods” (1993, p. 196). Some of the questions asked on the survey were also investigated through the interviews, allowing me to corroborate the results. For example, on the survey, participants were asked to indicate the regularity with which they performed specific sustainable clothing practices, while during the interview they were asked to discuss the practices in which they were engaged.

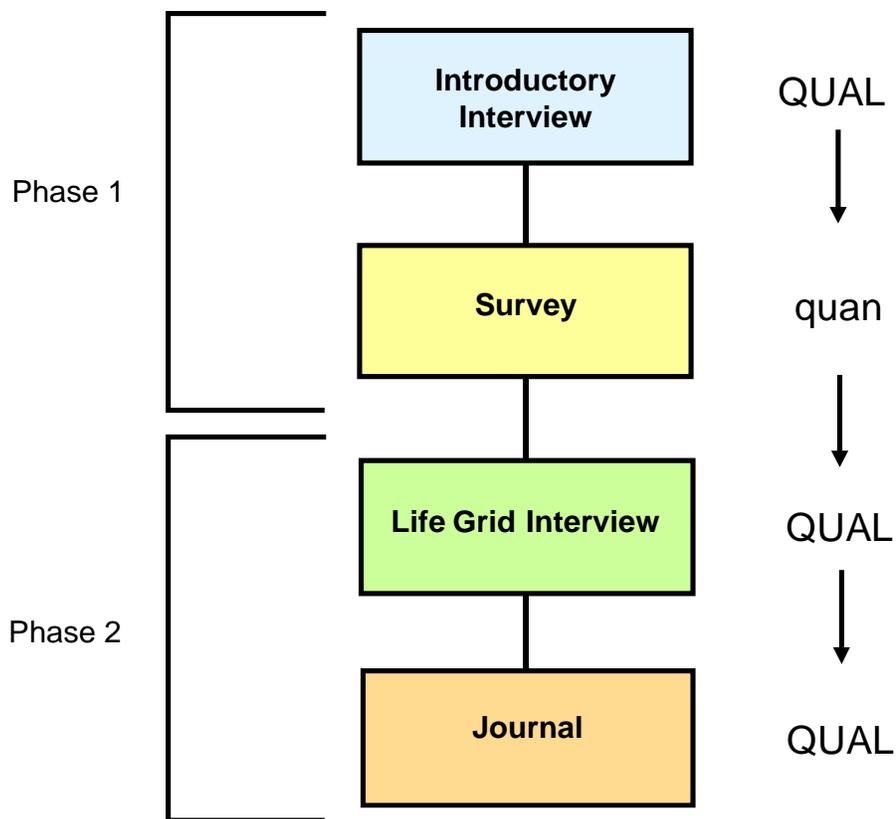
In designing a mixed methods study, researchers must decide on three key features:

- **Approach Emphasis:** A researcher must decide if he or she will give greater priority to one of the approaches – i.e., quantitative or qualitative – or whether they will be considered equal.
- **Timing/Order:** A researcher must decide whether the qualitative and quantitative phases will be conducted concurrently or sequentially. If conducted sequentially, they must also determine which of the phases will occur first.
- **Integration:** To truly be considered a mixed methods study, the qualitative and quantitative phases must be combined at some point. Thus, a researcher must decide at which stage to integrate them – e.g., objective setting, data collection, data analysis, and/or interpretation (Creswell, 2003; Johnson & Obwegbuzie, 2004).

The mixed method design used in this project was sequential, with a stronger emphasis on the qualitative approach. The quantitative and qualitative methods are integrated at the data analysis stage (i.e., the findings from Phase One are analyzed

collectively and used in the development of the initial set of codes for analyzing the data from the Life-Grid Interviews) and the interpretation phase (i.e., findings from all data collection and analysis methods are integrated to generate discussion and draw conclusions) (Figure 3.1).

Figure 3.1: Schematic Diagram of the Mixed Method Design



Note: 'qual' refers to qualitative, 'quan' refers to quantitative, '→' denotes a sequential phase, capital letters signify high priority, and lower case letters signify lower priority (Johnson & Obweugebuzie, 2004).

3.3 Case Study

A case study is defined by Yin (2009) as “an empirical inquiry that: investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 18). Rosenberg and Yates (2007) further explain that a case study is a “methodologically flexible approach to research design that focuses on a particular case – whether an individual, a collective or a phenomenon of interest” (p. 447). Case studies provide an adaptable and accommodating framework for conducting research on a diverse range of complex research questions and are appropriate for explaining, exploring or describing a phenomenon (Berg, 2007; Yin, 2009). Researchers employing a case study approach are free to select the methodological tools which are most practical for answering their particular research question – with a single case study potentially encompassing both quantitative (e.g., surveys) and qualitative (e.g., primary and secondary data sources, artefacts, interviews, and direct observations) techniques for gathering and analyzing data (Rosenburg & Yates, 2007).

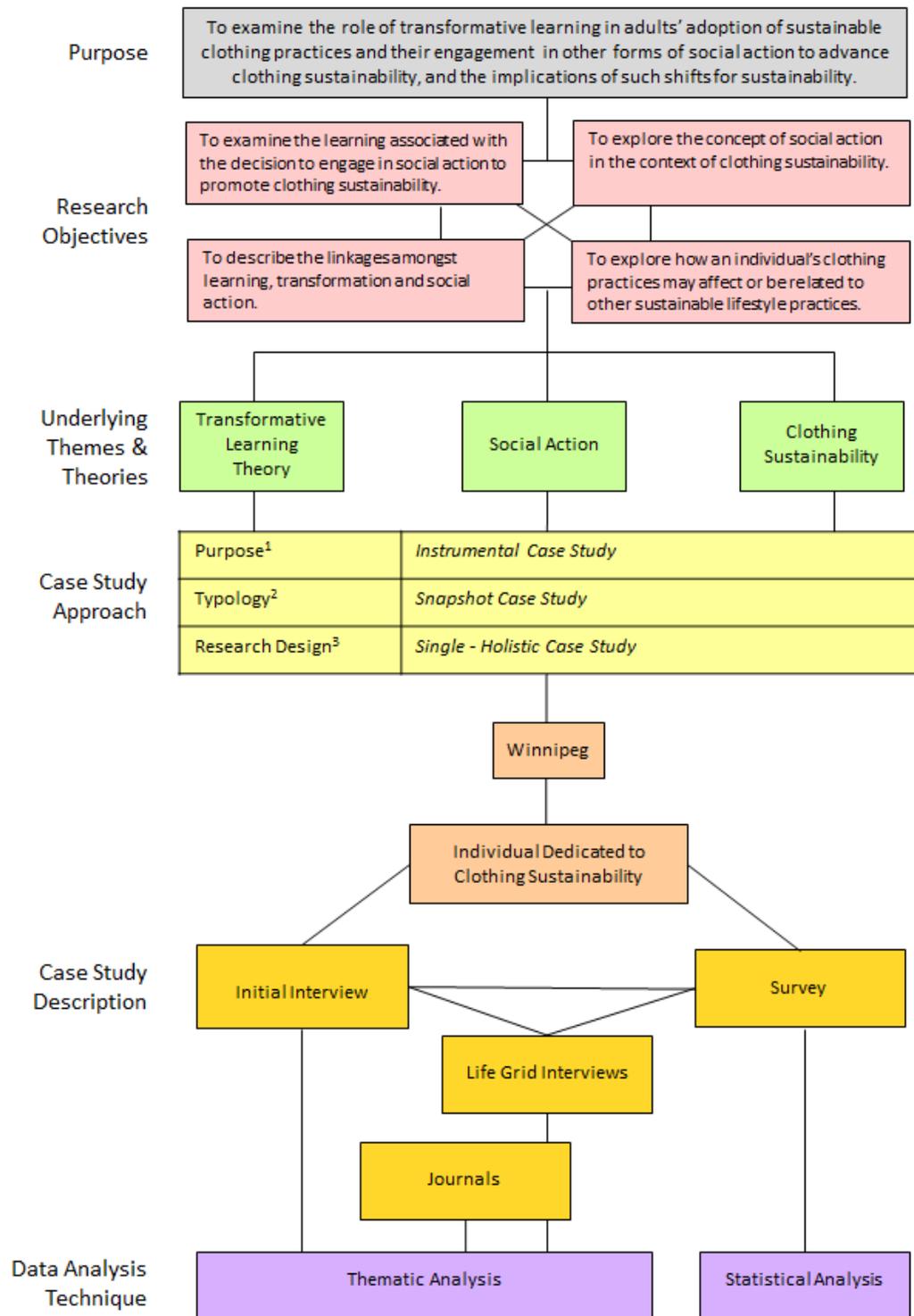
Although case studies are flexible and allow for the in-depth exploration of specific phenomena within their natural settings, there are several potential drawbacks to case studies. Critics often point out that case studies lack rigour and are open to researcher bias in data collection and analysis. Techniques for increasing reliability and validity of case studies include providing an accurate and detailed description of the procedures used, relying on multiple sources of evidence, establishing a clear chain of evidence, and engaging in member checking (section 3.5) (Yin, 2009). Another common critique of case studies is one cannot generalize from a single case study. However, Yin explains

that case studies, like experiments, are not designed to reach findings that are generalized to a population or universe, but they can be generalized to a broader theory. Theories are confirmed through the repeated replication of findings in diverse specific circumstances, thus the results of each case study go to support (or disprove) elements of a theory - in the case of this research, the transformative learning theory.

3.3.1 Type of Case Study

In seeking to explore and build upon the theory of transformative learning, a case study approach was deemed the most appropriate research strategy. As noted above, it is a logical approach for investigating complex phenomena, such as transformative learning theory, social action and sustainability, and permits the use of multiple methods of data gathering, including surveys and interviews. The case at the heart of this research concerns individuals engaged in social action related to clothing sustainability in Winnipeg, Manitoba, Canada. Figure 3.2 is a schematic representation of the research design framework to be used in this project.

Figure 3.2 – Schematic Diagram of the Research Design



¹ Stake, 1995 (as cited in Berg, 2007); ² Jensen & Rodgers, 2001; ³ Yin, 2009

Case Study Classification

There are a variety of ways of classifying case studies, three of which apply to this study. Yin (2009) established a case study research design matrix to distinguish between different approaches. According to his matrix, this study would be termed a single-holistic case study approach. Single refers to a focus on one case (i.e., individuals dedicated to clothing sustainability in Winnipeg), while holistic refers to the examination of the “global nature” of one unit of analysis (i.e., participants were regarded as a single unit rather than each participant being viewed as an individual unit). Jensen and Rodgers (2001) have also developed a typology to describe different case studies. According to their approach, this study would be deemed a snapshot case study, which refers to a comprehensive study of a single entity within a defined timeframe. Finally, Stake (1995, as cited in Berg, 2007) proposes a different classification for case studies based on their purpose. According to Stake, this study would be termed an instrumental case study. Instrumental is a term used to describe case studies which seek to build upon a theory. Often the actual case selected is secondary, simply acting as support for the in-depth exploration of a theoretical concept.

Case Study Selection Criteria

Winnipeg was selected for two primary reasons. First, as my place of residence, I was familiar with the status of clothing sustainability in this city and I was easily able to arrange for multiple in-depth interviews, both of which permitted me to develop a rapport with the subjects and gain a greater insight into their experiences. Second, Winnipeg is

considered an ideal test market as our consumers are deemed fairly representational of the wider North American market.

In North America, Winnipeg, the capital of the Canadian province of Manitoba, is considered a premier test market. Its (*sic*) fairly cosmopolitan and conservative population displays the same characteristics as a larger target audience or general market. This city is favourably isolated because the nearest urban centers are Regina, Saskatchewan and Minneapolis, Minnesota, both of which are approximately 300 miles away. Thus, the market is controllable because its residents are not exposed to conflicting or competing information from outside sources ... Winnipeg has been used to test several product concepts before those products were made available in the US markets. (Onkvisit & Shaw, 2004, p. 220).

This study does not seek to generalize the results to a broader population, but rather to contribute to the transformative learning theory. However, due to the representational nature of our population, the results of this study could serve as a reasonable foundation or starting point for future studies.

3.4 Data Collection & Analysis Methods

To explore the transformative learning process and its link to individual and social action in the context of the sustainability of clothing, a variety of data collection methods were employed, including an introductory interview, a survey, a journaling exercise, and a life-grid interview. As previously noted, the study was divided into two phases. *Phase One* gathered information regarding participant's attitudes, beliefs and values related to clothing, as well as data on their behaviours and actions associated with clothing sustainability, while *Phase Two* gathered in-depth information on the learning process and its relationship to their behavioural shift.

3.4.1 Research Preparation

Study preparations required that I determine the profile of potential participants, recruit participants and gain a sense of the clothing sustainability climate in Winnipeg. The following describes these steps.

Background Information

In preparing for interviewing participants, I considered it valuable to gain a better understanding of what was occurring in Winnipeg with regards to clothing sustainability. To do so, I met with a number local businesses and organizations who were promoting (e.g., environmental groups) and/or facilitating (e.g., sustainable apparel retailers) sustainable clothing practices and related social action. The majority of my interactions were in the form of a relatively informal, semi-structured interviews and included discussions with three second-hand retailers, two environmental organizations, a consumer advocacy group, a fair trade organization, and an environmentally-friendly printing house. In addition to recording the majority of these discussions, I took detailed notes during each interview. These interviews were then transcribed and participants were asked to review the transcript to ensure its accuracy and to add any additional information they wished to share. Appendix E provides a general sense of the broad questions discussed.

Unfortunately, arranging interviews with the sustainable apparel retailers proved difficult. In the end, I developed a fairly basic survey requesting information about their products, the methods they used to ensure the sustainability of their products, and the

information they provided to consumers. I had only three responses; thus, these data were marginally useful. A copy of the retailer survey can be found in Appendix F.

In terms of the selection of these business and organizations, they were chosen on the basis of their prominence within the community and/or my own personal connections or those of my committee. The general questions I asked sought to explore the role they played in promoting or facilitating learning and action and to identify the learning tools used by these groups to educate individuals/consumers. With regards to the non-government organizations (NGOs), at the time of our initial discussion, there was little to no direct clothing sustainable work being performed. One organization did provide information to consumers promoting second-hand clothing, but it was with the intentions of helping recent immigrants find reasonably priced goods, not to reduce the environmental or social impacts of clothing production. Over the course of the research, there was an increase in the activities of one of the NGOs. They organized a fair trade fashion show for high schools students and are now involved in delivering presentations on fair trade clothing and accessories. They have also included these items in their on-line buying guide.

Through these interviews, I discovered there were at least two second-hand shops with a sustainability focus. Going beyond just selling used apparel, one held classes on knitting and sold yarn (including several sustainable brands), while the other sold redesigned garments and apparel made by local designers, hosted clothing swaps and held workshops on making redesigned clothing. I was attracted to interviewing these retailers because I had heard they had an orientation towards sustainability. Due to my limited sample I cannot say for certain whether many other second-stores have similar

ideals. The third one I interviewed did not. A number of the participants discussed these two retailers, mentioning the additional sustainable services and products they offered. However, many also discussed the larger second-hand chains (e.g., Value Village, Salvation Army, Good Will and MCC Thrift Shops), which do not offer such extras.

The retailer surveys indicated that an array of sustainable apparel is being sold in Winnipeg, include men's, women's and children's wear, ranging from dresses to socks. Sustainable features included organic cotton, naturally-coloured fibres, fair trade, sweatshop-free and locally produced. With regards to sharing information with consumers, these retailers reported communicating information on topics ranging from sustainable features of a specific garment to options for extending the life of a garment. They did so using a variety of means, such as hangtags, in-store displays, website, and well-informed staff. Yet when participants reported how they learned about sustainability and clothing, the survey revealed that 49 percent gained knowledge from retailer or manufacturers publications and only 29 percent received information from retailer management or staff. In other words, despite retailers' efforts, less than half of the participants relied on the information they provided. All three retailers were directly identified during participant interviews, with one being mentioned on several occasions in relation to the information they supply. As will be discussed later, many of the consumers shopped at retailers they trusted. From the responses on the retailer surveys, it would seem that the retailers also tend to do business with suppliers they trusted, not necessarily verifying the supplier's assertions about their products. This was likely not a fact that many participants knew and potentially one which would lead them to be hesitant of relying on these retailers.

Participant Recruitment

The participants sought for the study were individuals who had a strong commitment to sustainable clothing practices, were dedicated to the environment and living a sustainable lifestyle, and were involved in social action. As was anticipated, these individuals were not a part of a readily identifiable population. Therefore, the names of potential participants were gathered primarily using a snowball technique – a non-probability, purposive sampling method, which involves establishing contact with a small group of individuals who meet the research criteria and then asking them to recommend other potential candidates (Bryman, 2008; Marshall, 1996). I began by advertising the study through the aforementioned local businesses and organizations (i.e., flyers placed in their places of business) and sending emails to various university listservs and to the members of one of the environmental groups interviewed. The poster/pamphlet used to advertise this research study can be found in Appendix G. Through these announcements, my personal contacts and those of my committee, I was able to form a base group of participants, and through their contacts this base group grew to the final sample size (n = 32).

3.4.2 Phase One – Concerns, Attitudes and Behaviour

Phase One of this study involved two components: introductory interviews with individuals partaking in social action related to clothing sustainability and a survey of their attitudes and behaviours. The purpose of this phase was to get an overview of clothing sustainability, in particular the participant' attitudes, concerns and knowledge

related to clothing sustainability, the range of social acts undertaken and the barriers they faced in implementing them.

Introductory Interviews

Thirty-two⁹ semi-structured introductory interviews were conducted, averaging 73 minutes in length, with the shortest being 33 minutes and the longest being 144 minutes. The questions in this interview were divided into three sections. Section one explored clothing sustainability, in particular the range of individual and collective activities participants engaged in, their motivations for adopting this behaviour, the barriers they encountered and their knowledge related to the impacts of clothing and options for reducing these impacts. Section two addressed their general attitudes towards clothing, exploring participants' relationship with clothing (i.e., their attitudes and beliefs regarding clothing and the role it plays in their lives), their attitudes and habits regarding clothing shopping, and their views on fashion. The final section asked them to identify their involvement in other sustainable lifestyle activities and mildly probed into the origins of this behaviour. A copy of the initial interview schedule can be found in Appendix A.

At the beginning of the interview, I provided participants with an overview of the purpose and objectives of the study, an explanation of the key concepts (i.e., transformative learning theory and sustainable clothing practices), a basic description of

⁹ Thirty-five interviews were originally conducted. However, it was revealed during the interviews that three of the interviewees did not meet the participant criteria. Thus, the data from only 32 of the interviews was used in the study.

the methods to be used (i.e., the interview and survey) and the anticipated timeline for the project. Following the interview, each participant was given the survey and asked to complete and return it within a two-week timeframe. In addition, if the respondent proved to be an individual committed to action related to the sustainability of clothing and demonstrated through their stories an engagement in critical reflection related to sustainability, I asked if he or she would be interested in participating in Phase Two of the study. Finally, as noted above, I recorded and took detailed notes during each of the interviews and, once transcribed, participants were provided with a copy of the interview for review.

Thematic Analysis. Analyzing textual data involves four primary steps: “(1) discovering themes and subthemes, (2) winnowing themes to a manageable few (i.e., deciding which themes are important in any project), (3) building hierarchies of themes or code books, and (4) linking themes into theoretical models” (Ryan & Bernard, 2003, p. 85). To accomplish the first task, the transcribed interview data were sorted, coded and analyzed using Nvivo qualitative analysis software, a package designed to assist researchers identify themes in narrative data. As was suggested by Richards (2005), coding permitted me to generate new ideas about the data and let me sort them in unique ways, allowing for the identification of key themes. Ryan and Bernard explained that “[t]hemes come both from the data (an inductive approach) and from the investigator’s prior theoretical understanding of the phenomenon under study (an a priori approach)” (2003, p. 88). In the case of this project, I began by establishing broad themes based upon my review of the literature, categorizing data into different activities (e.g., second-hand

shopping, donating clothes to a charity) and the various elements of transformative learning (e.g., critical reflection, instrumental learning). As I started to scrutinize the data to identify any repetition, similarities and differences, metaphors and analogies, linguistic connectors, missing information, and theory-related data (Ryan & Bernard, 2003), I found data which supported my initial literature based themes and sub-themes. Additional themes, sub-themes and categories were also discovered. For example, new themes included support networks and general barriers; new sub-themes for transformative learning included teenage years, strugglers and incremental steps; and new categories for second-hand shopping included motivations, considerations and barriers.

These themes were then analyzed in conjunction with the statistical data collected through the survey. My examination involved searching for evidence of reinforcement and divergence, and identifying any gaps in the data. The remaining analysis steps mentioned above – narrowing the number of themes, building hierarchies, and linking to theory – occurred in Phase Two.

It should be noted that this analysis was conducted prior to initiating Phase Two. This allowed me to develop a greater familiarity with each of the participants, to prepare an initial summary of each of the second-round participants' interviews, and to begin to develop some tentative conclusions, all of which aided in my preparation for the life-grid interviews.

Clothing Sustainability Survey

The survey gathered quantitative data to support and expand my understanding of the qualitative data collected through the interviews. Due to the small number of participants (n=32), the results of the survey were not used to make generalized statements about the larger population. Rather, the reasons for using this tool were fourfold:

- (i) to permit a direct comparison of participants' responses;
- (ii) to provide an additional means of facilitating participants' reflection upon their learning, beliefs and practices related to clothing;
- (iii) to allow for the collection of pertinent information that would not be appropriately gathered via interview (i.e., close-ended questions, numerical information, questions that may not be able to be answered easily on the spot, such as "How many articles of clothing do you own?"); and
- (iv) to permit triangulation and complementarity.

The survey gathered quantitative information regarding the consumers':

- participation in sustainable clothing practices (e.g., purchasing sustainable apparel, reuse, recycling, repair, leasing, maintenance);
- general apparel purchasing behaviour (e.g., factors influencing apparel choices, quantity owned, frequency of purchases);
- views, beliefs and concerns (e.g., I can make a difference through my actions, I am knowledgeable about the issues, I am concerned about child labour);

- engagement in other sustainable lifestyle choices (e.g., recycling, green commuting, buying local and/or organic);
- engagement in collective social action (e.g., participation in boycotts, membership in environmental organizations, involvement in social movements); and
- socio-economic background (e.g., age, income, education).

I designed the survey myself, using research studies of ethical consumer behaviour related to apparel (e.g., Butler & Francis, 1997, Dickson, 1999; Dickson, 2000; Iwanow, McEachern & Jeffery, 2005; Joergens, 2006; Kim & Damhorst, 1998; Kim, Littrell & Paff Ogle, 1999; Rudell, 2006; Shaw & Tomolillo, 2001; Shaw, et al., 2006; Shaw et al., 2007) and the literature on transformative learning as a guide, as well as relying on the advice of my thesis committee members and the University of Manitoba Statistical Advisory Services. A copy of the survey can be found in Appendix B.

For the purpose of triangulation, there was some overlap between questions posed in the initial interview and the survey. For example, in the initial interview participants were asked: “Can you tell me about the first SCP you engaged in?” and “What other SCP do you engage in?”, while in the survey they were provided with a list of SCP and asked “How often do you engage in the following activities?” In comparing the results from these two methods to see if the data sets were “mutually reinforcing” or if there was a “failure to corroborate” (Bryman, 2008), there were incidents of both contrary and congruent data. For example, there were a few participants who talked a great deal about a particular practice during their interview, but on the survey reported only engaging in it occasionally. Alternately, in several cases there was a clothing feature rated very high in

terms of importance on the survey, but that was never mentioned during the interview. I believe there are two possible reasons for these discrepancies. Emphasizing a particular behaviour or attitude may have been done to meet what they viewed to be the expectations of the interviewer or may have reflected how they view themselves, rather than reflecting their actual behaviour. Also, the survey may have acted as a memory aid for certain concerns, garment characteristics or practices, which they had not thought of during the interview. Overall, however, the two sources did support one another. In addition to cross-checking the results, I used mixed methods for the purpose of complementarity. To achieve this aim, I posed a number of questions in the survey which were explored in greater depth during the interviews. Examining different facets of the same issue while using different methods, provided for richer results. For example, as discussed above, the survey asked about the frequency of their actions, while the interview delved into matters such as when they first began to practice the act and their motivations for carrying out the act.

The surveys were self-administered and involved primarily close-ended questions. A paper copy of the survey was provided to each participant at the conclusion of the introductory interview, along with a stamped and addressed envelope. Participants were asked to complete and return the survey within two weeks. If a survey was not received within a reasonable time frame following the interview, I provided the participant with an email reminder. All 32 surveys were completed and returned.

Statistical Analysis. In preparing the survey and developing an analysis strategy, I consulted with the University of Manitoba Statistical Advisory Services. When the paper-based surveys were collected, they were inputted into Excel. Due to the small number of participants and basic-nature of the statistical analysis I conducted, it was felt that Excel would be the best tool for sorting and analysing the data. I conducted a univariate analysis (e.g., frequency, mean and median) of the individual variables within the various questions.

The findings of the survey allowed for direct comparisons to be made between the participants with regards to the behaviours, knowledge and concerns reported. Furthermore, the survey data was used to assist in the development of an initial set of codes to categorize and organize the data collected from the introductory interviews. Finally, as discussed above, the data were compared and contrasted with the qualitative data gathered through the interviews for the purposes of triangulation and complementarity.

3.4.2 Phase Two – Journey to Sustainability

Phase Two of the study involved delving more deeply into 17 participants' journeys towards clothing sustainability, from childhood to present day. It entailed the researcher and interviewee completing a life-grid, a tool used to enhance discussion and assist in the collection of retrospective data (Bell, 2005). The introductory interview and survey gathered basic information on the knowledge, behaviour, and beliefs of the participants, while the life-grid interview attempted to illicit information about *how* they came to adopt this behaviour and acquire these beliefs (i.e., the learning process). This phase also

involved a journaling exercise, with a select group of participants recording their current struggles with adopting sustainable thinking and behaviours related to clothing.

Journaling Exercise

I used a journaling exercise to explore in greater depth the experiences of the *strugglers*, those participants who felt divided between their more recently attained sustainability ideals and their love for clothing and/or shopping. As these individuals attempted to manage their conflicting meaning schemes, it was assumed that they would be engaging in transformative learning. As such, it was believed that their entries would provide unique insight into the learning process.

Diaries, or journals, have been defined as “self-report instruments used repeatedly to examine ongoing experiences, [which] offer the opportunity to investigate social, psychological, and physiological processes, within everyday situations” (Bolger, Davis & Rafaeli, 2003, p. 580). There are a number of advantages to using this method for collecting in-depth information on a particular topic, several of which were relevant to this study. First, journals minimize the need for retrospection by reducing the time period between an experience and the reporting of the occurrence (Bolger et al., 2003; Meth, 2003), thereby increasing the likelihood of an accurate account. Second, while interviews and focus groups are one-off data collection techniques, Meth (2003) notes that journals are a recurring means of gathering data. She explains that “insights often only emerge through repeated investigations” (p. 198), which can be attained through the frequent reporting associated with the maintenance of a journal. In this study, each entry elaborated upon their journey’s progression (or regression) and demonstrated the

accumulation of learning experiences, a series of events which could not be captured using an interview or a survey. Third, a tone or specific focus is often set early on in an interview or focus group, which can limit the discussion. For example, one of the life-grid interviewees frequently referred back to a single event we discussed at the beginning of the interview, one which, although likely an important life event, was not that significant to her clothing journey. However, Meth (2003) found that journaling, “as a discontinuous process, can change with each entry. Its temporal nature allows for a break in logic between entries. This perhaps reflects more accurately the diverse range of thoughts and feelings that make up human consciousness” (p.198).

Journaling is not without its disadvantages. Three of the primary shortcomings to this technique noted in the literature were also found in this study. First, journaling requires a significant commitment on the part of participants, making it challenging to ensure journals are maintained (Bolger et al., 2003; Meth, 2003). As will be discussed below, in this study, despite a number of email reminders, only one of the participants completed the requested number of entries. Second, Meth explains that some researchers have found that there is a risk of decontextualization in journal writing (i.e., written in isolation, entries may tend to only reflect the perspective of the participant). This was the case of the majority of the entries in this study. Although two of the participants, 03F and 35F made note of a few discussions with friends regarding clothing sustainability, most of the participants’ entries concentrated on solely their thoughts and actions. However, it should be noted that the instructions provided to participants did not request they report on the opinions and behaviours of others, which may have been one of the reasons such reporting was not seen. Third, Bolger et al. explained that there is scant

research on the impacts engaging in journaling has on a participant's subsequent interactions, actions, reactions and responses, and thus their overall impact on the research. This is particularly so in the case of this research, given that the writing of journal entries compelled critical self-reflection. Although I am certain that journaling had an effect on participants' behaviours, their interpretation of past and present experiences, and their discussions during the life-grid interview, it is difficult to determine to what extent it did so.

Five participants in this study were identified as being strugglers. Each agreed to participate in the journaling exercise (see Appendix H for Journal Writing Guidelines). Participants were encouraged to write about:

- their thoughts, feelings, attitudes, concerns, struggles, and knowledge related to clothing sustainability (past or present);
- their experiences with sustainable clothing practices, in particular any recent activities they had engaged in (i.e. those initiated during this journaling period);
- where they hoped to be in the future and/or activities they would like to try related to clothing sustainability;
- information they had come across regarding the environmental or social impacts of clothing;
- the internal struggle they have faced with conflicting attitudes, values and beliefs;
- the challenges they have faced in changing their behavior;
- how they overcame any challenges they may have encountered; and

- their support network (or lack thereof) for engaging in more sustainable activities.

Over a six-month period, they were requested to submit 10 entries. In the end, the number of electronic entries submitted ranged from 5 to 11 and the word-count from 120 to 750 words. Their entries covered a wide-range of topics, from successfully redesigning a garment to a shopping spree at the Mall of America, from discussing this journaling exercise with friends to conducting research in preparation for buying a sustainable mattress. Several of these entries provided evidence of discourse and critical reflection; however, many were ambiguous as to what took place to move them from a positive attitude about a particular behaviour to actually engaging in that behaviour. Further, many of the entries focused on the planning for social action rather than on the learning process, including entries addressing the goals they set for themselves and their success (or lack thereof) in attaining those goals. Details of the analysis process for the journals can be found after the following section on the life-grid interviews.

Life-grid Interviews

To gain insight into the learning process, participants were asked to share their stories regarding clothing sustainability. For some, this was a relatively recent journey, but for others it started long ago. To assist participants to recall and share their stories, I used a specialized tool called a life-grid to guide the Phase 2 interviews. The following will introduce the life-grid technique and describe how it was employed in this study.

Life-grid Interviewing Technique. A life-grid is a technique for “enhancing recall of relevant life events and behaviours by using one or more temporal reference lines of significant personal, family, or external dates and events to prompt and structure the recall of the information of interest” (Edwards, Pless-Mulloli, Howel, Chadwick, Bhopal, Harrison & Gribbin, 2006, p. 2) (See Figure 3.3). The life-grid allows for an interviewer to collect detailed and precise information regarding an individual’s life history, while at the same time facilitating a comprehensive exploration of the various events and issues raised by the participant (Parry, Thomson & Fowkes, 1999).

Figure 3.3: Life-grid Template

Life Grid Interview

Participant: _____

Year	
External Event	
Age	
Family/Housing	
School/Work	
Leisure/Volunteer	
Clothing Learning	
Clothing Action	
Other Sustainable Lifestyle Choices	

The life-grid was initially used to enhance the accuracy with which older adults recalled retrospective data being collected for quantitative-based medical research (Berney & Blane, 1997; Blane, 1996). Blane and associates found that recall problems

could be minimized by narrowing the type of data collected and using certain data collection techniques. Emotionally charged events tend to be more susceptible to recall error and recall bias. However, it has been found that more “hum-drum” routine aspects of an individual’s daily life can be recalled with greater accuracy (Blane, 1996). Memories of these routine facets of life are often associated with more significant life or world events. Thus, transitional or milestone events in an individual’s life (e.g., marriage, birth of a child, new job) or noteworthy public events (e.g., 9/11, Kennedy assassination) will often serve as a trigger to aid in the recall of a more ordinary, routine events or behavior (Bearney & Blane, 1997). The life-grid is designed to take advantage of these cues, with one axis of the grid representing time (e.g., year, age, critical public events), and the other axis representing specific elements of the interviewee’s personal life, as well as the events and behaviours being studied (Wilson, Cunningham-Burley, Bancroft, Beckett-Milburn & Maters, 2007).

The life-grid has since been used by several researchers to facilitate data collection for qualitative research (Bell, 2005; Parry et al., 1999; Wilson, et al., 2007). These studies have found the benefits of the life-grid approach to go beyond simply enhancing recall. First, surveys tend to gather broad data on a variety of topics, while interviews allow researchers to explore a particular topic in great detail; the life-grid technique is able to do both, permitting the collection of data with depth and breadth (Bell, 2005). Second, the visual nature of the grid allows the interviewer easy access to this broad and detailed information about the participant’s life to help guide and focus the interview. The layout of the life-grid also permits researchers to effortlessly manage this significant amount of information and enables them to identify emerging patterns in the data during

the course of the interview (Berney & Blane, 1997; Parry et al., 1999). Furthermore, the life-grid has been found to be a valuable technique for aiding reflection. “Blane [1996] also noted the visual proximity of (apparently) unrelated events encouraged participants to recall further or link life events...This suggests that the life-grid was acting as a tool to improve the quality and quantity of the data gathered, by encouraging interviewees to analyse their life stories reflexively” (Bell, 2005, p. 52). Similarly, Wilson and colleagues (2007), found the life-grid helped participants to share their stories, stating “...the grid seemed to encourage storytelling and provided a vehicle through which respondents, who recognized its visual potential, could reinforce their narratives” (p. 147).

Finally, the life-grid approach can enhance interviewer-interviewee rapport and shift the traditional power dynamic. In collaborating to complete the life-grid, the respondent is able assume a degree of control over the direction of the interview, how their story is told, and even, to a certain extent, how their story may be interpreted and analyzed.

During grid completion respondents were quite likely to discover associations between different events in their lives that they had not previously considered. They made these associations at the same time as the researcher and were able to reflect upon and discuss these issues as they arose. This is quite different from more ‘traditional’ interviews where the majority of associations are discovered subsequently during analysis. (Parry et al., 1999, p. 4.6)

The life-grid tool itself is a table on which the interviewer, under the guidance of the interviewee, records key life events and data related to the area of study. Through cross-referencing significant events in the individual’s life with the participant’s clothing-related learning and action during that same period in life, richer, more accurate

memories are recalled – memories that provide greater insight into the links between learning, transformation and action. In the modified life-grid created for my study, various measures of time were used, including age, year, and external events. There were six timelines: three “personal life” timelines – Family/Housing, School/Work and Leisure/Volunteer; and three “learning and action” timelines – Clothing Learning, Clothing Action and Other Sustainable Activities (see Figure 3.3). I used the Family/Housing row to gather information on key family events, such as births, marriages, and illnesses, and where individuals were living. On the School/Work row I gathered information such as important jobs, influential courses taken, or projects undertaken, program start dates and graduation dates. The Leisure/Volunteer row was used to collect data on important dates related to hobbies, sports, trips and volunteer activities. I recorded information on the Clothing Learning row about learning experiences related to the impacts of clothing and the activities participants undertook to reduce these impacts and on the Clothing Action row I collected data on the types of action (individual and collective) in which participants had engaged. In the Other Sustainable Activities row I gathered information on the other types of sustainable lifestyle choices that were essential to participants and how these relate to clothing action in terms of when they were incorporated into their lives. Participants’ attitudes, beliefs, values, and concerns were not easily captured in one category. Such frame of reference elements were documented through the narrative rather than on the grid.

Two-Part Interview Process. One of the benefits to a two-part interview process (i.e., introductory interview and life-grid interview) was to reduce the time commitment required in one sitting, but the primary benefit was to provide the participants with an

opportunity to reflect upon their experiences and responses. To encourage contemplation, a minimum of six months passed between the introductory interview and the life-grid interview, giving participants an opportunity to reflect upon their responses and, potentially, to incorporate their reflections into their way of thinking or their practices. Further, participants were given several opportunities to review their responses and my reconfiguration of their data, as will be discussed below. I believe that providing participants with time to reflect outweighed the drawbacks to this two-part interview process. The richness of the data yielded as a result of using not only two interviews, but two very different styles of interview, could not have been achieved in a single meeting. The first captured the activities, attitudes, behaviours and motivations of the present day, while the life-grid interview described their path to sustainability, namely the experiences that had accumulated throughout their lives, leading to a transition in their thoughts and actions. The depth and breadth of information collected through this technique more than compensated for the longer timeframe required to complete all the interviews and the attrition of participations resulting from an unwillingness or inability to participate in the second interview (i.e., 20 participants were contacted for the second-phase; however, only 17 partook as two had moved outside of the province and a third was non-responsive).

Clothing Sustainability Life-grid Interviews. With regards to this study, of the 32 participants who took part in Phase One, 17 participated in the life-grid interviews. The reasons for reducing the number of participants were threefold: (i) it was anticipated that not all the individuals engaged in the introductory interview would be able and/or willing

to commit additional time; (ii) some of the individuals interviewed in Phase One were not suitable subjects for Phase Two; and (iii) it was presumed that the time required to conduct, transcribe and analyze these interviews would be significant (which proved to be true).

Phase Two interview preparation began with providing participants a copy of their transcript to review prior to the follow-up interview. A few days before our scheduled interview, I sent a bullet-form summary of our initial interview to the participants, which included a list and brief description of their activities, motivations, concerns, and attitudes and a time line of key events marking their progression towards clothing sustainability. A copy of the life-grid, along with a brief description of the tool, was sent at the same time, granting them a further opportunity to ponder their path to clothing sustainability. On the day of the interview, before beginning the life-grid activity, I reviewed the introductory interview summary with them to ensure its accuracy. I hoped that in supplying these various documents, participants would begin to reflect upon their attitudes, behaviours and experiences in advance of the interview. In a few cases, evidence showed that this tactic proved successful, with participants making reference to thinking about their experiences before they arrived at the interview. Participant 24F specifically shared,

I like that you started with the recapping of our last conversation because it meant ... [we could] build on what we talked about last time rather than repetition. It was good to know in advance that we were going to be doing this, that I knew a bit of background about the process when we were passing emails back and forth. That definitely for me, knowing that this was coming up, triggered me to start thinking about some of those things.

On average the life-grid interviews took 101 minutes, ranging in length from 63 to 156 minutes. I began each interview by explaining what the life-grid was and defining the six categories. As previously noted, both public and personal events can aid in memory recall. To help facilitate the recollection of public events, I drew up a timeline of major events that included several important political affairs and few significant sweatshop scandals, but primarily it documented noteworthy environment-related events over the last thirty years. This timeline was also introduced at the beginning of each interview. Unfortunately, in my focus on environmental events, the list was only of use to a few individuals, in particular those who were quite sustainably-conscious. Further, due to the amount of space required for recording the life-grids, there was often little space on the table for the timeline, so it was not consistently used. It was really the participants own personal events that generated remembrances, with several participants commenting on its usefulness in evoking memories of events and practices. For examples, 16F sharing, “I found that it brought memories that I probably didn’t remember” and 34F adding,

I think it’s useful, for sure. Because if you told me to just go back and think about it without thinking about where I was at that time, especially thinking about the jobs since a lot of clothing purchases are related to jobs.

Being able to watch as the grid was populated also allowed a number of participants to go back to an earlier time period and add an event they had forgotten. It also permitted some to see connections between different events and their subsequent behaviour. At times, if I saw a connection or a gap, I would ask questions and, in that way we worked together to document their path. Further, the experience was very valuable in that it

encouraged participants to share their journeys. There were no formal questions restricting the direction of their stories; however, there was an outline of what was being asked of them so they felt confident in what they were doing. One participant explained, “I was like “oh yeah, Leisure/Volunteer – well, I was involved in...” You didn’t have to ask questions that I couldn’t answer. It was like, I would look down and think “oh yeah, I should talk about this too” (24F).

Others who have used this tool noted a few disadvantages, one being that it tends to yield large quantities of data. I concur that the information obtain is considerable, and somewhat unwieldy, as one attempts to decipher the data both thematically and temporally. Further, not all of the data generated was useful. This was especially the case in two of the early interviews. In both instances, rather than starting with a discussion of some of the sustainable clothing activities they engaged in childhood, as I did with the others, I began by asking them what year they were born in. The difference was remarkable. When the interview began with the focus on clothing sustainability, it generally stayed on topic throughout. However, for those asked about their birth year, the interviews were extremely long and the focus was much broader, including a wide-array of non-sustainability related topics and significantly more personal information.

Another criticism of the life-grid approach is its “event-centred nature” which may lead to a very factual recount of events to the exclusion of the emotional side of these experiences, or result in information which is not linked to a specific event being overlooked (Bell, 2005). I found that the key denominator was not the tool, but the participant. Most of my participants expressed great emotion in recounting their tale, while only a small number were restrained and required more prompting to give their

experiences some depth. The fact that I did get rich stories may have been related to the ability to be selective in the second round and to choose those participants who tended to be more reflective. In terms of missing events, I took steps to limit this possibility by sending all Phase Two participants a summary of our previous interview, as discussed above, to encourage them to reflect on their experiences before the interview. Further, during the interview, we discussed the majority of experiences in some depth, not simply noting that they started buying second-hand clothing at a particular time in their lives, but also delving into issues such as why were they purchasing used apparel.

Thematic Analysis. As in the case of the introductory interviews, the narrative journal and interview data were sorted, coded and analyzed using Nvivo qualitative analysis software. The set of codes identified in the analysis of the data from the introductory interviews was used to initial sort this information. However, the focus of this second round of interviews differed from that of Phase One, centering on exploring transformative learning and how it led to social action. As a result, an array of additional codes were added and many existing codes were expanded or revised. In the end, I was scanning for data indicating learning had occurred (e.g., new knowledge, attitude changes, evidence of critical reflection, mention of discourse), searching for evidence that a transformation had been experienced (e.g., significant changes in attitudes and behaviour), and looking for information related to the social action process (e.g., factors which differentiated the various acts, challenges encountered, and supports for learning and action).

The data collected through the journals and the life-grid interviews was analyzed together with the data previously collected in Phase One, using several different methods of analysis, including examining for emerging patterns, comparing the data to a set of assumptions and contrasting the overlapping data gathered via the four collection methods. Further, the data were analyzed from a temporal perspective. Relying on the information provided in the initial interviews, the life-grid interviews and the journals, the stories of these participants were reconstructed. These timelines were compared to one another in an effort to identify any emerging patterns or themes, particularly in relation to the triggers for learning (disorienting dilemma or series of occurrences) and action taken (be it individual or collective social action).

As noted, in addition to identifying emergent patterns in the data related to learning outcomes and the learning process, I also was looking to the data to confirm or refute a number of assumptions I had regarding sustainable clothing practices, social action and sustainable lifestyles. Specifically, I anticipated:

- For most consumers the choice to adopt SCP will follow a commitment to other sustainable lifestyle activities (e.g., recycling, sustainable modes of transportation, buying local/organic foods).
- More consumers will be involved in individual social action related to clothing than will be involved in collective social action.
- Of the range of individual actions, purchasing sustainable apparel will likely be one of the last activities consumers adopt.

- When selecting apparel, other clothing criteria, such as fit, price, and style, will precede sustainability concerns.
- Consumers will be more knowledgeable about the social impacts of clothing, and less knowledgeable regarding the environmental impacts of clothing.
- The life-grid framework will be a useful tool for conducting retrospective transformative learning research.

3.5 Reliability & Validity

For other researchers to be able to build upon the results of a study or for policy-makers to make decisions based upon a findings of a research project, the data collected and conclusions made must be reliable and valid. Reliability refers to the dependability and trustworthiness of the data and results, while validity refers to the soundness of the data and conclusions (i.e., are the findings and conclusions well-founded, corroborated and substantiated?) (Richards, 2005). According to Creswell (2003) and Richards (2005) there are a number of steps researchers can take to increase the validity and reliability of their study, namely triangulation, member checking, detailed descriptions, inclusion of negative or discrepant information, and external review; all of which were employed in this study.

- *Triangulation.* As discussed above there was some overlap between the questions posed on the survey and those asked during the interview, allowing for key elements, such as practices, concerns and beliefs, to be corroborated.

- *Member Checking.* To ensure I had accurately recorded the responses of the participants, I provided transcripts of all the interviews to the participants, asking them to verify the accuracy of my records and to indicate if they had anything further to add. In addition, as was discussed above, for those engaging in the life-grid interviews, I provided a summary of our initial interview, which provided both a summary of their responses (e.g., their practices, attitudes, motivations and concerns) and a timeline of their the significant events from childhood, through their teens, to present day related to clothing and/or sustainability. They were asked to review and indicate any errors or omissions in my reconfiguration of the data.
- *Detailed Descriptions.* All the procedures and methods I have used to collect and analyze the data have been described with accuracy and great detail. Furthermore, when reporting results, I have provided, wherever possible, direct quotes from the participants, in order to afford the reader with as much detail as possible.
- *Inclusion of Negative Findings.* In addition to the positive data and results, I have included contradictory information and findings.
- *External Review.* The final thesis was reviewed by an external auditor.

Chapter 4

THE PARTICIPANTS: CONCERNS, MOTIVATIONS, ATTITUDES AND BELIEFS

4.0 Introduction

Our meaning schemes, the most amendable component of our frame of reference, are comprised of our knowledge, attitudes, values, views, judgement, beliefs and feelings (Diduck & Mitchell, 2003; Mezirow, 1994, 1996). Shaping our interpretations and guiding our actions, meaning schemes are the heart of transformative learning and, as such, an essential element in our exploration of the adoption of sustainable clothing actions. This chapter illustrates the array of concerns, motivations, attitudes and beliefs held by individuals who recognize the importance of clothing sustainability. It provides insight into their meaning schemes, and provides some indications as to why the transition to SCP has proven more challenging for some. While couched in different language, many of the studies emerging from the field of consumer-behaviour on sustainable apparel also examined elements of meaning schemes, namely knowledge, attitudes and concerns. This provides an opportunity to compare and contrast, to some degree, the findings of these studies with the data collected on sustainable apparel in my study. Of course, my study goes beyond SA, examining the full range of sustainable activities related to clothing and initiating our exploration of the relationship between individual transformation and social action, which will be elaborated further in the Chapter 8.

Following an introduction to the participants, this chapter will provide valuable insight into (i) participants' concerns surrounding the sustainability of clothing, (ii) their

motivations for engaging in more sustainable clothing practices, and (iii) their beliefs and attitudes towards clothing, fashion and apparel shopping. The findings presented below have been drawn primarily from the Phase One surveys and interviews.

4.1 The Participants

The 32 participants, 84% of which were female, ranged in age from the 18-25 to the 56-65 categories, with 50% falling between the ages of 26 and 35. The majority were married/common law (69%) and the majority had no children (59%). The income range was extremely broad ranging from under \$10,000 (2 participants, neither of whom were students) to over \$80,000 annually (6 participants). In terms of education, the majority had obtained their bachelor degree or a diploma (56%), while 31% had a graduate degree. Seven of the participants were currently students. The largest percentage of participants were employed full-time (47%), while 25% were employed part-time and 19% were not currently working. Two of the participants were self-employed, both in the area of sustainable textiles; one made hand-bags out of upholstery samples bound for the landfill and the other had an environmentally-friendly textile printing business. Unfortunately, when contacted for a second interview, both shared that they had been unable to maintain their businesses and had to seek employment elsewhere.

It should be noted that due to employing the snowball technique to recruit participants, there may be some bias in the demographics, in particular in terms of participant age and education level. Further, as a result of the small sample size, the participant group and the resulting data may not be representative of the entire population of individuals meeting the criteria of my study.

Other questions asked of respondents in the survey which provided insight into “who” these individuals were, revealed that all of the participants agreed strongly or very strongly with the statement “I believe by engaging in sustainable activities I can make a difference”, demonstrating an established locus of control in relation to sustainability.

All identified themselves as being either concerned (50%) or very concerned (50%) with social issues and concerned (34%) or very concerned (66%) with environmental issues. Yet, when asked if they consider themselves to be socially conscious consumers few strongly agreed (23%), although the majority did agree (61%) and the remainder were neutral or disagreed (16%). In terms of being environmentally conscious consumers, the numbers differed with regards to the levels of concern, with 38% strongly agreeing and 41% agreeing, and 6% strongly disagreeing. During the interviews, two participants who strongly disagreed said that they did not view themselves as consumers, and one even found the term somewhat offensive.

Discussions of motivation during the interviews also provided further insight into the participants’ characters, as a number of the participants made reference to their sustainable actions being linked to their identity. One shared, “Motivation? It’s hard, other than saying, I don’t know, that’s who I am. I just can’t help it” (11F), while another expressed, “It only makes sense to me. If I am going to stand for nature, I have to support it in every way. I like to walk the talk” (27F). This concurs with the findings of other studies, such as Shaw, Shiu and Clarke (2000) who found, “...as an ethical issue(s) becomes important to an individual it becomes part of their self-identity, and they form a desire to behave accordingly” (p. 888).

4.2 Concerns

A key element I sought to explore through the surveys was the concerns participants held in relation to clothing /sustainability and the comparative strength of these concerns. To achieve this end, one question on the survey asked participants to identify their level of concern related to a series of adverse impacts resulting from conventional production and consumer practices (see Table 4.1). Although only one direct question related to concerns was asked during the interview (i.e., what were the participants' thoughts or concerns about fashion and the fashion industry), a number of other inter-related themes were raised, many of which reinforced the survey data. These concerns included environmental impacts, social impacts, human health, overproduction, excessive consumption, fashion marketing, and animal rights.

“The quantity of natural resources used to produce low-quality, short-term use garments” was most frequently identified as very concerning (78%). This finding was echoed in the interviews, with one participant commenting, “you get the pre-faded jeans, you push them through the washing machine six times and it’s like “oh, I can’t wear these anymore”. You just paid \$80.00 for them and they grew the cotton so that they could ruin them before they gave them to you” (20M).

Closely related to concerns over resource use is “the amount of clothing being consumed” (63% very concerned). During the interviews, these concerns were reflected in their discussions regarding the fashion industry. Shaw and Tomolillo’s (2004) study of ethical consumers found that the majority of their participants had a negative perception of the fashion industry, referring to it as “dictatorial and superficial” (p. 146). Similarly, my participants expressed frustration over the continual pressure to buy new clothing and

the built-in obsolescence inherent to fashion apparel. Several participants discussed how the industry promotes extravagance, with one individual stating, “the fashion industry, I think it is just wasteful. There is too much and there is too much emphasis on buy, buy, buy and new, new, new” (19F). Another expressed concern over, “the way shopping is promoted as a way to participate in culture and community, when it often results in environments that are harmful to the body” (28F), while several others discussed the way in which fashion marketing manipulates people, playing on their insecurities and making them question their self-worth.

To address concerns over the depletion of natural resources, the short life span of clothing and overconsumption, as well as “the amount of clothing being sent to landfills” (59% very concerned), many participants had taken responsibility for their own behaviour, choosing to engage in actions such as buying high-quality garments, reducing consumption, keeping garments a long time and reusing clothing (to be discussed in Chapter 5).

The push to consume clothing, planned obsolescence, and overconsumption is believed, by a number of the participants, to be what has led to poorer working conditions and more dubious hiring practices. Consequently, another of their top concerns was “the use of child labour” (75%), with “poor working conditions for garment workers” (44%), placing much lower on the list. Researching companies, personal boycotts and buying locally were the primary practices used to increase participants’ confidence that they were buying sweat-free apparel.

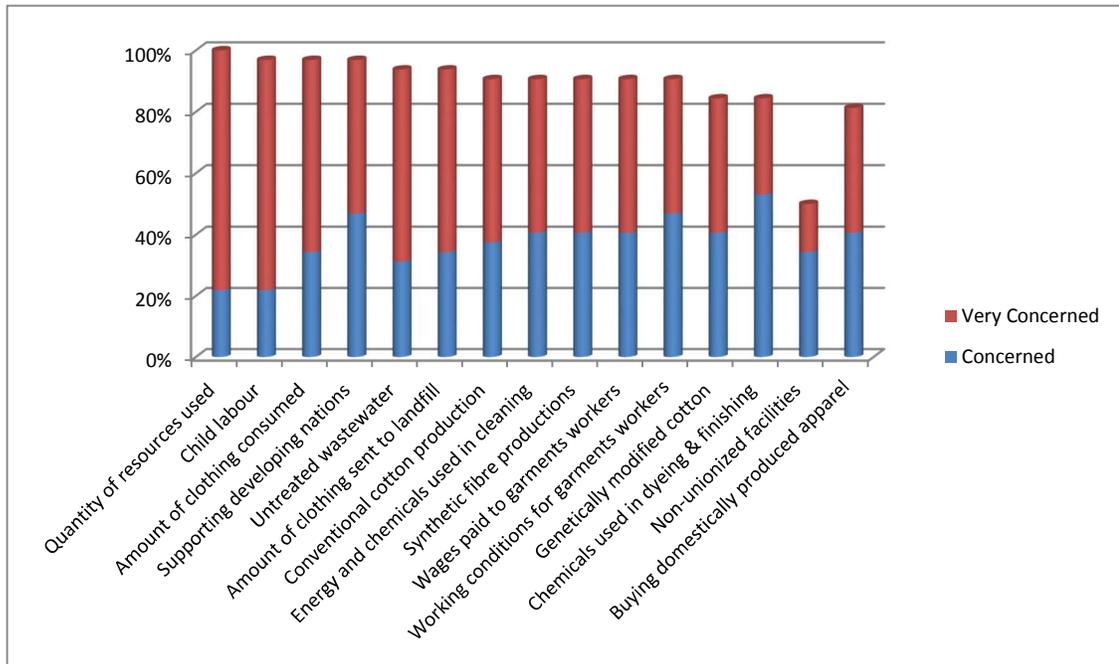
Curiously, “buying domestically produced clothing” (41% very concerned) was relatively low on the list of concerns reported on the survey; however, during the

interviews many participants discussed the importance of buying local. Interpretations of the term “buying local” ranged from buying Canadian-made products to supporting people within their community (i.e., those designing and/or selling sustainable apparel). Perhaps using the term “domestically produced” was not equated with “buying local”.

Various participants also noted during the interviews that they were concerned about either their health or that of their children as a result of the chemicals being used to produce clothing; specifically mentioned were flame retardants, polyvinyl chloride (PVC), Gortex (waterproof membrane), formaldehyde, and Microban (antibacterial additive). Related, a few participants discussed being worried about the effects of the excessive use of agrochemicals to cultivate conventional cotton. However, the small number of participants identifying this as a concern during our meeting was disproportionate to the 53% who indicated in the survey being “very concerned” (with another 38% being “concerned”) about conventional agricultural practices related to cotton. In general, this was not, as one might expect, addressed through the purchase of organic cotton garments. Rather, reducing the consumption of new garments, thereby decreasing the requirements for the cultivation of cotton, was a more common tactic for meeting this concern.

Finally, only one of the participants discussed concerns regarding animal rights, specifically related to fur and leather products. She shared that in her youth she had very strong convictions, explaining, “I wanted to be part of the hippy image and everybody was wearing Birkenstocks, but I was hardcore vegan, so I actually made my own, using solvent free latex. I went to all the Spaghetti Factory and got their old corks and ground them up in a meat grinder to make the soles” (07F).

Table 4.1:
Level of Concern for the Negative Impacts of Clothing Production and Consumption



4.3 Motivations

Another element explored in the interviews was what motivates participants to engage in sustainable clothing practices and related collective social action. The motivation behind the act is essential to determining whether or not it is social action. If an act is motivated by a desire to protect the welfare of others or the environment, challenge an existing system considered to be repressive, encourage a new approach to existing practices and structures, or maintain an aspect of the status quo viewed as positive, it would be deemed to be social action. If, however, the act is motivated by personal aims, such as obtaining a personal benefit, maintaining status quo or preventing a personal loss, although the act may be the same, it would not be considered social

action. Participants identified a wide range of motivators for their actions, and while a number were sustainability related, an equal number were personally-based. They discussed how these different types of motivators simultaneously compelled their actions and even worked concurrently to strengthen their resolve and dedication. When asked if their personal motivators were stronger than sustainability-oriented ones, most of the participants did not feel as though they could rank one above the other.

4.3.1 Sustainability-Oriented Motivators

As anticipated, most of the participants declared that taking action was done in an effort to alleviate their concerns about conventional clothing practices. Among the list of concerns discussed above, the ones specifically identified by participants as being motivators were environmental impacts, social injustice, unsustainable consumption, supporting local production/supply, and health matters. Aside from addressing concerns, several other sustainability-related motivators were discussed, including parental responsibilities, honouring family beliefs and traditions, and reverence for their spirituality or faith.

Most of the participants with children were motivated to adopt more sustainable behaviours in order to bestow upon them the value of living sustainably and/or to preserve the environment for future generations.

Because we have kids we want them to grow up with that type of mentality - sustainability. Just trying to make a change so that future generations can enjoy what nature has left to offer. (21M)

I don't want my grandsons to look at me and say, "So in the great climate crisis, in the first decade of that last century what did you do?", "Well, I wore designer clothes and jetted around everywhere". (22F)

... becoming a parent makes you think more about the future. It makes you think about your children and their children afterwards and so you want to have ... a more sustainable lifestyle to preserve the planet. (31F)

A few discussed continuing the legacy of their parents/grandparents or respecting their upbringing, as a motivator for engaging in sustainable behaviour.

Motivation is also, for me, it's coming from my parents and from my grandparents who were the biggest recyclers in those days and coming from the era of depression and abject poverty and all that they lived through. So for me, motivation is definitely following in their footsteps. (23F)

Finally, two of the participants discussed their faith or spirituality as being a significant motivator for changing or maintaining more sustainable clothing practices. One stated, "... anything that we can do to sustain the health of our environment, the health of our ecosystem, for me it's part of my spirituality. It's part of my connection with the divine to live in a responsible way" (22F), while the other shared, "... for me every motivation goes back to my faith, and just the desire to live in the world in the best way possible, in all ways" (01F).

4.3.2 Personally-Oriented Motivators

The personally-oriented motivators discussed by participants included, finances, shopping avoidance, aesthetics, and enjoyment.

Limited income was a driver for a few of the participants to engage in sustainable clothing practices, such as acquiring second-hand clothing, reducing consumption, and keeping clothing for extended periods of time. Although most would continue to engage in these practices even if their financial status changed, a small number felt that an increase in their household income might compromise their resolve, as is reflected in the comment below,

[My motivation is] probably a fairly equal combination of environmental awareness and poverty. It is a lot easier to make those environmental decisions, because a lot of environmental practices are very similar to behaviour people have when they do not have a lot of disposable income ... if I had more money, I might use it on more luxuries and splurge a little bit more. I do recognize that. (03F)

It should be noted that participants who believed they might spend more on clothing if they had more money also had a strong attraction to clothing. Individuals such as these, who struggled with their desires to consume apparel, will be discussed further below.

For some participants, adopting more sustainable clothing practices - in particular, reducing consumption and wearing clothing for long periods - were relatively easy to embrace because they detested shopping. Their comments included:

A lot of this actually ties into [the fact that] I really dislike the mall and it really stresses me out to go to the mall too, or large department stores ... it just gets overwhelming, all that choice. (24F)

I hate shopping. Hate. Particularly at the mall, I really hate. But I especially think things like the clothes swap, it is a very healthy environment, it's little effort, it's free, it's totally fun, and it's fast. I'm not one to spend a lot of time

thinking about my clothing and going shopping ... I'd rather spend my time doing other things. (02F)

A group of participants discussed preferring the styling or aesthetics of the clothing they obtained sustainably (i.e., sustainable apparel, locally-made garments, second-hand pieces, and redesigned clothing). In comparison to mass-produced items, they felt these garments were more unique and/or better expressed who they were. Two of these participants shared,

I have always been a little different ... I've never really been interested in looking like everybody else. So, particularly second-hand and vintage clothes, you stand out from the crowd a little bit. Your aesthetic is different. (06F)

... I bought some [sustainable] clothes [while travelling] and I actually felt like these are clothes that reflect who I am. Whereas, if you go to the mall, it's just like, whatever, but there I actually felt like "yeah, these clothes actually show who I am." It's kind of bizarre and wonderful. (19F)

A few other participants involved in making clothing (e.g., knitting, crocheting, sewing) discussed this as being a pleasurable hobby. One expressed, "I really need a creative outlet since my work, while interesting, does not satisfy that need. So, by starting to repurpose second-hand clothes, I can satisfy my need for creativity, while also satisfying my love of fashion" (11F).

Finally, two participants, both working in the area of environmental education, discussed that one of the motivators of their sustainable clothing practices was to avoid being a hypocrite. One stated "...you can't really be at the mall all the time when you are protesting Buy Nothing Day" (18F) and "I figure it's hypocritical if you're doing one thing and not doing something else ... it's hard to say, 'Oh, I ride my bike everywhere I

go, but all of my clothes are from The Gap” (24F). Thus, their reason for engaging in SCP such as personal boycotts of major retailer chains is, in large part, to avoid being viewed negatively by others. Similarly, 34F and 35F discussed being motivated to buy sustainable apparel to relieve their guilt about buying too much clothing. While understanding the importance of reducing their purchases, they still found themselves frequently shopping. If it was sustainable goods, in their minds it did not seem as negative a behaviour than if it was unsustainable clothing. Thus, assuaging their guilty-conscious was their motive for supporting the sustainable apparel market.

4.4 Beliefs and Attitudes

Beliefs and attitudes are a fundamental component of one’s meaning schemes. Beliefs are what an individual has come to accept as true, and from which strong convictions about the world and that within it are formed. Attitudes describe how a person feels, specifically their likes and dislikes regarding a situation, object, person, idea and so forth. In order to gain an understanding of the broader meaning perspectives of individuals committed to clothing sustainability, as well as an appreciation of the changes to participants’ frames of reference, it was necessary to establish the participants’ current beliefs and attitudes towards clothing. A number of studies of sustainable apparel also sought to identify the attitudes of ethical consumers to determine if their mind-sets influenced their willingness to buy. Their findings will be compared and contrasted to my findings. Accordingly, the following section describes the participants’ beliefs and attitudes towards clothing, including its importance in their lives, their affinity (or lack

thereof) for trendy clothing, their concept of fashion, and their opinions regarding clothing shopping.

4.4.1 Role of Clothing

Participants were initially asked to share whether clothing played a minor or a major (pivotal) role in their lives. Interpretations of the question and similarly the responses varied considerably, as is demonstrated below. The majority responded that its importance fell somewhere in between these two extremes, as captured by 04F, “Not pivotal, but not inconsequential either”. However, for a few, clothing held little importance in their lives; it was simply a basic necessity. As expressed by 30F, “I only buy what I have to, absolutely have to, have to, have to. So it’s a real minor role in my life. It’s functional. That’s it”, as well as “You’ve got to put clothes on or get arrested”. At the other end of the spectrum, several participants believed that clothing played a fundamental role in their lives. Their reasons were diverse, some of which included:

I care about what I wear because I feel like it says something about who I am ... it says something about my personality, it is my presentation to the world of whether I take care of myself or not. And so, I guess, it plays an important role in terms of how I think about showing myself to the world. (01F)

I need to wear it for legal reasons, but also for temperature, protection and social, of course. I guess in that sense it’s totally pivotal. It’s definitely a part of my everyday thought process and is connected to my understanding of myself and my confidence. It is not a major part of what I spend my time thinking [about], compared relatively to other people I see. (28F)

As the interviews progressed, participants discussed the role clothing played in their lives, namely that garments can be functional and pleasurable. They can enhance one's self-esteem, act as a tool for self-expression, and reflect one's mood. The following section will explore these various aspects of apparel.

Functional

For many, the fundamental characteristic of clothing was functionality. They expressed a need for a garment to serve the purpose for which it was selected (e.g., providing protection and warmth, allowing for ease of movement, affording comfort, versatility). Several participants also discussed how vital properly designed and constructed clothing was in our climate and a few stressed the need for high-quality, specialized gear to allow them to participate in activities such as biking, hiking, skiing and tree planting. A few of the comments expressed included:

I'd say [clothing] plays a minor role for the way that I look and then either a moderate role, or even potentially an important role, in its functionality, because of needing to either be dry or be warm whenever I'm outside. (13M)

I have worked in the bush. You can't have crappy clothing when you are a tree planter because you can get really sick or you can get hurt. It becomes part of your toolkit. (06F)

Pleasurable

Another important role clothing played in participants' lives was the bringing of pleasure or enjoyment. One group appreciated the creativity behind unique designs or

looks, and enjoyed looking at clothing. They also discussed watching people on the street, window shopping, reading fashion magazines, following fashion blogs and watching fashion-oriented television programs. Most of these participants also enjoyed selecting and combining their own clothing in different combinations, with one stating “I think it’s a small form of creativity we have, and it’s a necessity, so we might as well enjoy it.” (18F) and “I enjoy finding clothes that I like and do take some pleasure in thinking about what I am going to wear and finding interesting combinations of clothing to put together” (01F).

A small number of the participants derived pleasure from finding a garment which satisfied their needs. 13M expressed, “Sometimes there’s pleasure, yes. Finding something that would serve all my needs, being a sustainable aspect, functional aspect, as well as the fashionable aspect”; while, 24F was excited and shared, “I’m in love with Smart Wool [socks]. Mostly because they’re warm and they’re pretty durable and they have come out with these really funky, stripy, really high socks and I’ve bought a few pairs in the last couple of months because they make me comfortable.”

Sentimental attachment was another important connection some participants had to their clothing - namely, those garments which held special meaning or roused pleasant memories. An article of clothing given to them by someone special was one of the examples provided, with 31F sharing, “I do get a lot of pleasure out of clothing. My Mum has been dead for ten years now, but knowing that she bought me this blouse when I was 17, I get pleasure out of that”. Another discussed clothing obtained while travelling, and it being much more than a garment, but rather a reminder of that time.

Yet another discussed being very attached to her hand-made garments, which, to her, gave them greater value than other articles of clothing in her wardrobe.

Connection to Mood

Mood, and its relationship to one's attire, was discussed by several participants as being an aspect of importance. Specifically discussed was apparel's ability to lighten one's mood. Participant 01F shared, "If I am wearing something I particularly like, it will probably make my day just a little bit cheerier" and 20M concisely stated, "I like to dress to my mood". Even 14M, a participant that viewed clothing as utilitarian and derived little to no pleasure from it, mentioned a link between his mood and his clothing choice, stating "...actually sometimes, I have say shirts that I like more than other shirts and if I have a day that I know is going to be stressful, I may wear a shirt that I really like...".

Means of Self-Expression

Intricately linked to their personalities and serving as a means of communicating who they were with others, using clothing as a mode of self-expression was one of its essential roles to some participants. Participant 11F explained the importance of selecting garments which matched her personality, "When I am not wearing something that I feel conveys my personality I can tell in how I feel", while 13M stated, "I'd say that it would be a part of me, clothing. When I purchase stuff it is an extension of my personality and my ideas and my character, so it is a representation of me" (13M). Using

clothing to distinguish themselves from others was an appealing application for some participants, including 21M, who stated, "... I've always tried to set myself apart from people around me and the means in doing so would be choosing what I wore" and 03F, who explained, "People often admire my clothing ... I like to be noticed. I like it to make a statement."

4.4.2 Fashion

Following a discussion regarding the role of clothing in their lives, interview questions shifted to their thoughts and opinions related to fashion, more specifically fashionable clothing and the fashion industry. The introductory question was "What are your thoughts/feelings regarding fashion?" This question was then followed with "Do you follow fashion trends (e.g., magazines, window shop, fashion TV programs)?", "Do you like to wear the latest fashion?", and "Do you have concerns about the fashion industry?"

As noted above, some participants discussed receiving pleasure from clothing, and enjoyed observing clothing, either by watching others, window shopping, or following different media sources. For most of these participants, their admiration was casual, limited to occasionally flipping through a magazine or periodically watching a fashion television show. A small number, however, committed more time to following clothing trends, including one who had a subscription to a fashion magazine and two who followed clothing-related blogs on a daily-basis. One of these individuals stated, "I love fashion. I like watching it, I like seeing it, I like thinking about it and watching how other people put things together" (11F).

Although these participants, as well as a handful of those without a proclivity for fashion, indicated they were aware of fashion trends, when asked about their propensity to wear fashionable clothing, no one in the study considered themselves to be a trendy dresser. A few mentioned that they would occasionally purchase a few trendier pieces if their specific criteria were met, but they did not make any effort to wear the most up-to-date styles. 24F noted, "...often it's just whatever catches my eye that I like and maybe sometimes [it's] fashionably in-style and sometimes not".

However, a number did discuss having their own personal style and as a result were not concerned with following the fashion trends. 27F shared, "I have my own look. It may not be the most attractive and popular look at all times", while 18F stated, "I feel that it's human nature to want to look good and just be proud of how you look and try to set yourself apart, even if it's just a little bit. To have your sort of unique style." Within this group sporting their own unique looks, a few commented that they intentionally did not follow current trends, expressing a distaste for the homogenous looks resulting from "everyone" wearing similarly styled garments. Their thoughts included:

I'm out and about enough that I notice when something is trendy. Sometimes I'll like the thing and say, "Oh, I really want a nice zip up hoodie (or something)", but just the fact that everyone has one, I don't want to get one. (15F)

I'm conscious of fashion trends, but I don't follow them. I usually wait about three or four years and then try to bring it back when everybody else is tired and done with wearing it. It gets to the point where it's hot and then for me it gets tired because you see everybody wearing it and then it starts to peter off and then you don't see it so much anymore until it's at Value Village and that's when I get it. I sport it when nobody else is wearing it anymore. So, I don't really try to shop for what's socially acceptable or hot – that's going to lead people to think that you are in fashion. (21M)

The segment of the participants over the age of 45 (seven participants), all reported that they did not wear fashionable clothing. On the survey, all but one rated fashion as being a neutral or unimportant factor when selecting their clothing. Three of these participants put forward their age as one of the primary reasons for not keeping up with the trends, with one commenting, "...it no longer means anything to be in fashion because you're too old" (33M) and another stating, "...what is currently fashionable is fashionable for the 18 to 30 year old people. When somebody in their fifties wears that, they just tend to look a little silly" (14M). Of course, two others commented that fashion was never something they were interested in, even in their youth, and its lack of importance was neither the result of their age or a transformation.

In addition, a small number of participants discussed not feeling confident regarding clothing and fashion. Although they wished they were more capable in this area, 14M admitted he did not really care enough to invest the time, "I think I like that idea of looking cool, but I have very little concept of what is currently fashionable and I guess not an awful lot of interest in following all that" and 15M believed it did not coalesce with her personality, sharing "Sometimes I think I wish I was someone who put lots of thought into what I wear and how I look, but it just doesn't fit with me I guess."

It should be noted that several of the participants did not view "fashion" as a solitary concept, but rather as two distinct notions – designer fashion and mainstream fashion. Designer fashion tended to refer to unique pieces created by an artist, be it a world-renowned or a local designer. For many of these participants, these garments were viewed in high regard and were felt to be works of art. On the other hand, mainstream fashion, which referred to mass-produced garments, was regarded, by many, in a more

negative light. The styling was associated with being “not interesting” and “not creative” and one felt that the colour palette as being identical from store to store. Two comments included:

... when you are looking out on the street your average seventeen to twenty-five year old woman, all of them look exactly the same because they are wearing the same boots and the same jacket because that’s what is trendy and in style. (03F)

... the more high fashion or like fashion that is, in my eyes, not every day stuff, but stuff that’s like runways and various unique occasions, is maybe an extension of art and culture can be interesting. Fashion as like a normal every day sort of needing to look a certain way to fit into the norm or to be comfortable, I think is less important for me personally and as well could have some negative social impacts on people. (13M)

Mainstream fashion was also correlated with the fashion industry and all its ills. As captured in the *Concerns* (4.2) section, many were perturbed by the continual push to buy more clothing. One participant stated:

I think the fashion cycle is too fast. It’s hard to keep up with the latest trends. There’s not just four seasons, there’s eight seasons. It’s impossible to keep up with and as a consumer it makes people crazy. They want to stay current and have the latest and the greatest, so they are forever buying new things. (04F)

A number also discussed irritation at the how fashion is marketed, seeking to make people feel inferior in order to goad them into purchasing more apparel. 20M shared,

I think that the whole fashion industry promotes and feeds off insecurity and tries to make people feel inferior ... they try to confuse that whole need/want thing and make it so that you think you need this and you need to go and buy new clothes.

Several participants also voiced concerns over mass production/mass consumption resulting in clothing having less and less value, resulting in people not appreciating their clothing and not taking measures to make it last. 04F noted, “If we invested monetarily into clothing instead of buying \$2.00 pants, we would also feel a greater sense of responsibility to having to care for them”, and 12F shared,

... when there is no accountability for externalities, like shipping and how the fabric is made, then people have no idea. You can buy T-shirts next to our office at the Dollar Store. That’s a dollar - that is insane ... People treat it like it’s worthless because it is. Then there is no incentive to care because it’s so cheap.

However, the most common complaint regarding the fashion industry was that of body image, namely the sexualisation of women and the very prescriptive image of female beauty (i.e., tall, thin, young, hairless, often Caucasian and blond) promoted by the industry. Specifically, their frustrations were related to the negative impacts these messages have on self-esteem and self-image, which at its most extreme, finds some women taking drastic measures to fit the ideal (e.g., eating disorders and plastic surgery). A few felt these pressures were beginning to be experienced by men as well. Further, they complained these images lead to the development of unhealthy and impractical apparel, including fashion items that are uncomfortable and/or put strain on the body (e.g., extremely high heels and highly restrictive garments).

Interestingly, although a large number of participants held negative perceptions of the fashion industry and of mainstream trendy clothing, when asked on the survey how important fashion was in deciding which garments to select, 50 percent of the participants indicated it was important/very important. Similarly, Shaw and Tomolillo (2004) found

that although the ethical consumers in their study were very critical of the fashion industry, one of their primary complaints about sustainable apparel was its unfashionable styling. They concluded, “it could be argued that as part of a consumer society, despite their intentions to escape the allure of fashion, the consumers’ responses imply that they have subconsciously become enticed into the very industry that they claim to dislike” (p. 150). Taking this one step further, I would argue that participants, living in a consumer society, are inevitably exposed to social norms such as the “importance” of fashion to our relationship with others and our place in society. As such, many would have incorporated these ideas, likely at a young age, into their frame of reference. Later, exposed to the negative aspects of the fashion industry, many participants would have likely formed new meaning schemes; however, these new meaning schemes may not have been associated with, or reconciled with, pre-existing ideas of important elements of the garments they select.

4.4.3 Shopping

A large majority of the participants stated that they disliked shopping for clothing. Although a number did qualify this statement, explaining that while they did not like the process of shopping they did get pleasure from the product they acquired. Their statements included:

I don’t like spending a lot of time shopping. So, it’s not so much the shopping I enjoy, but it’s finding something that feels good, looks good, makes you feel confident. (10F)

When I do go, it's fun when I'm at the thrift store and find a really unique or cool or interesting shirt or a pair of pants ... But I wouldn't usually go, "Oh, it's time to go shopping" just for the pleasure of it. (13M)

However, a few others were adamant that they hated shopping, including 02F who, as previously mentioned, stated, "I hate shopping. Hate. Particularly at the mall, I really hate". Their only motivation for shopping was sheer necessity, with one participant explaining that he shops, "pretty much as little as possible and when necessary" (14F). Not surprisingly, these participants were also those that viewed clothing predominantly as functional rather than pleasurable. They were also the participants who kept their clothing as long as possible in an effort not only to be sustainable, but also, as discussed earlier, to avoid shopping.

A few participants spoke favourably of purchasing garments directly from local artisans. Two shared that these had been quite positive shopping experiences. One said, "I don't like shopping, but I think when I'm building relationships with people and when I am becoming aware of their work, again I'm talking about the local artists, then it becomes enjoyable" (29F) and the second, a hater of shopping who purchased a hand-tailored suit while travelling abroad, shared the following about this experience, "We had a wonderful time, but it was as much talking to this woman and me finding out what it was like growing up in Vietnam during the war as it was getting the clothes"(14M).

A small group of participants, while not caring for actually selecting and purchasing a garment, did find browsing for clothing a gratifying experience. Two of the participants described their motivations for shopping as being, "Necessity or the need for visual inspiration. Just looking at the colours and the textures. Often I won't buy

something, I will just go for the experience” (07F) and “I don’t get pleasure from buying clothing. I like to touch textiles. So I think I get pleasure more from the tactile nature of clothing ... I look a lot. I go to [the shopping mall] and roam around and touch everything” (04F).

Then there are those who loved to shop. Possessing sustainable beliefs, values and attitudes, they regard environmental and social issues as very important; however, they also loved clothing –admiring it, reading about it, buying it, and playing with it. Clothing is an essential part of their being. Referred to as the *strugglers*, this group will be cited often throughout this thesis. The incongruence between their sustainability meaning schemes and behaviours and their clothing meaning schemes and behaviours provides a glimpse into the heart of the transformative learning process, in particular the accumulation of new, refined, and transformed meaning schemes.

4.5 Chapter Summary

Exploring participants’ meaning schemes in relation to clothing and sustainability was the key focus of this chapter. It began by establishing that despite their demographic diversity, all the participants shared an internal locus of control with respect to sustainability and a concern for both environmental and social sustainability. An examination of the range and strength of concerns regarding clothing sustainability followed. On the survey, socially-related concerns centred on child-labour and supporting developing nations. Concerns about wages, working conditions and unionization received far less emphasis. Environmental concerns were diverse, including water quality, chemical usage and energy expenditures. However, during the interviews,

there was little mention of the specific environmental and social damage inflicted by clothing production; rather, the focus of their concerns lay with unsustainable consumption - the force driving the environmental destruction and social decay (both at home and abroad). Although blame was placed on those consuming clothing in excess, participants attributed greater culpability to the clothing marketers responsible for compelling consumers to continually replace entirely usable clothing.

The initiation and/or maintenance of social action in relation to clothing sustainability was equally credited to sustainability-oriented and personally-oriented motivators. Thus, while the desire to contribute to social change and create non-oppressive systems was inspired by altruism, participating in sustainable clothing practices was also driven by practical, self-oriented reasons, including finances and personal-preference. An imbalance between these two sets of motivators is liable to alter the type of actions undertaken by individuals. A growth in the strength of sustainability-oriented motivators would likely result in either an expansion of their activities or a deeper commitment to existing practices, such as was seen in the case of 21M, an avid second-hand shopper for financial and aesthetic reasons, who upon realizing the sustainable nature of the practice redoubled his dedication to this means of clothing acquisition. Alternatively, the increasing draw of personal motivators may alter an individual's practices in a negative manner or alter the underlying nature of the act, shifting it from the realm of social action to simply an act performed for the purposes of self-satisfaction or personal need. Both 03F and 18F brought forward an example of such, when they shared that if their financial situation changed, they were uncertain that

they would continue their current sustainable consumption practices, they thought they would likely be persuaded to purchase more apparel.

Finally, the chapter delved into the beliefs and attitudes of the participants in relation to fashion, shopping and the role of clothing. This exploration led to a divide among the participants based upon their affinity or appreciation for clothing. For those to which clothing provided little appeal, apparel was viewed as a functional item, required to fulfil a specific need. Conversely, for participants with an attraction to clothing, it played a more significant role in their lives. They received great pleasure from clothing, obtaining enjoyment from observing apparel and from selecting and combining their own garments. Many of the clothing admirers also used their apparel as a means of self-expression, viewing it as a way to present oneself to others, a tool for exploring oneself, or a conduit for demonstrating their uniqueness. When addressing shopping, the group with an affinity for apparel was divided once again amongst those with a controlled appreciation for clothing and those termed the “strugglers”. The strugglers had a deep affinity for clothing and, although their concerns were similar to those of the other participants, they had a propensity to purchase clothing in larger quantities on a fairly regular basis. Although they often did seek out more sustainable items, such as second-hand, remanufactured, hemp, and organic cotton, the amount they consumed was unsustainable.

The following chapter will build upon these meaning schemes, weaving in the participants’ subsequent behaviour and the ways in which they hoped this behaviour would influence a shift away from our consumeristic-based society and support the growth of the sustainable aspects of our existing system.

Chapter 5
WHAT THEY DID:
PROMOTING CLOTHING SUSTAINABILITY

5.0 Moving Towards Clothing Sustainability

Our collective journey towards sustainability is contingent upon substantial changes in societal values and attitudes, shared behaviours, existing institutions and underlying systems. Participants in this study, acting alone or working collectively, sought to contribute to this societal shift. Through their practices and actions, every one of my participants believed that his or her activities could make a difference.

The following chapter presents the types of activities undertaken by participants, independently or in conjunction with others, to support or advance clothing sustainability. It also explores the various challenges participants confront when engaging or attempting to engage in these actions. Finally, due to the interconnectedness of sustainable thinking and actions, the chapter will conclude with a brief discussion of the other sustainable activities being undertaken by participants as a part of the adoption of more sustainable lifestyles. It should be noted that this chapter focuses solely on introducing the range of activities undertaken by participants in order to reduce their “clothing footprint” and the impediments they faced in doing so. Chapter 8 will explore these practices, acts and barriers within the context of social action.

5.1 Individual Practices and Actions

Although a handful of the participants reported working cooperatively with others to encourage wide-scale change, on the whole, participants spoke of engaging in sustainable activities on their own. The following section explores how participants, as individuals, took action to reduce their “clothing footprint” through a change in their personal practices, or by simply maintaining positive practices. I also studied how participants sought to change the actions of people within their social network (e.g., sharing information, actively encouraging a change or supporting positive existing behaviour) and their efforts to influence larger entities, such as corporations and governments.

5.1.1 Sustainable Clothing Practices

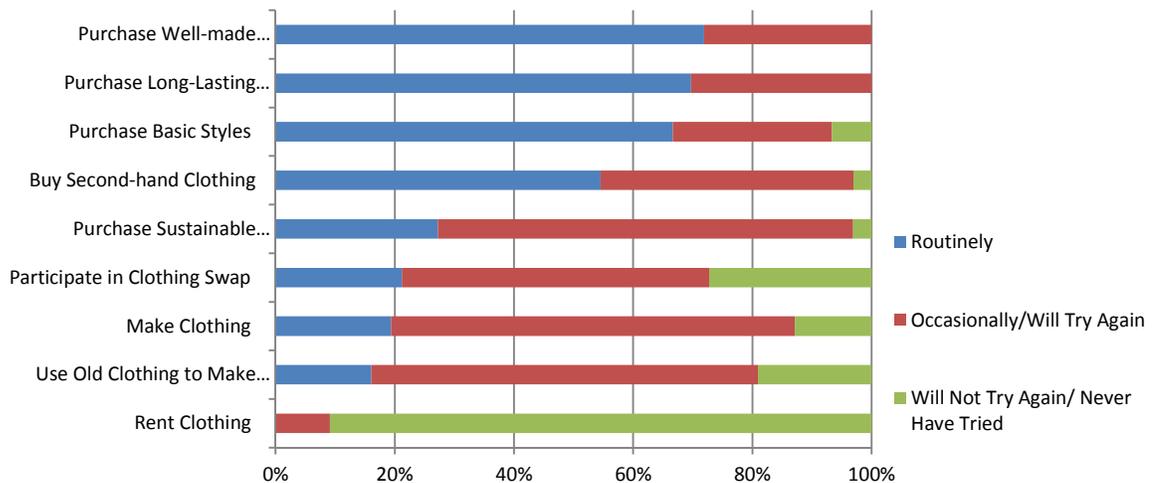
As outlined in Chapter 2, sustainable clothing practices refer to those everyday behaviors in which individuals engage, in relation to their apparel, which would be deemed more environmentally or socially-sound. Based on the data collected through both the surveys and interviews, three general categories of sustainable clothing practices emerged, namely activities related to (i) acquiring clothing, (ii) maintaining clothing, and (iii) disposing of clothing.

Acquiring Clothing

Acquisition practices refer to matters such as how individuals obtain their clothing, how frequently they buy or receive garments and how long they retain their apparel

items. Based on the data collected, activities related to acquisition fell into four broad categories: reducing purchases and/or keeping clothing; obtaining second-hand clothing; purchasing sustainable apparel; and constructing clothing.

Table 5.1: Sustainable Acquisition Practices (frequency of participation)



Reducing Purchases and/or Keeping Clothing. As noted in Chapter 4, two of the top concerns reported by participants on the survey were “the quantity of natural resources being used to produce low-quality, short-term use garments” and “the amount of clothing being consumed”. These concerns were certainly reflected in their practices, in particular through the various techniques used to reduce their apparel consumption. Ensuring a long-life for their garments, thereby diminishing the need for new articles of clothing, was one means of doing so. Making wise purchase decisions increased the likelihood of a long lifespan. The survey revealed that factors such as quality and durability played

vital roles in many of the participants clothing choices, as did buying garments with basic styling (i.e., not trendy), so as to avoid short fashion cycles (Table 5.1)¹⁰.

These survey findings were substantiated by the interview data. A significant number of the participants reported buying clothes that would last, which included purchasing well-made garments and simple, non-trendy styles. 18F described what influenced her to focus on quality, sharing: “I’ve had experiences with poorly manufactured clothes from malls and chain stores that just absolutely fall apart in three washes and I vowed never to go back to those stores”. Additionally, the majority of participants explained during their interviews that they did not purchase clothing very often. In fact, a number discussed wearing their clothing until it essentially wore out, with participants stating, “I literally wear things until they fall off my body” (09F) and “normally we wear clothing until they are rags” (14M). It should be noted, however, that these individuals were typically those who detested shopping and viewed clothing as purely functional, as was described in Chapter 4. A few of the participants in Shaw and Tomolillo’s study had similar perspectives regarding clothing and shopping, with one sharing, “I find myself looking for clothes which will last me for ages so I don’t have to endure the agony which is shopping. The t-shirt I am wearing I bought in 1981” (2004, p. 147).

Focusing on clothing needs rather than wants was another means to reduce purchases, as is reflected in the following: “I’ve never really been a big clothing consumer, but I really do try and think about, okay, do I really need this item?” (10F)

¹⁰ Other practices to prolong the usefulness of a garment are related to maintenance and will be discussed below.

and “I try to reduce. Even if I am buying second-hand, I really try to think of how often I’m going to use something, as opposed to just buying something just because I like it” (15F).

As discussed in the previous chapter, for participants who had a strong affinity to clothing and shopping, although they recognized the importance of reduction, altering their purchasing practices was more difficult. One who had successfully moderated her clothing consumption stated,

I used to be really into clothes. Then I shifted to being only into what I thought were ethical or environmentally friendly, because I still wanted to buy stuff ... Then I guess the next step was once I learned more about just wanting to buy less [in general]. I’ve just been trying to buy less clothes period. (12F)

Two others, who had not yet consistently overcome their unsustainable purchasing practices, communicated through their journals incidents which successfully averted a shopping spree:

I had a wedding to attend last weekend and I had an urge to buy a new dress. I did go shopping in one nearby store. Luckily, I didn’t find anything. I don’t need anything, but it was the urge to wear something new that I was battling with. I ended up wearing something I already owned, and it was just fine. (34F)

I found myself in a store and my arms were loaded with mounds of things from Afghan socks to sea shell bracelets. It was a tiny store, but I walked around and around and around just touching things, picking them up and putting them back down. I could very vividly feel my guilt building and saying to myself, “I don’t need this stuff.” Eventually, 30 minutes in the store, I felt that the situation was getting a little ridiculous and could feel the shop owner being confused by my aimless wandering, so I put everything back in its place and walked out. As I exited the store, I literally heard myself let out a huge sigh of relief; I did it. (35F)

Second-hand Clothing. In terms of obtaining the clothing they did need, a significant percentage of survey participants reported either regularly or occasionally acquiring used clothing, be it from a second-hand store (97%), through a clothing swap (50%), or hand-me downs from someone they knew (Table 5.1). The interviews supported these findings. When purchasing used garments, a number discussed that they always looked for second-hand first. Only after a thorough search and not finding what they required, would they look for new, and generally this would be a new sustainable apparel item¹¹. 28F, whose wardrobe consisted almost entirely of used garments, described her purchasing practices as follows:

...when I do purchase something new, it's usually because I haven't found something that I consider an adequate replacement that's second-hand. So, I always look second-hand first. I've been trying, just in general in my life, not to buy new things at all.

Unfortunately, obtaining used clothing by way of second-hand stores presented a number of obstacles, the primary one being uncertainty. One never knew what the store would be carrying, which was a problem if a specific item was required within a particular timeframe. As noted by participant 07F, "... when your main source of clothing is [second-hand stores] you are never sure that you are going to get what you need". A number of participants discussed this being especially a problem for specialty items such as cycling or outdoor gear, which generally had to be purchased new. Socks and undergarments also tended to be items participants purchased new. A few of the participants also shared that finding the proper fit, size and style could be challenging.

¹¹ It should be noted that for a small number of participants, purchasing new was either not financially feasible or they had such a strong aversion to doing so, they discussed waiting (up to a year or more) until they found the item second-hand.

For example, 15F noted, "...if I know I need a pair of jeans, sometimes it takes several visits somewhere to find something that fits properly" and 12F stated "I mean I try to look second hand first, but sometimes it's just so ugly".

A few others found shopping second-hand exceedingly time-consuming.

Participant 10F said,

You really have to sift through a lot of stuff and go through a lot of stores and then you are wondering "well, am I just wasting a lot of time and gas going from one consignment store to another looking for a sweater, if I can just go to [the mall], I could probably find it right away.

The majority of those participants favouring used clothing, acknowledged the challenges of second-hand shopping and had accepted that in order to buy second-hand garments, they had to adopt a different style of shopping, which included being patient and persevering. For example, 07F shared, "You have to be persistent ... there are always these items on my mind that I know that I use, so I will grab them whenever I find them". Two others also noted,

... it's a bit of a time commitment to go down there You can't wait until [you] need a specific item of clothing, because it may not be there then. So, you have to kind of go every once and awhile and just kind of go through and see what you find. It's often difficult to find a pair of jeans, but then again, you just have to go often enough and you'll find them. (20M)

It takes patience and a bit of tenacity and a sense of adventure maybe to shop at a thrift store 'cause you never know what you're going to find, unlike when you look at a catalogue and you know what you're going to the store to buy. (24F)

In addition to being a more sustainable means of acquiring clothing, a number of participants described additional enticements of a more personal nature to shop second-hand, including cost savings and getting a thrill out of successful trip to the second-hand store. 12F shared, "... the thrill is there for potentially finding something good quality that is second-hand. So that's exciting". Related to the idea of a thrill, was the attraction of finding unique items. 17F commented, "I find if you go to the mall, if you go to one store, sometimes you go to all. So there are a lot of similar things, but at thrift stores you get better variety".

Although some participants found their way around the challenges of second-hand shopping a few of the participants noted, that while they would like to buy second-hand clothing more regularly, they found the process extremely aggravating. 19F said, "I don't have as much patience with second hand stores ... I get really frustrated going through racks and racks" and 12F complained, "The quality is so low because people buy such [poor quality] stuff that they give it away after six months of wearing and it's already falling apart".

Aside from purchasing second-hand clothing, the majority of participants discussed other means of obtaining used garments, which included receiving used garments from friends or family and participating in clothing swaps, the latter of which I will discuss further under collective social action.

Sustainable Apparel. As discussed in Chapter 2, sustainable apparel is a term used to refer to apparel which was produced in such a way as to reduce its environmental and/or social impact. When unable to find a much needed garment second-hand, a number of

participants explained their next step would be to look for a sustainable apparel product. Similarly, several of those unable to overcome the barriers of purchasing second-hand instead sought out sustainable apparel. However, for many of the others, sustainable apparel purchases occurred infrequently, often an item here or there, but not something they actively searched out.

Previous sustainable apparel related studies concluded personally oriented considerations (e.g., price, quality, style, and comfort) had a greater impact on clothing choice than an individual's concerns regarding sustainability. Research indicated that this was true of not only your average consumer, but also those considered to be ethical consumers (Dickson, 1999; Iwanow, McEachren & Jeffery, 2005; Joergens, 2006; Shaw, et al, 2007). These studies found that consumers did not feel that sustainable apparel met their personal criteria for clothing or that they were "not prepared to juggle this concern in their apparel consumer decisions" (Dickson, 2000, p. 28).

Corroborating these findings, this survey revealed that less than 30 percent of participants routinely purchased sustainable apparel (Table 5.1). During the interviews, many of the participants were quick to point out the array of barriers to purchasing this form of apparel. These barriers, which include the complexity of the decision to buy, price, lack of information, and lack of availability, also corresponded with the results of the other studies (Shaw & Tomolillo, 2004; Shaw et al., 2006). The following section will explore these challenges faced by participants.

- (i) Complexity of the Decision. A key challenge associated with buying sustainable apparel was the plethora of factors which needed to be considered and

prioritized in order to select a garment; a process which 26F described as a “balancing act”. In the survey, participants were asked to indicate the significance of an array of selection criteria for new garments, which ranged from traditional factors, such as price, fit and style, to sustainably-oriented factors, such as organic cotton, recycled materials and natural dyes (Table 5.2). Considerations such as fit, comfort, quality, durability and suitable style were identified most frequently as being either important or very important, while sustainable choices such as “greener” fibres, union-made, a brand known for sustainability, and unfinished fabrics were deemed to be less important. Key decision factors discussed during the interviews, again, included style, function, comfort and quality, as well as country-of-origin. Also discussed, although with less frequency, were price, colour, retailer and sustainability.

Table 5.2: Top Ranked Clothing Criteria

		Important or Very Important
Top Conventional Decision-making Factors	Comfort	97%
	Fit	97%
	Quality	97%
	Style	94%
Top Sustainable Decision-making Factors	Ethical Production	68%
	Fair Trade	58%
	Organic Cotton	55%
	Other Sustainable Fibres	52%

- (ii) **Garment Cost.** The majority of participants mentioned price as being a barrier to purchasing sustainable apparel. Although some were able to pay the higher prices, such as 12F who stated, “cost usually isn’t an issue if it’s something that I think will last a long time”, a number of others were either unable to afford to pay more or unwilling to do so. One such participant shopping for her husband wrote in her journal, “I feel awful spending money. So I went for the cheap and volume for my cash (you know, make a BIG birthday impression, pressure was breathing down my neck)” (03F), another felt her money would be best directed somewhere else,

... you can go online and I see some stuff, but the costs there would be just prohibitive, especially for a family. So you take that money and you spend it elsewhere because you feel fashion would be frivolous and why would you spend \$80.00 on a t-shirt ... you could spend that on your [children], you know? (11F)

- (iii) **Lack of Information.** As was noted in other studies, many of the participants expressed frustration related to the lack of readily available information regarding products and companies, the trustworthiness of the information that is made available, and the amount of time and effort needed to look for and verify this information (e.g., Iwanon, McEachern & Jeffery, 2005; Joergens, 2006; Shaw & Tomolillo, 2004; Shaw et al., 2006). Regarding trustworthiness, a number of the participants discussed not knowing whether or not to trust the information provided by manufacturers and retailers. Having previously worked for a major Canadian clothing retailer, 11F was

particularly concerned about the lack of transparency within the garment industry. She stated of apparel manufacturers,

Where is it being made? Who is making it? What kind of conditions are they working under? ... you have no idea, you just have no idea – because they will get around it every which way unless you're checking constantly and you are in the factory not just talking to the factory boss, but in there seeing whenever you want and not a scheduled visit.

The dearth of trustworthy information available to help guide decision-making has led consumers to develop their own techniques for managing their uncertainty. Shaw and colleagues (2006) found that when faced with a lack of information, their participants employed four methods to increase their confidence that the products they were buying were sweat-free, namely (i) buying from trusted retailers, (ii) acting based on country of origin, (iii) boycotting a particular brand or retailers and (iv) researching companies' practices. Each of these tactics was also used by participants in this study.

Relying on trusted retailers was one of the primary means for increasing their confidence in the sustainability of the product. Many discussed placing their trust in well-known companies with a strong sustainability reputation such as Mountain Equipment Coop (MEC) and Patagonia, while a smaller number, including 19F, talked about frequenting local retailers who sold more sustainable products:

...sometimes there will be things made of organic material or made of bamboo, but they'll still made in India and I don't know whether or not they're made fair trade or not. I will still buy

them and kind of hope they're fair trade and that the retailers have done their homework.

Just as Shaw et al. (2006) discovered that their participants tried to avoid clothing made in countries they referred to as “dubious” or “notorious”, so too did a number of participants in this study, including 02F, who stated,

I try to stay away from areas that are very well known to be terrible, like China. I try my best to not - for anything, anything in the house or anything in my life - that is not Chinese, because they are so bad in that respect.

Searching for Canadian-made products was another reason for reading garment labels, as was discussed by 27F,

I purchase as Canadian as possible. I really do turn my items inside out and investigate the origin of the manufacturer. When I shop with my husband I make sure that he does the same along with me. There have been many, many times that we walk away from something that we really like because it's made elsewhere.

In lieu of tangible, credible evidence that a company had sustainable policies and practices, some participants discussed boycotting brands or retailers they had heard or suspected had questionable reputations. This was an approach also noted in studies by Dickson (2000) and Shaw and Tomolillo (2004). For example, unwilling to purchase products unless she felt confident about their sustainability, 22F stated:

I am very aware of where I'm shopping from, where the clothing is made, who's making it, the name of the brand, the company. There are certain stores that I will not shop at because they have bad ethical practices or safety practices or whatever around their

clothing production, including some major chain names that everybody goes and shops at. I just can't do it.

Lastly, research was a practice used by participants to aid their decision-making, although not by many. Only 36% of participants reported either routinely (13%) or occasionally (23%) researching retailer's or manufacturer's policies and practice. The primary challenges to conducting research were that information was difficult to source and research required a commitment. For example, 12F responded, "First, it involves research, unfortunately – lots of it." Similarly, 29F explained, "... you definitely have to source out, ask around, do research, so you have to be an engaged consumer, an aware consumer, so it's not always convenient. There's a lot of work involved". Two others also commented,

It's hard to get information. It's hard to get more environmentally sustainable choices. You can do it, but it's way more work here I think than it is in other places and that makes it much harder and I think, of course, in the end even, except for the ultra, ultra, ultra committed, there is a point that it's just too much work and people don't do it. (14M)

[If] I don't know the company's name and I can't find anything out about it, I'm not going to make a purchase until I have a better sense of who I'm buying from. Just because it's organic doesn't mean it's made sustainably, because the labour/trade aspect of it is as important as the organic sustainability. It can be organic cotton woven by children tied to looms. That's not going to happen. (22F)

- (iv) Lack of Availability. The dearth of retailers supplying sustainable apparel in Winnipeg was discussed by many participants. One believed that, "Winnipeg

is not a city that tends to market towards these issues” (14M) and another commented, “I think it’s a harder path given our location. If you were somewhere like Montreal or London or somewhere where it’s more accessible, I think those choices are easier” (11F). Shopping online provided an extensive selection of products and was a means for some individuals to overcome this barrier, allowing them to locate even difficult to find items such as raincoats and underwear. However, according to most of the participants, buying off the internet raised other challenges, including the time required to research and find the right product, and concerns over proper sizing and fit. Looking for sustainable apparel while travelling was another means of circumventing the lack of local availability. For example, 12F said, “I try not to buy anything except when I’m home ... There are so many options. There is a whole neighbourhood that is known to be the eco-shopping haven, so it’s really simple if I’m home and I need something”.

Another constraint identified by participants across the studies (e.g., Joergens, 2006; Shaw & Tomolillo, 2004; Shaw et al., 2006) was that the selection of sustainable apparel on the market was extremely limited in terms of styling, sizes, and work-appropriate garments. A wide variety of observations and critiques were made regarding the styling of sustainable apparel, which included descriptive terms such as post-apocalyptic, utilitarian, hippyish, edgy, excessively bright and too casual. Finding larger sizes and/or the proper fit was also a problem for several individuals. Also obtaining work appropriate attire was a problem, with participants stating:

“The casualness of most of the organic or sustainable clothing is a problem for professional people” (22F) and “... the clothing is designed in a way to be edgy or to be decidedly not mainstream, so depending on the reasons that you’re buying the product or what you’re going to use it for, it’s not necessarily practical for work or other things” (24F).

Redesigned and Local Garments. Sustainable apparel encompasses clothing made of either environmentally-improved (e.g., sustainable material or production processes) or manufactured in a social-conscious manner, such as hemp clothing, fair-trade cotton, and sweat-free garments. However, there were two other types of apparel deemed to be sustainable which were discussed in depth by a number of participants - redesigned (a.k.a. remanufactured, repurposed) and “local” (locally-sourced or locally-made). A few participants noted during the interviews that they had a great appreciation for redesigned apparel – or articles of clothing constructed by means of rearranging and combining two or more used garments. Several of the participants discussed purchasing these types of garments from specialty shops, either locally, online or while travelling. Many of these also had made or planned to make their own clothes from old clothing.

Although not an item directly asked on the survey, the concept of locally produced clothing did emerge during many of interviews. For those seeking items made in Canada, their reasons for making such purchases included decreasing the distance travelled, having greater confidence in the working conditions, and supporting Canadian manufacturers. Unfortunately, most reported it was becoming increasingly difficult to find, such items.

For a few of the other participants, locally-made referred to buying clothing from small, independent retailers and local artists. In addition to the reasons cited above, creating and participating in a strong sustainable community was also very important to these participants, with 07F expressing her motivations for buying local as, "... just being a part of my community. I would prefer to buy something at a shop that I know or made by people I know rather than the big box store" and 28F sharing, "... if my community is able to take care of itself, then we're not going to need to exploit another country or another community". Another reason discussed was a desire for their clothing to have a "story" or to have a connection with one's garments. For these individuals, there was a great appeal in knowing, and potentially forming a relationship, with the person who made their clothing. As a result, they viewed locally crafted garments as having greater personal meaning and value. Further, these participants felt they were better able to acquire unique garments which suited their personal style and reflected their personality and values when they invested in local garments rather than mass-manufactured clothing.

One last reason for buying local, provided by only two of the participants, was to support the notion that when clothing was produced on the other side of the world, where Canadians were unable to see the adverse environmental and social impacts, it resulted in there being a disconnect between themselves and their clothing. Thus, they believed having a better understanding of the impacts of garment production and having it occur locally where the effects can be seen and felt is one way to reduce unsustainable production, as was explained by 28F:

How is it extracted? How it is created? What water stream did it go into? Which community lives downstream from there and is trying to drink out of that water? ... I don't see the immediate effects in my community and it's

becoming increasingly important to me to focus on understanding what I use and how I use it and how it impacts the world around me. That means for me I've become much more local in the choices I make.

Regrettably, as is the case with other more sustainable goods, these garments are not readily available, are quite limited in terms of selection, and are generally more costly.

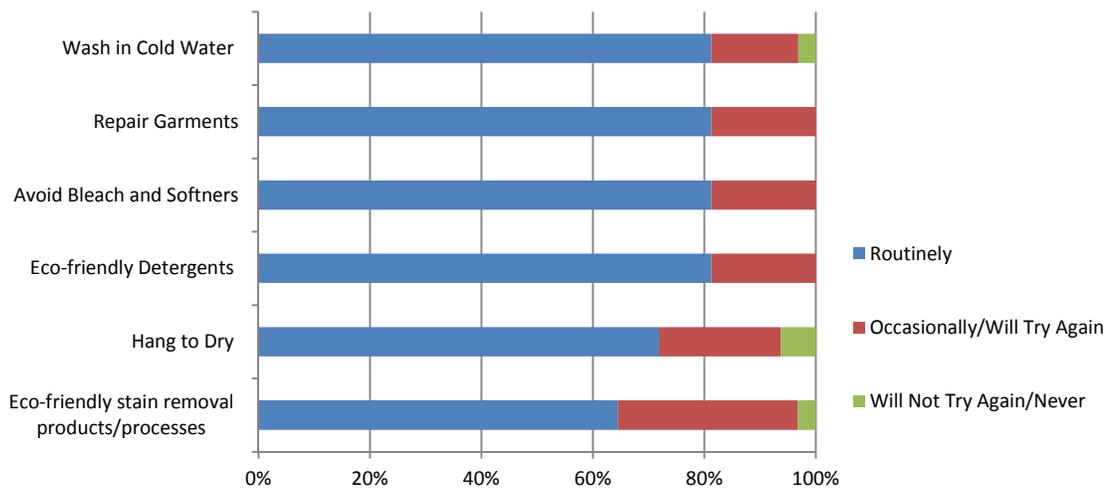
Constructing Apparel. Finally, in an effort to obtain their clothing sustainably, several participants were involved in making clothing or accessories. This included sewing, knitting, and crocheting items as gifts or as pieces for their wardrobe. For two of the very committed participants, this extended to spinning their own yarn and looming their own fabric. There were a variety of motivators for constructing garments or accessories, a few of which included enjoyment (hobby), creative expression, creating unique items or garments with a specific style or fit, and of course, sustainability, with one participant stating, "... for anybody who wants to make their own clothing, that's the ultimate in sustainability" (22F). However, a number of barriers impeded those wanting to construct apparel and those already involved in making clothing. One such barrier was cost, as noted by 08F, "[I will sew] when it is financially reasonable to do so ... but so often you can go and buy a finished garment for less than you can for the supplies to start it, so that's frustrating". Another was the time commitment required, for all forms of construction, but in particular for those engaged in yarn and fabric production, with 22F commenting "It takes a long time to loom fabric. When you think about it in terms of placing it thread by thread, 300 threads an inch is a lot of shoo, shoo, shoo, click,

click, click”. As a result, the construction of textile materials was viewed as a hobby rather than as viable alternative to commercially available fabrics. Other barriers included a lack of skills and limited availability of eco-textiles.

Maintaining Clothing

Maintenance activities included cleaning clothing (i.e., washing, drying, and ironing), as well as activities related to extending the life of the garment, such as repairing a garment when it has suffered damage or updating the style of a garment to prolong its use.

Table 5.3: Sustainable Maintenance Practices (frequency of participation)



In terms of cleaning clothing, over 50% of the participants were very concerned about “the amount of energy and chemicals used to clean clothing” (see Table 4.1) and

their maintenance activities reflected this concern (see Table 5.3). Over 60% of the participants reporting routinely engaging in cold water washing, hanging to dry, and using eco-friendly cleaning products. During the interviews, a number also mentioned washing less frequently, discussing their practices of changing out of clothes as soon as arriving home, spot cleaning, and airing out their clothes.

Interestingly, when it came to cold water washing, hanging to dry and less washing, the primary driver reported by several participants was not to reduce energy consumption, as I had anticipated; rather, the motivation was to extend the life of their clothing by reducing the wear-and-tear on their garments resulting from machine washing and drying, as was expressed by 11F:

I have one style of sweater in about six different colours...I have had them I am sure a good seven or eight years already. I don't wash them often. I wash them in cold gently, I just lay them flat to dry, that type of thing. That way I have them forever.

Thus, although several authors (Allwood et al., 2006; Fletcher, 2008) have indicated that the bulk of the energy expended during the life-cycle of a garment is during maintenance, it would seem that energy conservation, in most instances, was simply an additional benefit for these participants.

In addition, the majority of participants reported that they conducted their own repairs to their garments, which included sewing on buttons, patching holes, and darning socks. A few also discussed simply wearing garments with flaws for either everyday wear or downgrading to chore clothing, such as 28F, who joked, "I also have holes in my clothes and I just wear them anyway ... That probably makes me look more shabby to other people and other people think it's a fashion statement and I just (laughing) haven't

had time to sew it” and 21F, “We like to play in our clothes. But if a hole happens or a stain happens, it just happens”.

Acquisition activities, such as reducing purchases and keeping clothing a long time tie naturally into maintenance practices, all geared at reducing the need for new garments by extending the life of their existing wardrobe. One participant, who did not buy second-hand or sustainable apparel, regarded her maintenance practices as her most sustainable activity related to clothing, saying, “I don’t purchase things that are sustainable, I purchase whatever I want, but I invest in clothing. I take great care in the preservation of clothing, extending its life” (04F).

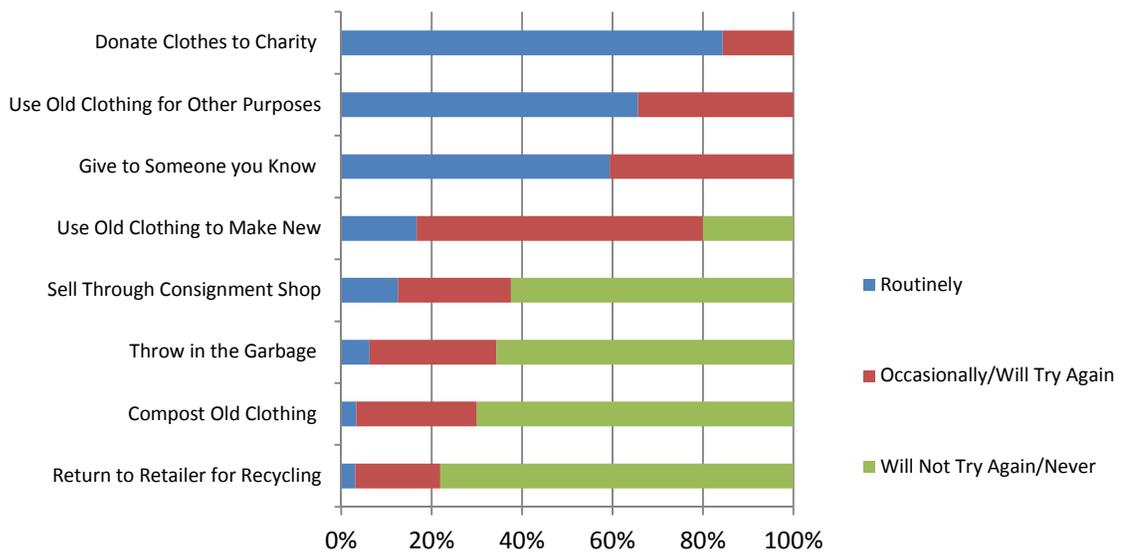
With regard to challenges, increased costs for front loading washer and eco-detergents were mentioned. Hanging to dry was cited as being more time consuming and less convenient. It also required a suitable area, a clothes line, cooperative weather conditions and self-assuredness (not everyone was comfortable with having their underwear on the line). Conducting repairs was said to be time consuming and several individuals mentioned having a pile of damaged clothing awaiting mending. The majority of participants had the ability to conduct basic repairs; however, there were more complicated procedures, such as fixing or replacing zippers, which a few participants specifically mentioned as being too difficult and frustrating.

5.1.3 Disposing of Clothing

Finally, participants felt the way that they disposed of their clothing was an important component of sustainable clothing practices. Based on an informal review of

provincial waste management programs and leading retailer companies’ practices, it seems that the majority of the clothing industry and the bulk of municipal recycling programs do not give consideration to post-consumer clothing and textiles waste. Thus, participants who were concerned about the end of life management of their clothing had to find their own ways to reduce their impact. A variety of disposal methods were discussed (Table 5.4), with the majority indicating they gave clothes away to charities, to for-profit second-hand stores or to people they knew. As for those garments that were no longer wearable, a number of participants reported using them for other purposes around the house, such as rags and crafts, while a few admitted to throwing these garments in the garbage. Very few participants reported composting these items.

Table 5.4: Sustainable Disposal Practices (frequency of participation)



5.1.2 Individual Acts to Influence Others

Sustainable clothing practices were by far the most common form of action; however, there were examples of activities carried out by individuals with the intent of either (i) making others more aware of clothing issues, such as the impacts of clothing, alternative practices, or specific products or companies, or (ii) influencing the policies and actions of retailers, manufacturers, brands, or governments. The most frequently identified act of awareness raising was sharing information with people within their social sphere (i.e., friends, family, colleagues and peers). On the survey, 47% of the participants stated that they would frequently “Share knowledge of environmental or social impacts of clothing with others”; while 34% reported they would routinely “Share knowledge of ways to reduce the impact of clothing”. In the interviews, participants revealed a number of ways in which they shared information. A few discussed voluntarily sharing information with friends, family or colleagues, in particular when he or she was excited over a new practice or article of clothing. Whereas, a greater number would only share information if they were directly asked about their practices or if someone complimented a piece of clothing that was obtained in a sustainable manner. In such cases, they would discuss how and why they engaged in a particular act or would tell the ‘story’ behind the admired garment. Although these participants were reluctant to tell people about their clothing and practices, a number did hope people would notice and ask questions. 34F stated, “When I buy something that has been reworked, I get so excited to tell someone if they’ve complimented me on it, to explain why I chose to buy from that designer”. A few of the participants discussed why they chose to share information only when asked. “It’s more trying to lead by example, I guess. Because it’s

so hard to talk to people and not come off as arrogant or as superior and like, “oh yeah, you’re doing this wrong and you should do it my way””, 20M stated, while 28F, who was a very committed youth activist, but had since decreased her participation in such activities, explained,

...people ask me about why I do what I do occasionally, and I’ll share that, but I’m a lot less sure that people want a campaign ... I don’t feel ethical about preaching to people I don’t know or who aren’t requesting information from me. But, I do take opportunities to share what I know when people are indicating that they want to be more aware and they are intentionally asking questions.

Another form of individual awareness-raising was demonstrated by participants with their children/grandchildren. Being responsible for teaching them sustainability values, including clothing sustainability, required parents to both communicate information verbally and to set an example through their actions. One parent noted in her journal,

I shop for my daughters now and it seems that everything I buy can be a potential lesson/learning experience. Yes, I realize they are only two and they don’t understand that China’s environmental regulations are not particularly strong or that there are environmental and health impacts of PVC (we were shopping for raincoats). But I do know these things. And, one day, I hope to explain it to them. So, that means I have to practice what I preach ... so no PVC for me. (11F)

Only a small number of participants took part in acts intended to influence the large-scale systems, namely by changing the behaviours and/or thinking of the textile, clothing and fashion industries, governments world-wide, and the North American consumer culture. These few participants stated during the interviews that they engaged

independently in advocacy activities. Specifically, they emailed companies to ask about, or critique, their practices and policies, asked staff questions about the products offered or corporate practices, held companies accountable for the quality of their products, requested retailers carry sustainable apparel items and staged personal boycotts. For example, 02F believed a key part of encouraging sustainability was informing businesses of when their products failed. Buying brands with reputations for high quality and performance, she had positive responses from the majority of apparel companies she contacted. In fact, in several instances they had provided her with a replacement product – even years after it was purchased. She explained:

I like to hold companies accountable for their apparel. For example, North Face is a great one, as is MEC - if North Face says we are going to give you a lifetime warranty on this product and it's like "ok, I've worn this Gortex for ten years and it is no longer waterproof and the zipper broke". So, I called them up and I said, "You know I've worn it every day for ten years, I don't expect you to do anything, but I just want you to know this has happened" and they said, "We'll send you three jackets and you pick your favourite one." ... What other ones have been really good for that? MEC is excellent. After 10 years my raincoat was just useless, brought it back and they gave me a credit for what it was worth. So, companies standing behind their products. Which I think encourages them to make good ones, because they don't want to have to replace them.

Requesting retailers carry sustainable apparel was also one of the questions posed on my survey. Although 36% indicated they routinely (13%) or occasionally (23%) made such a request, including 26F who discussed emailing her favorite retailer to encourage them to carry more garments made of organic cotton (unfortunately, with no response), far more participants (48%) reported that they either had never or would not again attempt to persuade a store to sell sustainable apparel.

A common practice for avoiding sweatshop apparel was the personal boycott, which entailed a participant, as an individual rather than as part of a campaign, refusing to purchase from a particular retailer, apparel company or country. Seventy-five percent of participants reported doing so routinely. The term “voting with their wallet” was raised in-conjunction with such boycotts, which meant that through their purchasing choices some participants believed they could send a message to, and influence the behaviour of, manufacturers and retailers. In addition to rejecting goods they regarded as unethical, they also discussed the importance of buying local. Sourcing their goods closer to home gave them greater confidence that fair labour practices were being followed and that no children were involved in the manufacturing process; but, it also allowed them to support artists and businesses in their community, ensuring they were able to continue their efforts.

5.2 Collective Action

The actions of collectives, which ranged from a couple to an international movement, were far less prevalent than individual acts, with only a handful of participants identifying on the survey or discussing during the interviews their involvement in collective activities. Much like individual action, cooperative action had three main aims, encouraging or supporting sustainable clothing practices, increasing others’ awareness of clothing sustainability, and advocating for change at the system level. The following section will explore of these in turn.

5.2.1 Promoting Sustainable Clothing Practices

With respect to advancing sustainable clothing practices, participants sought to actively facilitate the adoption of new practices by others, to explore new behaviours and actions in-conjunction with others and to collectively support one another in their efforts to maintain their SCP. Such actions were certainly more common in other sustainable areas of their life (e.g., gardening, purchasing local products, composting), however, there were a few examples from a clothing practices perspective. Most often they were small acts of support or encouragement between themselves and others in their social sphere which built or reinforced their commitments to sustainable clothing practices (e.g., working with a relative to make a quilt, second-hand shopping together). Many of these acts took place between partners, with couples bringing home new ideas or challenges for sustainability, agreeing together to commit to a particular practices and working together to uphold that commitment. A few of the participants also discussed purchasing sustainable fabrics and clothing through a buying club and participating in mending parties, knitting collectives and clothing swaps.

5.2.2 Collective Awareness-Raising

In terms of working collectively to help inform others of alternate clothing views and practices, three participants were, or had been, involved in a voluntary capacity with handing out leaflets, posting blogs or twitters, and sharing information through podcasts. More often, efforts to increase awareness were work-related activities, with the participant playing an influential role in initiating and carrying out the endeavour. A few of the participants discussed conducting presentations, lectures and workshops which

included some aspect of clothing sustainability. Organizing and implementing a fashion show featuring more sustainably obtained clothing was another. One such organizer described the goal of their fashion show,

... people have this perception that sustainability and the environment are for those people who ride their bike and wear hemp and eat granola, and it's like, "well, no, it's not. It needs to be for everybody". So that was the angle that we were taking. (11F)

Two of these participants also shared that they had coordinated large-scale clothing swaps. Developing an ethical purchasing policy for their organization was another activity performed by a few of the participants. Both the clothing swaps and purchasing policies increased awareness regarding clothing sustainability, but also had the added advantage of assisting others to carry out more sustainable acts.

5.2.3 Collective Advocacy

Collective advocacy work attracted the fewest number of participants. According to the survey, 38% routinely participated in "Buy Nothing Day" and 28% routinely took part in organized boycotts of retailers or brands, both of which are very passive activities (i.e., refraining from shopping for a 24-hour period or refusing to buy certain garments). When asked about a more active form of collective social action, namely engaging in letter writing campaigns, only 9% stated they did so routinely. Two of these participants discussed writing letters with other concerned individuals to government officials and corporate executives on an array of topics both directly and indirectly related to clothing sustainability. Other acts of advocacy raised were protests and petitions. One

participant, concerned with animal rights, participated in a march to protest fur, a true act of dedication, for it involved parading through the downtown in December in a bathing suit. Two others provided details of the protests they were part of at shopping malls while in University, both noting their uncertainty as to the effectiveness of these actions. One explained that her groups protest on “Buy Nothing Day” involved, “...parading around the mall with signs or sticking little notes in the merchandise or singing funny carols. Things that are fun and pretty much not effective.” (18F). Sharing a similar experience, 29F talked about her group’s protest at Christmas time, “we went and we carolled in front of the Gap ... we were calling them out in a non-violent way and I think when people learned about the lyrics they were offended. We got kicked out of the mall”. Of the advocacy acts discussed, signing petitions, again a passive act, was the most frequently practiced (although the numbers were still very low). One participant, who in her youth was passionate about labour issues, environmental concerns and animal rights, had been a habitual letter writer (aiming to write one letter a week); however, as an adult she shared, “Now, I prefer signing petitions instead of writing a whole letter because it takes less time”.

During the interviews, participants offered a number of barriers to participating in collective forms of social action in relation to clothing sustainability. Similar to Lange’s (2004) study of “citizen action”, a lack of avenues for effective collective social action and limited time were challenges shared by some of my participants. Likewise, some of the identified barriers to individual action, such as not wanting to force their opinions or way of life on others and the lack of support or encouragement from their social network, were also challenges to collective social action. Further, although directly addressed by

only a few, it was implied by many that clothing was not as important a sustainability issue as were others, such as food or transportation. For example, 03F wrote in her journal,

This journaling experience has led to clarifying that, for me, food and cosmetic issues are a bigger priority for me than clothes (and I struggle a lot with being consistent and committed here as well). I care more about what I eat and put on my skin than about my clothes.

I would surmise that some participants would be willing to overcome barriers in order to join collectively with others to address a matter they viewed as vital; however, it is unlikely that the same efforts will be made for an issue for which they are less passionate. A possible reason for clothing holding less importance could include the implied belief of many participants that through the acquisition of second-hand clothing and reduced purchases they had effectively addressed the issue of clothing sustainability. These are simple acts, within their control, which allowed them to bypass the negative environmental and social consequences of conventional clothing production and consumption. They acted as individuals to remove themselves from the problematic system and, as such, there was no need to give the matter greater consideration. Another possibility relates to the quote above, specifically the weak relationship between physical well-being and clothing sustainability, which has also been commented on by Joergens, who stated, "It [seems] that participants show more ethical commitment when it has a positive influence on their own health rather than to others involved in the supply chain" (2006, p. 365). Joergens and Shaw et al. (2006) both found that making decisions regarding clothing is far more complex than the selection of other products, and the repercussions of the damage caused by production is not felt or seen by the individual,

both of which contribute to the fact that more people, ethical or otherwise, engage in purchasing sustainable food and other products.

5.3 Other Sustainable Lifestyle Practices

In addition to engaging in actions related to clothing, a substantial number of participants were routinely involved in an array of other sustainable activities, choosing to live, as best as they could, a more sustainable lifestyle. The majority of participants routinely participated in the more commonly recognized and relatively easy to implement activities, such as recycling, drinking tap water rather than bottled, using reusable grocery bags, avoiding yard chemicals, using environmentally-friendly cleaning products, and using a reusable mug/bottle (Table 5.5). As one would expect, when the challenges or personal sacrifices to engaging in the behaviour increased, the participation rate declined. For example, despite discussing the importance of food during our interviews, less than half the participants routinely purchased local food, practiced vegetarianism or veganism, or followed a “100-mile diet”. It should be noted that for even for those raised in a sustainably-oriented environment, food tended to be a way of extending their beliefs and practices. Increased knowledge and availability of sustainable foods resulted in the development of additional food related attitudes and practices, ones which were not as commonly known about in their youth, such as organic, local, humanely-raised, fair-trade, and vegetarianism/veganism. Many of these ideas crossed over into other areas of sustainability, as in the case of this study, increasing participants’ awareness of, and exposure to, organic fibres, fair-trade related clothing and locally-designed garments.

Interviews identified an assortment of other sustainable practices, ranging from conventionally recognized activities such as using a rain barrel, canning fruits and vegetables, and preparing food from scratch (i.e., avoiding prepared foods) to less common practices such as making one's own personal care products, using bathwater to flush the toilet, trading goods and services, and choosing not to have a car or television.

In terms of collective action, 75% of survey participants reported that they are currently or had been actively involved in a social or environmental organization, which indicates that although not a significant number were involved in collective action in relation to clothing sustainability, the majority were oriented towards working with others to induce change or defend the status quo. During the interviews, various participants shared being voluntarily involved with causes ranging from human rights to water quality, from natural medicines to labour rights.

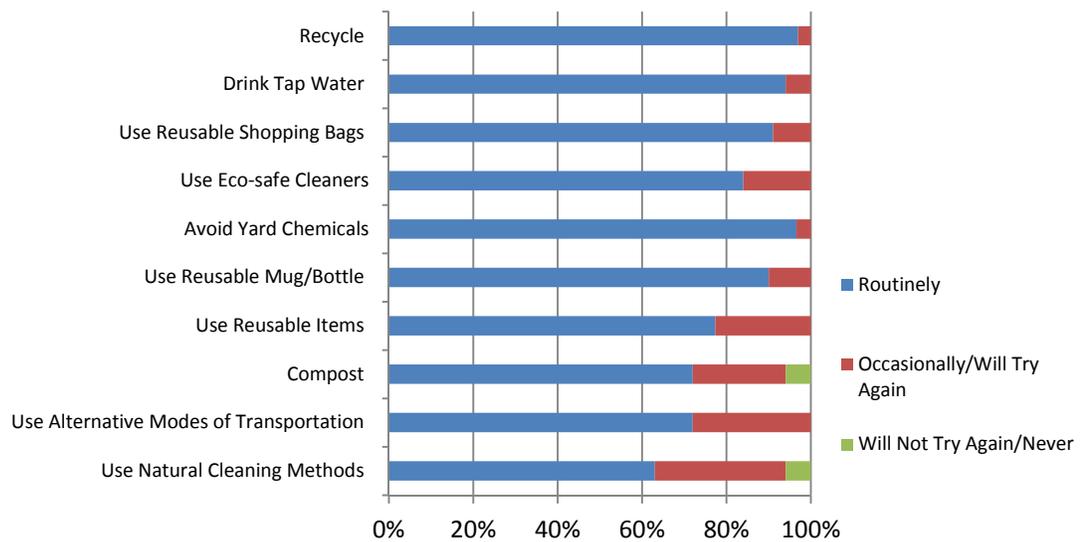
Also related to collective action, a number of the participants were members of food buying collectives and as such were able to provide greater support to local and/or organic farmers and producers. By working together to source products, they were able to reduce many of the barriers to purchasing these goods, including the cost. Through these groups, participants also received encouragement and a sense of connection with others holding similar attitudes and values.

Further, a large number (63%) were either studying or employed in the environmental and/or social sustainability field. The majority of participants working (or planning to work) in this area may be indicative of the recruitment process (i.e., the snowball technique) or may be further support for conclusions reached by Lange (2004). She postulated that due to the identified barriers to engaging in collective social action

(e.g., no platform for meaningful collective social action, limited time, and personal and work pressures) many of her participants had sought out the “right job”, which would allow them to both “make a difference in society and enact their professional and personal ethics” (p. 136).

Finally, although the timeline for participants’ adoption of social action related to sustainability of clothing will be discussed in detail in Chapter 7, it should be noted that participants discussed adopting other sustainable lifestyle choices either concurrently, or more often, prior to adopting more sustainable clothing practices. For most, sustainable clothing practices were simply a part of their overall choice to live more sustainably, not a distinct and separate act.

Table 5.5: Other Sustainable Lifestyle Activities (ten most frequently practiced)



5.4 Chapter Summary

Previous studies (e.g., Dickson 2000; Shaw & Tomolillo, 2004; Shaw et al., 2006) have found that even ethical consumers who are concerned and knowledgeable about the adverse impacts of clothing find it difficult to routinely purchase more sustainable apparel. This study certainly supports this conclusion, finding that less than 30% of the participants regularly purchase sustainable apparel. However, this research also clearly demonstrates that shopping in a more conscious manner is not the only way to engage in clothing sustainability. For many of the participants, buying new clothing, even if it was more sustainable, was not one of the means they relied upon to reduce their clothing footprint. Typical acquisition practices involved obtaining clothes second-hand, reducing the frequency of their purchases, maintaining their garments for extended periods of time and refusing to purchase from companies with poor track records. Sustainable maintenance and disposal practices were also deemed essential to clothing sustainability. With regards to barriers, activities which were well-established in social norms, familiar, and easy to perform, such as washing in cold water, donating clothing to charity, and keeping clothing a long time were more commonly practiced as compared to activities which countered normative ideology, required new attitudes or patterns of behaviour, demanded the acquisition of equipment or materials or involved a substantial learning curve.

Beyond adopting more sustainable personal practices, the next most popular actions were related to participants' social sphere including, sharing information, supporting others' efforts, and jointly partaking in sustainable practices. Participants did not engage in collective efforts to reach a broader audience, be it consumer society, government or

industry, with any frequency, particularly in a voluntary capacity. Those engaged in broader awareness raising activities did so primarily through their employment. Those who discussed partaking in collective acts of advocacy generally did so in a passive manner, signing a petition, not shopping at a particular retailer or donating money, rather than playing an active role in the organization and implementation of collective campaigns.

Sustainability was a familiar concept to all the participants and all, to varying degrees, engaged in a wide array of other sustainable practices. Once again, not surprisingly, those activities that were more familiar and easier to implement were practiced on a more frequent basis (e.g., recycling, drinking tap water, and using reusable shopping bags). Food was an issue of greater importance for most of the participants and an area to which they dedicated more time, effort and money. The majority of participants, in addition to participating in individually-based sustainable practices, also reported being engaged in collective action, either currently or in the past, which was not the case when focusing specifically on clothing sustainability. This is likely due to a greater concern for other sustainability issues and believing that through individual acts they are able to satisfactorily address their clothing concerns.

Chapter 6
THE START OF IT ALL:
CHILDHOOD FOUNDATIONS AND LEARNING TRIGGERS

6.0 Introduction

At its heart, transformative learning is about questioning the lens through which we view our world. Initially constructed in childhood¹², this lens, or frame of reference, serves as the foundation for all future learning. Thus, in order to understand how participants arrived at the concerns, beliefs and attitudes described in Chapter 4 and how they came to engage in the activities presented in Chapter 5, my analysis begins with their upbringing and the values, assumptions and practices they obtained from those significant to them. We must also appreciate those events which initiated the learning process, i.e., those experiences which called into question their childhood foundation.

Accordingly, this chapter begins my exploration of the learning process. It introduces the participants' childhood beginnings, which were identified in their introductory interview and life-grid interviews, and discusses the impact this foundation has had on their adult learning and actions. It also delves into the experiences which triggered learning in adulthood, setting in motion their journey towards clothing sustainability.

¹² For the purposes of this thesis, childhood refers to the years up to and including the mid-teens.

6.1 Childhood Foundation

Our frame of reference develops as we do, expanding and shifting with each successive meaningful event, occurrence or interaction we encounter. According to Mezirow (1994), the foundation of our frame of reference is established in childhood and is constructed by way of socialization. Through our experiences and interactions with parents, family, friends, role models, and others in our community, we absorb language, skills, beliefs, values, and attitudes (O'Neil, 2011). Subsequently, we become able to comprehend our experiences, appreciate social roles, conform to social norms, and understand ourselves and the world at large (Diduck, Sinclair, Hostetler & Fitzpatrick, 2012; O'Neil, 2011).

Participants' childhood foundations were dispersed along a continuum ranging from sustainability-oriented to consumption-oriented. The majority lay somewhere in between these poles, but there were a handful in which the roots of their frame of reference were planted in one of the extremes. The following section provides an overview of the variety of foundations exhibited, concentrating on the practices, skills, values and attitudes the participants absorbed, be they sustainable or unsustainable. Although the focus will be on clothing sustainability, other sustainable lifestyle choices will also be discussed, for rarely did a participant only practice a single element of sustainability.

In terms of more sustainable clothing foundations, participants' recollections of the sustainable clothing practices their family engaged in were largely acquisition related. Most references were in relation to receiving and wearing hand-me-downs and homemade garments, while a lesser number mentioned purchasing second-hand clothing.

For most, these garments composed part of their wardrobe – a few hand-me-downs from their cousins or a homemade dress for a special occasion. However, for a few these sustainably obtained garments comprised their whole wardrobe. One of these participants, who grew up on a farm in rural Quebec, laughed, “I never wore anything that was not made by my mom until I was seventeen. My mom made all our clothes, all of them, underwear, everything” (23F). She explained that it was her mother’s choice to do so, it was not because they could not afford new clothing. However, for many of those wearing used or homemade clothing, limited finances were one of the primary reasons for such acquisition practices. Two of these participants shared:

Well, my family was always poor, so non-consumption was always kind of status quo. My mother sewed a lot of our clothes when we were young and she made things out of old clothes, so I picked that up from her, same as my grandmother. (07F)

I mean growing up, we bought used as well. But again, I think it had to do with the low income. There wasn’t really any talk of sustainability or recycling, that kind thing, from my parents. (21M)

Sentiments towards these practices were varied, with one sharing, “I remember my dad would bring home bags of clothes from his co-workers and it was like Christmas” (11F), while another felt quite the opposite, “...when I was a child I didn’t understand why I couldn’t look like the other kids and I was very angry at my parents and felt really unfashionable and bad about myself a lot...” (28F). No matter the view held in their youth about such attire, all the participants who wore hand-me-downs or store-bought second-hand garments in their youth continued to wear used clothing (purchased, swapped, given) in adulthood. Also, nearly all those who wore homemade clothing in

childhood, sewed clothing for themselves and others in adulthood (although not necessarily on a regular basis).

With regard to sustainable clothing skills learned in childhood, the primary proficiency discussed was sewing, although only by the women. Most were taught at home by their mother or grandmother, while a few learned in school. Despite having the skill, there were a number who did not use this ability and as mentioned in the previous chapter, even those who viewed themselves as a “sewer”, tended only to sew the occasional specialty item due to an array of barriers.

Sustainability related values were another element of the foundational frame of reference addressed by participants. Some values were directly associated with clothing, but more often they related more broadly to consumption or an overall lifestyle. A small number described being exposed to and developing a connection with nature in their youth. These participants’ families spent a great deal of time engaging in outdoor activities, such as hiking, cross-country skiing, and camping, which led to them to have a greater respect for and desire to protect the environment.

Supporting local business was another ethic passed on to some participants, in particular a sense of pride in one’s community or country and a desire to help sustain local jobs, products and services. For example, 02F stated,

I remember we used to get milk delivered to our house and I would ask, “why do we get milk delivered to our house?” and my mother would say, “well, if you don’t support local industry, they won’t be around ... [also] if you want Robby Calpert’s dad to have a job as a milk man you have milk delivered to your house”.

Placing little to no value on fashion or clothing was a lesson passed on to several participants. For example, 02F emphasized that fashion was not important in her family, explaining that they “never really [put] value on fashion, but high value on functionality”. She also added, “We lived, I think, modestly. Really well, but modestly. But I think all of these things influenced our bringing up, that your value is not in what you wear ... who you are is important, not how you look”. The most essential values in her foundation were that of the importance of people and experiences, “...there was always an emphasis on the live simply and also a large emphasis on -- family, friends and experience are the most important things and the other stuff is superfluity, right?” These sentiments were shared by several other participants about their families.

The importance of living modestly was another value developed in childhood by several participants. Although thriftiness was often linked to minimizing consumption, notions such as needs versus wants and an appreciation for what one has also underlay this value. Closely related, several participants discussed being taught the importance of not wasting, taking good care of belongings and buying quality, long-lasting items. It should be noted that the majority of these individuals had parents or grandparents who lived during the Depression, World War II or on a rural farm, and, accordingly, took a more practical approach to consumption. One woman explained that her foundation was not only the result of her parents’ example, but, “... my grandparents’ influence too – the whole idea of rationing, wartimes, and really taking care of what you do have” (29F).

Two other participants said,

My parents grew up in Canada, through the war, at a time when there wasn’t a ton of extra stuff around. So, you learned how to make do with

what you had and that just, that translated, I think, not just down to what to wear when we go hiking in the bush, but everything, right? (06F)

[My parents] both come from that older farm life kind of approach to living where you reuse things and live simply, because that is just what you do when you lived on a farm. (01F)

Several participants indicated they had parents that sought to actively teach the lesson of living modestly and the value of money by placing their children on clothing allowances. These participants began making their own decisions regarding clothing in their late childhood/early teens. 01F describes the impact her allowance had on her purchase then and now.

I think when we turned twelve, my sister and I had to buy our own clothes and we were given a pretty small allowance. So, we could not afford to pay 20 bucks for a t-shirt that said *Guess* on it, just because it said *Guess* on it, right? And so, then I started thinking, not so much about the sustainability, but about just the whole industry of brand names, and decided that I was not going to pay companies to advertise for them. And so that got me more into thinking about my clothing and what it said on it and where it came from. So, that would have probably been when I was twelve or thirteen. (01F)

03F, whose parents were actually conspicuous consumers, had wished to teach her the value of money, but not with sustainability intentions in mind. However, their lesson did nonetheless lead her towards a more conscious lifestyle. She said:

My parents would give me my family allowance and I was responsible for making it last the year ... by the time I was fifteen ... I got my first after-school job. I worked five days a week for a couple of hours and that's how I bought the clothing to try and keep up with my friends who were wearing designer labels and stuff. So being stuck in that sort of full on, upper class luxury, because my two best friends were crazy wealthy in comparison, whereas I was living right next to it but having to survive on whatever income a fifteen

year old can make. I think that's probably a lot of where my socialism and my politics come in.

The groundwork for critical reflection and discourse was set for some in their childhood, with some parents encouraging participants to remain informed, to question the information readily provided, and to engage in research. 12F recalled a phrase her father used to say, which had remained with her, “Believe none of what you hear, some of what you read and most of what you see”. 28F describes the support provided by her parents in her exploration of different issues, stating that she had been:

... very encouraged when I started doing my own research and learning around the effects of my clothing choices. So, if I came home with a statistic about child labour, my parents, that would be something that they would also value ... I mean, I know people who couldn't talk about these things with their family when they were 12 and I could.

Although the majority of participants' comments were related to learning at home, a few did mention that the learning that took place in school also had an impact. Two discussed high school courses, but one talked about experiences in elementary school,

I think it was in grade five, our teacher would have this book and every morning -- it would be like 101 things you can do for the environment or something like that. So it was just little tiny tips for kids that they could do. In grade six, I did a science experiment or science project with one of my classmates on recycling/environmental issues. So, [sustainability has] always been kind of simmering in the back of my mind. (19F)

The above discussion is primarily reflective of the experiences and learning of those with moderate or conservative foundations (i.e., in between the two extreme ends of the spectrum mentioned above). Although most of their actions and attitudes yielded sustainable outcomes, they were often driven by practicality, modesty, simplicity, or

frugality. Learning for sustainability in adulthood, therefore, involved adding sustainability ideals, values and attitudes to their pre-existing foundation and behaviours.

I would like now to focus on some of the features of the two extremes witnessed in this study - the sustainable foundations and the unsustainable foundations. For only two participants were these skills, practices, values and beliefs deeply embedded in sustainability. They discussed exposure at a young age to concerns such as environmental degradation, human rights, labour rights (including child labour), animal rights, classism, prejudice, nuclear proliferation and vegetarianism¹³. Both were raised in households which had very little money and as such they typically wore second-hand or home-made attire. 28F shared that it was often difficult at school being unable to wear the same clothing as her classmates, but upon reflection she now appreciates their limited income, expressing:

I just think if we had had more money, [my parents] probably would have indulged us a little bit more in that area and I'm grateful that that didn't happen because I was raised with a different sense of entitlement. I was raised with a sense of entitlement around community and philosophical support and not around product.

In addition to being environmentally and socially aware, these two participants were also exposed to, and became involved in, activism in their foundational years. 28F explained that she had become involved in activism at a very young age because her parents "were very involved in environmental advocacy and peace and justice" and

¹³ One discussed her family growing organic food as a child and explained that she had never eaten meat as both her parents, as well as her grandparents, were vegetarians.

“finding alternatives to war toys”. 07F recalled how she became involved in activism, noting,

Starting when I was about twelve, I guess. My mom was pretty involved in the anti-nuclear industry and I would go with her to the peace marches and stuff like that and through that I would meet people my own age and so we kind of spoke out.

One of the ways she would voice her concerns was letter-writing, stating “I would actually try and write a letter about some kind of environmental issue once a week, so lots of letters”.

Although these participants possessed a very strong sustainability foundation, this did not preclude them from engaging in learning in adulthood. Often this learning entailed pushing further ahead with sustainability, adding new attitudes, views and behaviours; but in other instances, their learning experiences led to more moderate actions and thoughts. In other words, learning in adulthood, for these participants, was about strengthening or tempering their existing frame of references. For example, as noted above, both were dedicated activists in their teens and early twenties; however, in adulthood, although much of their views remained the same, their research, overt awareness-raising, and advocacy activities waned, replaced with more subdued actions and behaviours.

At the other end of the spectrum was a small group of participants who were raised to value consumption and affluence. Descriptions of their youth included:

My parents purposely chose [to live in an affluent neighbourhood] because they wanted me to grow up knowing money and knowing people with money. Anyway, the snobbery involved in this is embarrassing to say out loud. (03F)

Sometimes I would come home and my stepmom would buy all new dishes - - just constantly buying, like always, always buying new things. Always shopping. It was what my stepmother did for fun and still does for fun (12F).

For these participants, as they entered adulthood and were introduced to different perspectives, they came to regard their childhood as an example of how not to think and behave. In describing her motivations for living a more sustainable lifestyle the above participant stated that it was “a rejection of my family’s values of constant consumerism, and it was like “God, I need to get away from that” (12F). Another (18F) surmised, “I think it was maybe a bit reactionary to the childhood conditions”.

6.2 Learning Triggers

Childhood foundations are the basis of our frame of reference. In adulthood, some elements of an individual’s foundation will remain as they were when absorbed in childhood; however, in some instances, components of the individual’s foundation may be found to be lacking or erroneous. To address this situation, an individual may engage in learning in order to add to or transform aspects of their frame of reference. It is an individual’s experiences which trigger the learning process. When a learner encounters an event or occurrence which they do not understand or which conflicts with their existing frame of reference, they may either dismiss the unfamiliar or contradictory experience or they may take it as an opportunity to assess and reconsider their assumptions (Dirkx & Mezirow, 2006).

Mezirow has termed a very powerful event that leads to an epochal transformation in an individual’s world perspective, a *disorienting dilemma* (Aalsburg Wiessner &

Mezirow, 2000; Mezirow, 1994). He has also explained that the learning process may be initiated by a succession of less consequential experiences, triggering a series of changes to a learner's meaning schemes. Thus, rather than an epochal transformation of their meaning perspective, these changes accumulate over time and, eventually, as they amass, lead to a shift in a learner's meaning perspective (Aalsburg et al., 2000; Daloz, 2000; McDonald, Cervero & Courtenay, 1999).

Not all researchers, in particular Daloz (2000) and Newman (2012), agree with the notion that a single, although compelling, event could lead to such dramatic changes in an individual's worldview. Daloz (2000), in a recount of his study of socially responsible individuals, describes discovering that "although a single event may catalyze a shift or a particular story might dramatize a transformation, closer examination reveals that change or shift was long in coming and its possibility prepared for in myriad ways, generally across the years" (p 106). Newman (2012), commenting on Daloz's work, further explained, that a transformation is not the product of a single experience, rather,

... disorienting dilemmas will be many, will often go unremembered, and will have a cumulative effect over time. Our lives are not so much marked by occasional major events, as by the continual encounters with a multitude of minichallenges. (p. 44)

This study supported Daloz's observations. It was a series of concurrent and/or consecutive experiences, events and interactions, exposing participants to different attitudes, beliefs, knowledge and practices, which led to new, expanded or modified meaning schemes. Although some experiences were more vivid, momentous or evocative, they were always preceded, accompanied, or closely succeeded by more minor

events (e.g., an article, an encounter at work, a discussion with a family member, and countless unrecalled moments). For example, 19F explained,

I think with this, the way we are living now, we meet people of the same mindset and they might introduce us to a different idea that we find interesting and then we are like, “oh, well, let’s check that out a little bit more,” and then we are like “oh wow, that’s really neat, we should try and incorporate that into our lifestyle,” which is just one piece until another, I find. It hasn’t been a drastic one day to the next day kind of shift. It’s been a very slow, gradual transition. We haven’t really noticed a huge difference, but I think if people don’t see us for a significant amount of time, they might come back and they will be like “oh, what are you doing now?” It’s been very slow for us. (19F)

Participants’ own words, as well as the picture painted by the life-grid, provided many examples of periods of intense exposure to new ideas and changes in life-circumstances, compelling them to explore their beliefs, attitudes and behaviour. For example, 18F described in a two to three year period being influenced by her sister, who had begun working in the environmental field, joining and eventually coordinating an environmental organization, being exposed to Ad Busters and Buy Nothing Day, engaging in an anti-consumerism protest, watching sustainability-oriented documentaries, and reading a range of environment-related material. The learning initiated by these experiences led to “seeing [the environment] as an over-arching issue that encompasses other issues – a common basis that we should all focus on to improve our lot.”

In addition to epochal and accumulated transformations, Clark (1993) introduced another means of characterizing triggers, distinguishing between predictable events and unpredictable events. Predictable events are the typical milestones in life which may lead to a shift our thinking and behaviour (e.g., leaving the childhood home, having children) (Clark, 1993; Mezirow, 1994). However, there is some controversy regarding whether

development and learning in adulthood are two distinct and separate processes or whether they are “intertwined, lifelong endeavors” (Baumgartner, 2002, p. 44). Tennant (1993) held that it is necessary “... to distinguish learning experiences and personal changes which are fundamentally transformative and emancipatory from those which are simply part of social expectations associated with the different phases of life” (p. 39).

Mezirow’s response to this assertion was to state, “For some people, what Tennant sees as normative life-cycle functions do not involve reflection on the justification of their beliefs at all. One can leave home and simply become assimilated in a new subculture on a college campus and go on to graduate and move into a new work culture, procreate and die without critical awareness of one’s premises anywhere along the way. For another person, leaving the parental home may evoke deep critical self-reflection on beliefs, relationships and identity” (1994, p. 229).

Participant interviews have led me to favour Mezirow’s position on this matter. Many of the triggers observed in this study were common lifecycle events, such as buying a first home, becoming a parent, and the start or end of a relationship. The most frequently identified phase of life linked to the exposure to more sustainable attitudes, information, and practices, was between childhood and adulthood, what I refer to as the *transitional years*. This phase spans from participants’ late-teens to their early twenties (late high school into university/college or their first job). This was a very influential time for many of the participants, a time when they were “entering” the world on their own, making their own decisions, and exploring their self-concepts. Erikson refers to these psychological development periods as *late adolescence* and *early adulthood*, explaining that it is in this timeframe that individuals form their personal and social

identities, exploring, experimenting and trying out different roles and relationships (Erikson, 1959/1980). As participants entered the workforce or university/college and the parental influence began to wane, interviews indicated that meaning schemes had become more malleable and in flux as participants were bombarded with new ideas and perspectives.

This was the period when many participants were first introduced to the concept of sustainability, through activities such as classes, conversations with friends, discussions in the workplace, and campus advocacy campaigns and events. For example, when discussing the point at which she would have begun to consciously embrace sustainability, O2F believed it would have been in her late teens while working as a camp counsellor; she shared, “If I had someone say, “ok, looking retrospectively, what time of your life and what events happened?” That would have been it.” However, despite many participants referencing experiences and events occurring in this timeframe as having a strong influence on their concerns, beliefs, attitudes and behaviours, there are researchers and theorists, including Mezirow, who do not believe that young adults have the cognitive ability to engage in the critical reflection processes required for a transformation. For example, Merriam believes that an individual cannot partake in transformative learning until he or she has reached an advanced level of cognitive development, explaining, “to be able to engage in reflective discourse with others assumes the ability to examine alternative perspectives, withhold premature judgment, and basically to think dialectically, a characteristic of mature cognitive development” (2004, p. 61). Similarly, King and Kitchener (1990) found in their work that the “ability to make reflective judgements is an outcome of a developmental sequence” (p. 160).

This sequence is comprised of seven stages, with only the last two supporting critical reflection. They also noted that the Stages 6 and 7 were attained by a limited number of learners. Stage 6, in which learners come to understand that the act of knowing is tentative, that experiences must be interpreted in relation to their context, and that learning requires evaluation, is “typically found among advanced graduate students” (p. 165). At Stage 7, learners build upon their understanding that knowing is tentative and entails reflection, realizing that through critical discourse and reflection knowledge may be created. They understand that not all evidence is equal and that through the synthesis of the more reasonable arguments a justifiable opinion may be formed. Kitchener and King explain that their research has found that attaining this stage “is a rarity even in graduate students, although it is found in some educated adults as they mature into their thirties and beyond” (1990, p. 166).

Since this debate is not the focus of this study, I cannot be certain as to whether the participants did in fact engage in critical reflection and discourse during their transitional years, and in retrospect, it would have been very difficult for participants to track as well. However, some of their descriptions seem to indicate that they did so. For example, 24F shared a profound moment that occurred during one of the classes taken early in her university career:

I was just sitting there making so many connections in my own mind ... it was kind of like, now I understand the way that I see the world. It really helped me with that understanding of myself ... I started to define my intentions ... [or reaffirm] for me what was right about the way that I was living and that there were other people that thought that way ... that was a real tipping point in [terms of] the people that I spent time with ... I made a new social group. (24F)

However, I cannot say with confidence that such memories were accurate or that their current level of cognitive maturity did not alter their recollections and perceptions of that time period. Nevertheless, I can be certain that it was a period in which many were exposed to a significant amount of new information, ideas and behaviours that have undoubtedly had an impact on their current thinking and way of living. 13M was one of these participants. In his interview, he discussed his transition years, specifically being on his own for the first time, travelling to different parts of the world and moving from a small town to Edmonton, a much larger centre. Of the latter experience, he stated, “Just the impact of more waste and more consumption and going to West Edmonton Mall and being like “Wow””.

One other trigger category Clark identified, was unpredictable events, or those “that often occur without warning and that can be a source of pain or joy” (1993, p. 47). In this research, there were very few unpredictable events identified by participants and accredited with shifting meaning schemes. That said, there were a few participants who described changes in their health as being an important trigger for a move to the adoption of more sustainable food and natural health attitudes, beliefs and practices. This shift, along with other triggers, led to or helped support attitudes and decisions related to clothing.

My findings have led me to propose a third type of trigger, that of the *initiated trigger*, or an event that the individual arranges and sets in motion anticipating that it will have a significant impact on their perspective on life. Examples include travelling to a developing country, participating in an outdoor experiential learning program, joining a social or environmental organization, or entering an environmental or international

studies university program. Although learning is an expected consequence of such planned events, the particular aspect of the experiences, the profoundness of these events, the specific learning outcomes, and the subsequent impact on an individual's frame of reference cannot, of course, be controlled. They take on a life of their own as the experience unfolds.

6.3 Clothing Sustainability Triggers

Data collected through this research rendered yet another means of viewing the triggers for learning, by revealing an additional categorization method. These proposed categories include:

- (i) exposure to alternative ways of being,
- (ii) exposure to new knowledge,
- (iii) inspiration from another person, and
- (iv) changes in circumstances.

Within each of these categories falls the aforementioned predictable, unpredictable, and initiated events. The following section explores the triggers encountered by participants in light of these new categories. Again, these triggers are not epochal in nature, but rather represent an array of interacting and compounding occurrences, some significant and others relatively minor. It should also be noted that not all of the examples provided by participants were related to clothing; many discussed sustainability more broadly, sharing how such experiences had shifted their thinking around the environment and people, which eventually led to a shift in their beliefs, attitudes, values

and actions related to clothing. For example, 02F shared “I became a vegetarian for environmental reasons. And then started often thinking about, “Ok, how can I reduce my footprint? What are the things that I am doing to become more sustainable?” Another shift in thinking was expressed by 21M,

I guess it was a bit of a snowball effect, once you get into one aspect of living sustainably, a lot more ways to live are exposed. I guess maybe the first step was just recycling household waste. Then from there it was what else can we reuse or not use so much of? Power consumption, that kind of thing. It all went hand in hand.

Both clothing-specific and broader sustainability-related experiences are discussed in this section because the learning generated by these experiences is similar in nature and the resulting meaning scheme modifications are typically overlapping and reinforcing. That is to say, although a participant may discuss their exposure to ideas related to sustainable food, many of the basic assumptions being questioned for food, such as consumerism, power of large corporations, worker and consumer health, and environmental protection, also underlie clothing sustainability. A shift in one’s attitudes and beliefs regarding the purchase of local products will impact many elements of their lifestyle, food and clothing alike.

6.3.1 Exposure to Alternative Ways of Being

Experiences that exposed participants to an alternative way of living or viewing the world, in particular those in which they were actively involved versus being a simple observer, were identified as being profound and memorable. These events most certainly led to a change in attitudes, concerns, motivations or beliefs and, in a number of cases,

were a trigger for a change in behaviour. Travelling overseas, living in an eco-village, tree planting, participating in outdoor educational programs, and working in a competitive corporate environment or the apparel industry itself, were amongst the experiences instigating learning for clothing sustainability. Some of these occurrences were positive, introducing participants to more sustainable ideas and behaviour, while others highlighted the negative aspects of our socio-cultural system, which ultimately pushed them to pursue alternative perspectives.

Truly meaningful experiences that helped trigger reflection generally involved participants being removed from their routines and relationships, as well as the comforts and technology of our North American lifestyle. A few of the participants indicated these experiences enabled them to critically reflect, likely because being removed from their hectic schedules and their communication and entertainment devices afforded them the rare opportunity to stop to consider their perspectives and actions. When discussing her tree planting experiences, 09F noted, "...you have a lot of time to think out there".

Another participant recalled a cultural outdoor education program she engaged in,

I basically lived outside for 6 months ... I just felt really connected with what was going on around me. I mean we got our water from the river, that's what water we drank and cooked with and cleaned our clothes with. So, I think when you experience something like that, you really do, do a lot of reflecting. (29F)

D'Amato & Krasny (2011) found similar results in their study of outdoor adventure education participants, noting, "Being away from home for an extended period allowed participants to distance themselves from daily routines and distractions, to reflect, and to try out more healthy habits and roles" (p. 245).

Travelling to developing countries was one of the most compelling experiences discussed by participants. Following their immersion in another culture and exposure to devastating poverty, each commented on how much we consume and own in Canada. Several also become aware of the fact that despite their extreme poverty the people they met were happy. Some of the participants noted:

I went on an exchange program that was partly in Canada and partly overseas and I do struggle with saying that that exchange program totally changed my life, because it did, but I also had a lot of these values from before that. But it is an important reference point for me to remember ... I really like reminding myself that there are other ways to live than the way we live here and there are kids that I knew who had one or two outfits. It wasn't so long ago that everybody was in that boat except for royalty, right? So just remembering that this is all very new capitalist-driven scenario that we're living in – that's really, really important for me to remember. I'm not sure that that was such a huge part of my consciousness as it is now. (28F)

I mean you get home and it just seemed so excessive, especially coupled with the fact that during the trip we saw real poverty for the first time. There are people having a rough time here in Winnipeg but, I mean, just the lack of opportunity out there, it was like people would be willing to do anything to feed their family and there just was no opportunity to do it. But also seeing how people were with what they had, with their one pair of clothing that they made and their unfired mud brick huts, guinea pigs being their only meat, but they were so happy and there was so much love going around in the community. It was a big eye opener. (20M)

Several of the participants also discussed specifically how travelling and tree-planting had impacted their clothing practices. In both situations, participants recalled having very few articles of clothing with them and realizing they were able to subsist on a limited wardrobe. They also spoke of not being able to wash their clothing very frequently and learning that perhaps they washed their clothing more often than was

necessary. For a number of these individuals, the understanding gained through these experiences was incorporated into their practices when returning home. Many reported reducing the size of their wardrobe, purchasing garments less frequently and/or not washing their clothing after every wear.

Being immersed within a work or academic culture that was contrary to their belief systems was also a significant learning trigger, resulting in substantial changes in their life-path. Two participants, unaware of the dramatic differences that would exist between their views and those of their colleagues, had willingly joined the corporate world. Being faced with the disparity in their respective perspectives, these women changed the direction of their lives, seeking out new career paths. They explained:

I recall being the only person in the office that used a reusable travel mug for coffee and I was called the “Tree-Hugger” just for that. I was aware enough then to know that that was nothing. That was just - it was something, but it was so small compared to all the other things that can make a difference. So, that’s over a decade ago now and I think I have been slowly moving away from that. You can still have your individual way of living, but when you are surrounded by people whose paradigm of the world is so different from yours, it definitely makes it challenging. So, I think my moving away from that career and to a different social group, different friends, that’s definitely been a huge part of the transformation. (34F)

I had people telling me “you should go into the Asper School of Business,” because they saw those qualities in me, but once I got there I didn’t agree with it ... So I think that was, I think going into something that was a different mentality showed me exactly intrinsically that I didn’t believe in it, right? (09F)

Two other participants’ shared some of their experiences working in the apparel industry and discussed how these events provoked a transformation of their frame of

reference and a change in their lifestyles. One participant was employed in the silk-screening industry and exposed to harsh solvents and other hazardous chemicals on a daily-basis. The terrible conditions eventually led him to open his own environmentally friendly silk-screening shop. The other participant was an apparel buyer for a Canadian clothing retail chain. Although still passionate about fashion, the reality of working in the apparel industry was disheartening. Her experiences led to a re-evaluation of her attitudes and beliefs about the fashion industry, and a realization that much of fashion was shallow, morally-questionable, superfluous and wasteful. Subsequently, she shifted to a career in the environmental field.

Although being submerged in another way of life was among the most compelling learning triggers, some participants also discussed being exposed to other ways of being in observational capacities. For example, one participant who had grown up very wealthy found that university was a period in life in which, for the first time, she was exposed to people with very different upbringings and subsequently, dissimilar worldviews. Although not immersed in their lifestyle, she did meet, interact, and in some cases, befriend these individuals, allowing her to observe the differences in their daily life, views, beliefs and attitudes. She shared the following anecdote:

I met people who had worked through high school to pay for themselves to go to university and I had never had a job before. I wasn't allowed to have a job because I don't need a job; my parents are going to take care of me. (35F)

6.3.2 Exposure to New Knowledge

The introduction to new information or skills often stimulated the learning process. As noted earlier, the transitional period (late teens/early twenties) marked a time in most participants' lives when they were exposed to a flurry of new facts, concepts, skills, and practices. For many, it was during these years - either in university, the workplace, or through new friends - that they initially became aware of the concept of sustainability and its potential role in their lives. More specifically, it was the period in which a number of participants became conscious of clothing sustainability. For those attending university, the classes often contributed to a learning experience. It was also the setting in which a number began to realize they could play a role in shaping our society. Through both informal assemblies of student activists and environmental or social-justice organizations, a number were exposed to the idea of collective social action. Two of the participants discussed their initial introduction to awareness, advocacy and protest,

For me it's just in university there were people that I met - not everyone that goes to university is going to meet the activist type set of people - but, that's what I was part of. (13M)

... you know typical university propaganda - in a good way, I mean - like campaigns and awareness. Everyone's an activist, so you learn a lot from people - even if it's not all true. You learn to at least investigate more fully. (12F)

Two others discussed learning about a variety of environmental and social issues through the student-led social justice and environmental associations they were members of during their university years.

Learning about advocacy and activism was, of course, not limited to the transitional years. 20M shared,

I started working at a corporate-run sort of grocery store where they had a health food section and deli and that really solidified a lot of my feelings about corporations because there was a girl there I worked with and she was really into some militant stuff like Derrick Jensen. He doesn't exclude violence as an option for ecological struggles and she was very into that kind of stuff, having those kinds of debates and pushing.

A number of the students also discussed their exposure during the transitional years to documentaries and books as triggers for learning. In the majority of incidents, these were information sources not introduced in the classroom. Documentaries on other sustainability issues (e.g., coffee trade) were mentioned, as were a few clothing-related films (e.g., cotton production and apparel manufacturing facilities). Several books were also discussed. Once again these included both broader sustainability issues, as well as issues specific to clothing. A few mentioned specific reading materials that introduced them to new ways of thinking. For example, *Diet for a New America* by John Robbins (1987), played a role in two of the participant's adopting a vegetarian diet. One participant identified *Divorce Your Car!* by Katie Alvord (2000), as a meaningful information source for triggering reflection and supporting existing meaning schemes. She stated:

... after reading that book it became more of a conscious, like, I just don't have a car because I can't afford one right now or I don't need one right now, 'cause it had always been kind of in my mind that eventually I would get one. But after reading that book then it sort of became how long can I put off getting a car? How long can I function without one? And kind of a challenge to myself to see if I could do it ... It didn't

actually change anything that I was doing, but it changed that way I thought about what I was doing. (01F)

A book more directly related to clothing sustainability, *No Logo: Taking Aim at Brand Bullies* by Naomi Klein (2000), led two participants to begin to question the impact of brands and company practices. One related,

... [I was] in my late teens and I remember a friend gave me a book *No Logo* to read and I started, not so much doing lower impact purchasing, but more like “oh, I am not going to buy that because I don’t agree with the practices behind it.” I started becoming more brand aware like that. (20M)

Additional sources of information noted by participants in adulthood were radio programs (e.g., CBC’s *The Current*), newspaper articles (e.g., *Guardian*), magazines (e.g., *Perma Culture Activist*) and, most often, the internet. Discussing a speaker she had heard on the radio program, 02F stated,

... airplane travel - hearing George Monbiot speak on the impacts of flying, changed the way I approached flying, right? That was a real ‘gunk’, and I thought, “Oh my god, I cannot believe I’ve never real thought about it before”.

Finally, an awareness of sustainable apparel and where to source it was also discussed by some of the participants as an essential step on their path to clothing sustainability. One shared discovering a market in her hometown, which sold a range of sustainable clothing and deciding thereafter to only buy sustainable apparel. Two others talked about being introduced to Mountain Equipment Co-op mail-order services and another discussed the increased availability of sustainable apparel in Winnipeg as being a contributing factor in her choice to purchase more consciously. Three other participants

spoke specifically of their experiences with clothing shopping in a very sustainability-oriented community in British Columbia as being influential. One noted,

We were in BC two summers ago and it was just mind blowing for both of us. It just seems like there are so many stores where it was hemp and all organic and all ethical and everything like that and it was like, “wow”. (20M)

Two discussed that when they returned to Winnipeg that, despite it being more difficult to find sustainable apparel in this city, they continued to look for these types of garments.

6.3.3 Inspired by Others

The thoughts and actions of participants’ friends and family, as well as individuals they admired, often inspired learning. A number discussed interactions with, examples set by, or knowledge gained from influential people in their lives, particularly in their transitional years. Speaking of her Teaching Assistant, 09F shared, “he had a lot of really great ideas and I would just sit and listen to him. He would go off and there were things I didn’t even know about and I wouldn’t have read anywhere if it wasn’t for him telling us about it.”

While in either their transitional years or mid-20s, a number of participants worked for socially or environmentally-oriented businesses (e.g., fair-trade coffee shops, health food stores or organic restaurants). For each, their fellow workers played a vital role on their path to sustainability, introducing them to new concepts or expanding their understanding of general sustainability, collective social action or clothing sustainability. Thus, although the actual product or service offered by these

establishments may have provided some inspiration for learning, it was really the social networks established in these workplaces that both initiated and supported the learning process. Statements included,

I was working as a cook in an organic restaurant for a couple years, and just the whole community there, getting hooked into that and just many wise people and it was just like, “hey, check out this book,” or “hey, I heard about this, that and the other thing”. (20M)

People that worked at [the coffee house], on their break they would like, “I gotta run down I have to go print off 100 copies of billets”, like hand bills. And you’re like “Oh for what?” and you look at it because they are promoting some sort of awareness. (09F)

Participants also discussed being inspired by those close to them, including their friends and family. In terms of family, the inspiration was often gained from a member who was in the process of transforming or had recently undergone a significant transformation. One such participant remembered,

When I graduated from high school I had at least two jobs, I worked a lot. I was very hard working, but I was also working to support a lifestyle or support an image. I was kind of getting caught up in that way of being where it was like wearing makeup and clothing and having nice things and sort of that materialistic way of living ... then I moved to BC and I lived with my mom. She was living in northern BC and I feel like another shift happened there because my mom is ... non-materialistic and she had also become more spiritual and had made some changes in her life and spiritual in a sense where she really could connect with Aboriginal spirituality and those teachings. So when I was living with her we would go for walks in the woods and she would start teaching me about offering tobacco. Starting to sort of look at this as being living, all things, trees and you know everything is living ... my mother I think had a really huge influence on me in terms of making some lifestyle changes. (29F)

In the case of friends, several of the participants discussed how forming a new friendship group, one that was environmentally or socially conscious, had encouraged them to engage in skill development, research, dialogue or reflection. Through observation, discussions, and mentorship, these participants, most often individuals who did not have a sustainable foundation and who came to sustainability in the transitional years or adulthood, were introduced to the concept of sustainability or encouraged to expand their thinking and practices related to sustainability. 34F talked about her interactions with her neighbours, commenting

They have only been in my world for a year, since they moved in; but, that has been a huge part of my transformation ... having these people ... as this resource, to ask them questions... that's been pretty big for me. If you are hanging around with a bunch of people that are all wearing second-hand clothing, you start to feel a little out of place.

16F discussed the impact a new group of sustainably conscious room-mates had on her attitudes towards clothing, inspiring her to reflect on her existing assumptions. She shared:

... why I was all the time wearing these kind of [brand-name clothes]? It doesn't make me a better person ... [In Canada] I start to value other things and it was so irrelevant. Whenever I was just showing up with a sweatshirt that says like a brand, nobody will even like comment, like, "oh, why are you wearing this? Where did you get it?" Like nobody would say that.

In university, 35F became involved in the *Vagina Monologues*. She reflected upon the impact of the new friendship group she made as a result, stating:

I got involved on a totally superficial level and then it was these women that I met, these women who wore vintage clothes, who only drank Fair Trade coffee and all this kind of stuff, and then learning about women's rights and

working at a women's shelter and meeting aboriginal women for the first time in my life when I was nineteen. One of the women particularly that I met, her and I carried on a very close friendship when we moved to Toronto and her friends were all very similar to her, where they were all, all wore vintage clothes or all made their own clothes or only ate organic food. So it spiralled out of the *Vagina Monologues*, of the women I met, that was how I sort of began that path of awareness.

6.3.4 *Change in Circumstances*

For some participants, broader changes in one's life served as a catalyst for a learning experience related to sustainability. Among the changes discussed by participants were parenthood, health problems and moving.

For a small group of participants, becoming a parent was a key aspect in their transition (or cause for their guilt over not yet making a complete transition) to more sustainable clothing practices, and a more sustainable lifestyle overall. A few of them explained,

I found that pregnancy and having a newborn around, I was environmentally conscious in every way. As I started thinking about what kind of world my kids were going to be inheriting. Where the environment is right now, and where the world is politically right now, is really frightening. So, I think [using cloth diapers] was just my little way of trying to control some small part and make things better for [my children]. Because we are looking at gas shortages, water shortages, major war – probably in their lifetime, if not apocalyptic environments in their lifetime. (03F)

... as [my kids] grow older and they are starting to see things and see behaviours, it's becoming really kind of panicky for me, because it's like this is how they are growing up. This is how they are going to learn and this is what is going to shape them as people and if they don't see mom and dad taking on [sustainable] behaviours then they are not going to do it but panicky is the

word for it because it's just like, "No, but they are watching. They are seeing me throw the eggshell in the garbage". I think about that whenever I am doing it. (11F)

Although not all these parents necessarily purchased sustainable apparel or second-hand items for themselves, they did discuss doing so for their children.

I'm conscious with my kids about buying organic cotton and those kinds of things - I do tend to gravitate towards [those], when I do make the purchases. Or else they wear hand-me downs. Sometimes second and third generation hand-me downs. (03F)

I go second-hand shopping - probably less for me and more for the girls. Children's clothing is just a lot easier because they don't have to be trendy and fashionable, they just have to be cute and that's pretty timeless. They just don't get worn as much, obviously, especially at this age. I mean, I am sure older ages they go through pants like crazy, but at this stage, like they are still perfectly good and they are just too small. (11F)

The development of health problems was a significant draw to a more sustainable lifestyle for three of the participants. One discussed allergies and another chemical sensitivities, which had led them both to become more aware of the products they purchased. They commented,

I am chemically sensitive. So, I tend to react heavily to any perfumes, any kind of fabric softener, whatsoever, some clothing and artificial fabrics, and dry cleaning. So, I avoid those things partly because it is just my constitution. (03F)

[My wife] has a variety of allergies that we have become aware of and so that has forced us to stop eating out to a large degree... [we began to] pay more attention to what we are eating and started reading ingredient lists and stuff like that ... [and realized] that's not food, that's a chemistry experiment. (20M)

The third discussed working in the apparel industry, specifically silk screening houses, and its implications for her health. She shared, “I became deathly ill because I had used so many chemicals in my fashion program. That’s when my [natural health] hobby grew into a career” (27F).

Finally, a few of the participants discussed significant moves as being a trigger for learning. The most significant such event was experienced by 16F who moved from a consumerist-based lifestyle in South America to a very sustainably-conscious housing cooperative in Canada. In this situation, it was a major event (i.e., the move to a new country), followed by a series of consecutive revelations resulting from moving into a “hippy community”, that led to a rapid succession of changes in 16F’s views, understanding, knowledge and practices. She shared,

When I was in Peru we hardly talk about the environment ... I have to say that I kind of grew up in a bubble in Peru. My friends will be super consumeristic people ... but when I came here it was kind of like, “oh”. I was introduced to all this new world, right?

6.4 Chapter Summary

Although it has been remarked that the lens through which we view the world, is acquired through socialization in childhood (Mezirow, 1994, 1997), little research or theoretical discussion within in the context of transformative learning, in particular sustainability and learning, has been done on the foundations of our frames of reference. In order to fully appreciate the journey to clothing sustainability, and the learning driving participants forward, it was necessary to establish where their passage began. Emerging

from the research was a continuum of upbringings, spanning the sustainable to the unsustainable. There were participants who described childhoods existing at these extremes. For those raised in more sustainability-oriented households, adult learning served to both temper their beliefs and actions and to strengthen their beliefs and expand their practices. For those with an unsustainable upbringing, learning related to clothing was very difficult as an adult. They found themselves struggling with clashing values, attitudes and motivations – one pulling in the direction of conspicuous consumption and the other towards a sustainable approach to clothing acquisition. However, the majority of the participants fell somewhere between these two extremes. I refer to these participants as having a conservative upbringing. Although most of these participants engaged in sustainable behaviours in childhood, their parents' motivations were not sustainability-related, rather their actions were driven by frugality or practicality. Through learning in adulthood, they added underlying sustainability rationale to support these activities.

The catalysts for learning have been explored by a number of transformative learning theorists (e.g., Clark, 1993; Daloz, 2000; Mezirow, 1991, 1994; Newman 2012). In the case of this study, all of the transformations were cumulative (i.e., a learner encountered a series of events which led to changes in his or her meaning schemes). Learners encountered, and continue to encounter, triggers which encourage them either to expand or to further question their views and values, as well as strengthening their determination and dedication to clothing sustainability. Although these triggers varied in their significance and impact, none was dramatic enough to trigger an immediate and remarkable transformation such as those described by Mezirow. Daloz (2000) and

Newman (2012) doubt that one event could ever lead to such a profound transformations. In light of my results, I agree with this contention and I have come to appreciate that the journey to clothing sustainability is a “slow awakening” (34F).

Unpredictable and predictable events were also discussed in the context of triggers for learning. With the exception of a small number of participants who discussed the emergence of health problems acting as a catalyst for learning, this study found no unpredictable events which were triggers. Most of the triggers were predictable, and included leaving home, going to university/college, starting one’s first job, purchasing a first home, having children and initiating a new relationship. However, not all the experiences encountered by my participants fell into one of these two categories. Therefore, I proposed the *initiated* trigger. These were events planned by the participant (e.g., taking a course, participating in an outdoor experiential learning program, travelling to a less economically-developed country). Although, what was learned and the significance of the learning was unknown, the intention of such events was for participants to expose themselves to new experiences and knowledge.

Emerging from the data is a third approach to analyzing triggers, one which is more explicit. It comprises four types of triggers - exposure to an alternative way of life, exposure to new knowledge, being inspired by another person or a change in life circumstances.

Having established the basis of the participants’ frame of reference and the events which called into question their frame of reference, in the following chapter I examine the learning process itself. Specifically, I present an analysis of the outcomes of the

learning process, instrumental and communicative learning processes, and the impacts to our frame of reference and cumulative knowledge.

Chapter 7

GETTING FROM HERE TO THERE: THE LEARNING PROCESS

7.0 Introduction

For most individuals, adopting a sustainable lifestyle will require changes to their perspectives, knowledge and proficiencies. Consequently, I feel that transformative learning, the process by which adults redefine and reconstruct their frames of reference, is vital to an individual's shift to sustainability. Through instrumental and communicative learning, learners both assess and affirm their experiences, thereby expanding, refining or modifying their base of knowledge, their skill set and their insights into the social realm.

Although Mezirow intended for his theory to be an all-encompassing theory of adult learning (Mezirow, 1994, 1996), in his writings he has not sufficiently developed all forms of learning. He does acknowledge that learning can be the result of creating new meaning schemes, clarifying existing meaning schemes, and transforming meaning schemes and/or meaning perspectives (Mezirow, 1991, 1994); however, his focus has been nearly exclusively on the latter. The name of the theory itself – *transformative learning theory* – only acknowledges learning which transforms an individual, not that which broadens and deepens one's knowledge and thought. Further, transformations, according to Mezirow, are only applicable to communicative learning; subsequently, the attention given to instrumental learning has been limited.

The following chapter draws on the experiences of my participants to more thoroughly explore *each* of the domains and types of learning. It presents evidence in

support of existing concepts documented in the literature, as well as delving in greater depth into the instrumental learning process and the relationship between instrumental and communicative learning.

7.1 Instrumental and Communicative Learning Outcomes

Instrumental and communicative learning are both essential to adult development, together helping to further our understanding of the objective and subjective realms of our world (Diduck et al., 2012; Mezirow, 1991). The primary differences between these two forms of learning lies in their purpose, process and outcome. The purpose of instrumental learning is to develop and enhance our knowledge and command of both the concrete and the rational domains of our understanding (Diduck & Mitchell, 2003; Mezirow, 1994). Mezirow explains that “instrumental learning is about controlling and manipulating the environment, with emphasis on improving prediction and performance” (Mezirow, 2003, p. 59). In other words, it is the process through which we hone our proficiencies, knowledge, and understandings, as well as our ability to anticipate future outcomes. On the other hand, the purpose of communicative learning is to advance our understanding of human communication (Mezirow, 2003). Diduck and Mitchell explain that this form of learning involves an individual interpreting the “values, intentions, feelings, moral decisions and, normative concepts” of themselves and others (2003, p. 341). In other words, it involves learners endeavouring to decipher and discern the meaning of their social encounters. The ultimate goal of communicative learning is for an individual “to negotiate his or her own purposes, values, feelings, and meanings rather than to simply act on those of others” (Mezirow, 2000, p. 10).

The essence of the learning process, whether instrumental or communicative, is assessing claims. Instrumental learning involves assessing *truth claims*, which requires a learner to ascertain whether “something is as it is purported to be” (Mezirow, 2003, p. 59). It is a task-oriented process involving empirically testing one’s own understandings, hypothesis or predictions with information gained from another person (e.g., book, website, lecture or casual conversation). Conversely, the communicative learning process “involves assessing claims to rightness, sincerity, authenticity, and appropriateness rather than assessing a truth claim” (Mezirow, 2003, p. 59). To do this, learners must attempt to reach a common understanding with one or more people; thus, unlike instrumental learning, there is no single correct answer. Further, one’s interpretation, even if validated by others, is subject to change when new information experiences or events call it into question (Feinstein, 2004; Mezirow 1994, 1997).

The *outcomes* of these two forms of learning also differ, with instrumental learning yielding concrete or rational products, such as skills and knowledge, and communicative learning generating insights into our own, other’s and societal values, beliefs and expectations. Various studies delving into learning in the context of resource and environmental management have found evidence of both instrumental and communicative learning outcomes (e.g., Diduck & Mitchell, 2003; Kerton & Sinclair, 2010; Sims & Sinclair, 2008; Sinclair, Collins & Spaling, 2011). Such outcomes were also plentiful in this study, with participants discussing the array of skills, knowledge, understandings and communicative insights learned in their adult years. An analytical framework established by Diduck and Mitchell (2003) was used in several of these studies (e.g., Kerton & Sinclair, 2010; Sinclair, Collins & Spaling, 2011) to help organize

learning outcomes into subcategories based on the theory and classes/themes emerging from the data. Employing this approach, I classified the instrumental and communicative learning outcomes described by participants into subcategories generated from the literature and grounded in the data from the interviews. Table 7.1 provides an overview of the primary categories (i.e., instrumental or communicative), secondary categories (theory-based), and the tertiary categories (grounded themes).

Three subcategories of instrumental learning were identified: (i) skills - physical and mental (e.g., problem solving and communication); (ii) knowledge (e.g., ecological, social, economic, cultural and political); and (iii) cognitive understandings (e.g., cause and effect relationships, risks and impacts). The three subcategories used to classify communicative learning in this study were: (i) insight into one's own values and interests; (ii) insight into others' values and interests; and (iii) insight into our shared interests and goals. It should be noted that although social action is one of the central themes of this research, I have not included the social action related subcategories identified by others, such as social mobilization, social engagement, and communication strategies and methods (Diduck & Mitchell, 2003; Kerton & Sinclair, 2010; Sinclair, Collins & Spaling, 2011). I omitted these because I believe that the findings which would be suited for these categories are better addressed by the aforementioned groupings, such as skills (e.g., communication skills) or insight into others' values and interest (e.g., assessing the reactions of others to a collective act), or are not in fact a learning outcome, but rather elements in the social action process to be discussed in Chapter 8.

Table 7.1: Instrumental and Communicative Learning Outcomes

Instrumental Learning Outcomes	
SKILLS	<p>Clothing/ Accessory Construction Skills (e.g., knitting, sewing, crocheting, beading)</p> <p>Textile Construction Skills (e.g., spinning, weaving, raw wool preparation)</p> <p>Repair Skills</p> <p>How to Purchase Sustainable and Second-hand Apparel</p> <p>Characteristics to Look for When Selecting SA</p> <p>Sustainable Maintenance Techniques</p> <p>Research Skills (e.g., how to find stores, product information, corporate policies)</p> <p>Challenges to Adopting SCP & Means to Overcome</p> <p>Communication Skills</p> <ul style="list-style-type: none"> • How to individually communicate concerns and ask questions (e.g., boycotts, asking staff questions, emailing companies, requesting retailers carry SA) • How to increase awareness of clothing sustainability to a wide group (e.g., fashion show, protest) <p>How to Effectively Influence Actions of Social Sphere</p> <p>Organizational and Event Planning Skills (e.g., fashion show, protest, clothing swap)</p> <p>Decision-making Skills (e.g., how to weigh pros and cons of different approaches)</p> <p>Problem-Solving Skills (e.g., devising means to overcome barriers, developing a plan of action)</p>

<p>KNOWLEDGE</p>	<p>Societal Impact of Clothing</p> <p>Environmental Impact of Clothing</p> <p>Fashion Industry</p> <p>Consumerism</p> <p>Environmental Justice</p> <p>Human Rights and Labour Rights</p> <p>Globalization (consequences of overseas production)</p> <p>Market Economics</p> <p>Sustainable Living</p> <p>Animal Rights</p> <p>Challenges to Adopting SCP</p> <p>Means to Overcome Challenges to Adopting SCP</p> <p>Source for Continual Learning</p> <p>Sustainable Apparel (e.g., what characteristics to look for, where to find)</p>
<p>COGNITIVE UNDERSTANDINGS</p>	<p>Impacts of Clothing Production</p> <p>Impacts of Fashion Industry</p> <p>Impacts of Consumerism</p> <p>Effects of Buying Local</p> <p>Effectiveness of Leading by Example</p> <p>Limited Effect of Certain Social Action Tools</p> <p>Alternative Actions Available</p> <p>Interconnectivity of Systems</p> <p>Effect of their Personal Clothing Behaviours</p> <p>Potential Impact on Personal Health</p>

Communicative Learning Outcomes	
INSIGHT INTO ONE'S OWN VALUES AND INTERESTS	<p>Consumption Patterns and Practices</p> <p>Importance of Clothing in one's Life</p> <p>Role of Clothing in their Lives</p> <p>Drivers for their Personal Clothing Practices</p> <p>Clothing Attributes Influencing their Choices</p> <p>Psychological Nature of Clothing (connection to self-esteem, self-expression and mood)</p> <p>Conflicts in their Beliefs and Values</p> <p>Comfort-level with Different Alternative Practices</p>
INSIGHT INTO VALUES AND INTERESTS OF OTHERS	<p>Other's Attitudes and Beliefs Regarding Clothing</p> <p>Better Understanding of those Living Sustainably</p> <p>Effects of Fashion Industry on Others (e.g., body image, self-esteem, drones)</p> <p>Motivations of the Fashion Industry</p> <p>Motivations of Second-hand Retailers (e.g., religious, corporate)</p>
INSIGHT INTO SHARED VALUES AND GOALS	<p>Norms regarding Clothing Consumption</p> <p>Norms regarding Beauty</p> <p>Role of Clothing in Society</p>

7.1.1 Instrumental Learning Outcomes

In the context of this research, instrumental learning encompasses the skills, knowledge and cognitive understandings required for living and advancing a more sustainable lifestyle, particularly those necessary for engaging in clothing sustainability.

This section will present examples of learning that has occurred in each of the above-mentioned categories.

Skills

Construction skills encompassed the array of abilities needed to make textiles, clothing or accessories. Sewing, knitting and repurposing clothing were the most commonly mentioned construction skills, but a small number mentioned more advanced and specialized skills, including mukluk making, spinning yarns, weaving, and processing raw wool. The means of learning and enhancing these skills varied amongst participants, and included taking formal classes and workshops, learning from a book, experimentation, receiving instruction from friends or family and/or seeking out the expertise of others.

Not only were the techniques for conducting these modes of construction discussed, but so too were related skills, such as how to source sustainable yarns or fabrics and methods for reducing the costs of construction (one of the key barriers to construction). For example, 12F shared,

It is pretty expensive sometimes. I just made a pair of mitts and I was like “wow! I think these are going to be about \$60.00 for the yarn for these” – whoops! But I am getting better at realizing that when they are on sale I will buy the yarn like crazy.

Proficiencies related to other forms of clothing acquisition were also discussed, such as learning what to consider and what features to look for when buying apparel. For example, 03F wrote in her journal what she now took into account when shopping,

This kind of thinking is becoming entrenched, replacing the common consumer paradigm ... I am learning to ask, “where was this made? how was this made? how far did it travel? how much energy was required? what does this mean? how badly do I really need it? can it wait till next week? next month? next year? how long will I need it? etc.”.

Participants also discussed learning how to shop for sustainable and second-hand apparel. Those interested in purchasing sustainable apparel had to learn how to find stores, people or websites providing such clothing. For those choosing to buy sustainable apparel directly from a designer or website rather than from a traditional retail store, new awarenesses and abilities were required. Similarly, as was discussed in Chapter 5, new skills were required for shopping for second-hand clothing. One had to shop frequently, buy when they saw something they might need in the future and always be watchful for items they had failed to find in the past. Another form of acquisition discussed by two participants was “dumpster diving”. This means of attaining garments and other products required an individual to know where to go, what to look for and how to retrieve the items. One of these participants shared,

I started dumpster diving all the time. I would walk to work and back and give myself an extra ten minutes, and I would take the back lanes, and I would lift up the lids on dumpsters and see what was inside and that’s how I got my winter jacket which was essentially brand new as far as I could tell, from MEC, but the zipper was broken, and I don’t know – all kinds of stuff. (20M)

Learning the skills required to engage those in their social circle or to participate in collective forms of social action were discussed by a several of participants. For example, 29F discussed working with others to develop “Tools for Non-Violent Action”; as discussed in Chapter 5. Three discussed learning the steps required to organize a

sustainable fashion show and two others developed the skills needed to organize a mall protest. Learning to approach companies to ask questions about their products or practices and to hold companies to their product guarantees, were also mentioned.

Engaging in these actions allowed participants to develop specific, concrete skills. For instance, in the case of the fashion shows, participants had to learn which companies supply sustainable apparel, what equipment is required for the event, how to find models, how to properly set up for the show and so forth. Participants, through their attempts to educate and inspire individuals, groups and entities to engage in clothing sustainability, also developed or honed their communication skills. 11F's fashion show not only demonstrated the clothing available to consumers, it also sought to teach attendees about the negative impacts of clothing. She explained that "as the models were going through I just talked about different aspects of the clothing industry and how it could be more sustainable ... I think that's sort of one way also to engage people who might not otherwise be interested in sustainability" (11F). Learning to share information with those in their social network was also a communication skill acquired by some participants. For example, as has been mentioned already, a few participants learned that a more effective means to increase awareness and encourage behaviour change was to "lead by example" rather than to proselytize.

Problem solving was essential for nearly all those consciously seeking to take action to address their concerns and uphold their beliefs. Whether buying sustainable apparel, beading a mukluk or joining with others to educate students about the negative impacts of clothing, most participants learned to research and identify the appropriate course of action to address their concerns, develop the skills necessary to implement this plan, and assess

the successes and shortcomings of their approach. Participants also required problem-solving skill in order to overcome barriers to action. As an example, for those with an interest in fashion and clothing, finding the best way to meet both their sustainability values and their aesthetic desires could be challenging. It requires problem-solving skills in order to determine the most appropriate combination of sustainable clothing practices to fulfill their needs. Turning to 11F again, a great lover of fashion, acquiring clothing in a sustainable manner was a significant challenge. Due to the shortage of attractive sustainable apparel in Winnipeg, buying new, sustainable garments was not an option. After some consideration, research and experimentation, she determined that purchasing second-hand clothing and redesigning clothing best suited her.

Finally, broader skills for leading a more sustainable lifestyle were also addressed, the majority of which were related to food. These included, cooking from scratch (e.g., jam, salsa, cider, chicken stock), gardening and canning, as well as skills for sourcing local (grown and/or made) and organic food products. A few other skills discussed were composting, cycling and soap making. Skills such as problem solving and communication were universally applicable.

Knowledge

In addition to gaining skills through instrumental learning, most of the participants developed a familiarity with issues related to sustainability and clothing. Knowledge of the issues and solutions was responsible for both setting participants on the path to clothing sustainability and guiding their decision making and actions. Participants' consciousness varied greatly, with some being very well-informed and

choosing to actively pursue information, while others were satisfied to take action based on their limited awareness of the issues. Commonly discussed areas of awareness included the negative aspects of clothing production and consumption and the positive actions that can be taken to reduce one's clothing footprint. Knowledge related to apparel production included an awareness of infringements on workers' rights (e.g., unsafe work conditions, long hours and poor pay), cotton production practices (e.g., excessive use of pesticides and fertilizers, water requirements, farmer suicides and child abuse), the distance clothing travels, and the wide-use of chemicals in textile production (e.g., dyes, bleaches and flame retardants). There were only a small number well-versed in all these areas of knowledge; the majority mentioned only a few items.

The other area of knowledge which was discussed by all was the actions that could be taken to reduce the impact of clothing. Such knowledge included an awareness of where to find sustainable apparel and which companies have poor labour and environmental track records. As noted in Chapter 5, several participants discussed becoming aware of the fact they could make a difference by "voting with their dollar", i.e., buying products they supported and boycotting companies with questionable practices. 31F noted that this awareness was certainly not shared by all, stating, "Some people have never heard of boycotting before. It's a new concept to them. So, they're like "What? You can't shop at where? That's weird". Because it's never occurred to them that you can put pressure on people that way". Other such knowledge included a recognition of the need to keep clothes for as long as possible, an understanding of alternative modes of maintaining clothing (e.g., cold water and "green" detergents), an appreciation for the problems associated with conventional washing practices (e.g.,

energy usage and water pollution), an awareness of how to soundly dispose of clothing (e.g., who to call or where to drop off), and a familiarity with Buy Nothing Day.

Cognitive Understandings

For the purposes of this study, the term cognitive understandings refers to the linkages which individuals have made between different segments of their knowledge. Drawing from the literature and the findings of other studies, I consider “cause and effect relationships” and “potential risk and impacts” to be cognitive understandings (Diduck & Mitchell, 2003; Kerton & Sinclair, 2010; Sinclair, Collins & Spaling, 2011). Participants demonstrated a wide array of understandings regarding clothing sustainability. One of the most knowledgeable participants on this issue, 07F, exhibited a deep understanding of the complexity of clothing sustainability and the many factors that must be considered when addressing it. When asked what she knew about the impacts of clothing production, rather than presenting facts, my simple inquiry generated a dozen questions on her part,

... how hazardous is that industry for the people working in it? Are they inhaling toxic chemicals? Are they inhaling too much fabric dust? How much do they get paid? What are the working conditions like in the terms of breaks, that kind of stuff? Then, so people turning those products into clothing, the same thing, what are their work conditions like? At the point where you start assembling the clothing, it's like, what alternatives are there and rating those alternatives in terms of environmental sustainability, like are they going to have plastic zippers? Is that better or worse than a metal zipper? How mechanized is the industry? How much are you able to know about the industry? Is it transparent, is it hidden? Who is profiting the most from it? Actually wearing the garment, like are there hazardous materials in it? Like I know like for fire safety there are all these codes about children's clothing that it's actually really dangerous because it's screwing up their endocrines and giving them cancer. Disposing of it, what will happen to it, like if its

burnt will it be releasing toxins into the air? When it degrades will it be putting little plastic thingies in the water? How durable is it?

Many participants had a keen understanding of the effects of our societies' unsustainable consumption patterns. Many noted that the influence of the fashion industry often has a negative impact on individuals' body image, depletes resources, generates waste, and takes advantage of disenfranchised workers. Drawing from her personal experiences, political views, graduate studies and observations, O3F devised an understanding of the relationship between fashion and sustainability. She explained that she had,

Feminist concerns - definitely - about women's body image, ridiculous expectations, the shoes – they are actually damaging to your back and your body. My mother wore high heels her entire life and her feet are awful and her back was awful and yet she had to wear them always ... globally speaking of the fashion industry, it just seems such a waste of resources and financial or material, brain power ... It comes back to a feminist political issue, but also just how much money do we spend on clothing and renewing them so often when they don't need to be? It's almost like economic busy work. One of the things that I've researched into a little bit ... was unionism and marketing the new America in the fifties after the Great Depression -- it was turning American culture into like religiously believing that they had to keep buying things, the fashion industry is so tied into that, almost more I would say than any other industry because people buy it so often. It's not like appliances and other things, because you just can't replace those as often as clothing. It's like clothing and shoes are definitely the fastest item that we recycle and consume in North America. Just how purposely that was created. So having that information in mind, I tend to try and insulate myself a little bit from acting on those impulses, because it just doesn't agree with my politics.

Another cognitive understanding identified by many of the participants was the importance of researching the companies they patronized, noting not all companies were

transparent and truthful. For a number of participants this understanding was the result of discovering that the knowledge they had been acting upon, with the intention of being more sustainable, was incorrect. For example, a few participants learned that what they believed to be a socially conscious apparel company was not as responsible as depicted and another participant learned the production of bamboo fabric, which she thought to be a sustainable material, used harsh chemicals. She noted,

I used to just sort of look for whatever what I thought was sustainable, now I realize that soy and bamboo things are really not that good because of all the chemicals involved in actually processing the items. So, for a while I was like “oh, the eco-stores say this is good, but now I don’t think they really are”.

Finally, others discussed observing cause and effect relationships in the context of clothing sustainability, such as those participants that while travelling, learned that in North America we have far more clothing than we need and that people in other parts of the world do not believe it necessary to wash their clothing as often as we do in this country.

One such participant, 29F, shared,

I spent some time traveling overseas and lived in remote communities for months on end and I think I felt that I had more in my backpack for that short period of time than people in the community did. That’s where they lived and so I just re-evaluated what I own, how much I’m accumulating, how much I’m consuming and scaled back quite a bit.

7.1.2 Communicative Learning Outcomes

Communicative learning outcomes, the product of our communication with others, fall into one of three broad categories: (i) insight into our own personal values and interests; (ii) insight into the values and interests of others; and (iii) insight into society's values and goals (Table 7.1). This section will address the most commonly cited and uniquely interesting communicative insights.

Personal Values and Interests

Gaining a greater understanding of one's own values, beliefs, expectations, feelings and attitudes is an essential component of adult learning and transformation. Participants discussed a wide array of new insights, a significant number of which fell into the class of revelations about the role of clothing in their lives. Specifically, they talked about encountering experiences which compelled them to assess their relationship with clothing, their consumption patterns or their perceptions of the apparel industry.

Several participants noted a trigger event compelling them to reflect upon their connection with clothing. As discussed in Chapter 6, both travelling and tree planting, in many instances, served as a catalyst for learning. For instance, being exposed to extreme poverty during their travels and realizing how much they have, especially clothing, led a number to reflect upon their clothing practices.

We started in Bolivia and it's the poorest country in South America and it just really opened my eyes to like "Wow, this is what poverty is. This is what living without is like,"... I've got two pairs of pants and a few shirts in my back pack and I'll be living with that for the next three or four months, but I have this closet to go home to. It made me realize how much we really have

even though we're not rich compared to the wealthy in Winnipeg, but we have so much, so much more than we really need and I think that was a huge switch for me. (19F)

Several others discussed that through their outdoor activities, in particular tree-planting, they came to appreciate the importance of the functional aspect of clothing. In fact, for one of these participants, her entire relationship with clothing was changed after tree planting. Prior this experience, clothing played a large role in her life and she had a sizeable wardrobe; however, following several months in the bush, she shared,

I think the minimalist approach has completely translated into my life now, as opposed to pre-planting. Pre-planting, I felt like I need so many of a certain type of clothing and I remember just coming and just purging, purging and donating so many clothes because I didn't actually wear it and didn't really have a purpose, it didn't have a function. So if I had one really good sports zip up, I just kept one. I didn't wear the other ones; I didn't need five of everything. Tree planting really taught me that. You don't need so much, if something does the trick, it does the trick. You don't need five of them. (09F)

Another topic discussed by several participants, primarily the "strugglers", was related to consumption. Realizations were related to: how much they consumed, the size of their wardrobes and the environmental and social impacts of their clothing decisions.

One of the journal participants wrote,

Since my last journal entry, I was able to complete my first goal of reducing the number of items in my wardrobe by 50. In fact, my total actually got to over 60 items! ... I found this activity to be very therapeutic and it really helped to get me thinking about having a smaller wardrobe. ... The next hurdle is to reduce the number of clothing items that I purchase. This is a real mental battle! I have to remind myself that I don't need to replace the 60+ items that I got rid of. (34F)

As mentioned earlier, two of the participants who were true fashion/clothing lovers, had chosen a career in the industry. For both, being immersed in this environment not only taught them a great deal about the values and attitudes of those operating clothing manufacturing facilities and retail stores (i.e., “others’ values and interests”), they also learned about their original assumptions about the industry and how they differed from their experiences. 11F, who worked as a buyer for a Canadian retail chain stated,

I think the whole industry, I don’t like it anymore. That’s why I went to Japan, I went and took a year off and decided what I was going to do and then I came back and went [into an environmental program], because I felt like I needed to do something that was, just had some more depth to it. Working at Ricki’s I was just like, if I heard another person say that this horribly shaped polyester blazer was “cute”, I was going to just barf. It was just like, “aaah.”

There were also several examples of learning about one’s self in relation to social action. Of note was one group of participants (previously mentioned), who had been involved in more overt forms of action and had come to the realization that they were better suited to “lead by example” rather than to advocate and protest for change. 24F, one such participant, said,

I went to the Summit of the Americas in Quebec City ... I realized at that time that I didn’t like that kind of protest. I don’t really care for that ... then I thought, “Well, I would prefer more to lead by example.” It has to start with me before I can go and be like fighting in the streets for things. I think that I would just rather lead by example and then if people are interested they can ask me or they can -- imitation is the finest form of flattery.

Another example from the realm of social action was that of 34F, who struggled with guilt related to her current lifestyle, which complicated her ability to act. She

described becoming cognizant of her upbringing and how social norms had impacted her perspective, a realization which allowed her move towards action. She stated,

... my [sustainably-oriented] neighbours ... keep reminding me that I've been raised in this world, right? To sort of forgive myself for the surroundings and how I have been socialized and that helps to have some level of forgiveness before you start going on the process of "Okay, okay, I can let go of that now and now I am going to try to do things better".

Values and Interests of Others

Participants discussed gaining insight into the values and interests of others close to them, as well as people and entities beyond their social sphere. As will be examined in Chapter 8, interpersonal relationships play a tremendous role in an individual's journey towards sustainability. Appreciating the motives, expectations and values of those close to them was essential to bettering their understanding of both their communications regarding sustainability and their own perspectives on sustainability. Learning outcomes surrounding family were raised most often, with participants gaining insights into both sustainable and unsustainable views. For example, 29F shared her initial reactions to her mother's transformed perspective and behaviour:

At first there was tension between the two of us because I was coming from a different place completely and I valued material possessions. Here my Mom had next to nothing and I was like "oh, how can you – like what's wrong with you?" I was embarrassed almost, like ashamed, like "come on Mom, don't you care?" and she's like "of course, but this is what I care about. Let me show you" and I mean, I was open to it. I am like "okay, sure. What do you want to show me?" She's like "let's go for a walk in the woods".

Over time she came to both understand and embrace many of her mother's priorities and views. Another participant also reflected on a change in her parents' perspectives; however, this time it was in reverse. Raised in a very sustainable environment, her parents were no longer demonstrating the same commitment to environmental and social concerns. She noted,

It's been interesting to see my parents make choices that I'm not okay with now. To ask myself "Oh were they doing that when I was younger or have I just changed or are they changing a lot?" And I think it's a bit of both. But, I have seen one of my parents in particular, like buying lots of new clothes and changing laundry detergents away from something that is natural and sustainable. Things like that, that really surprised me to see that happen. Then seeing how that is interesting and how that affects my perception of them as human beings. (28F)

Although it was not yet evident as to the underlying drivers for this change in her parents' behaviour, she was in the process of attempting to understand their motives and the possible transformations in their values, beliefs and attitudes, which may have led to this behavioural shift.

A few of the participants discussed developing a better understanding of those living more sustainably. For instances, 34F recalled first meeting her sustainably-oriented neighbours and seeking to understand their worldview and subsequent practices,

When I met my neighbours that live below, they moved in a year ago, I remember asking one of them "Well, where do you get your clothes from?" I can't remember how the question came up. She kind of looked at me funny, she's like "Well, I don't buy clothes new" and this was just foreign to me. Even though now it's so obvious that none of them buy clothes new, or when they do it's a rare, rare occasion. So, I've been really learning a lot from them on their practices.

Conversely, a very conscious and active participant recently was reminded that not everyone thought the way she thought or knew what she knew:

It blew my mind when we were in the hemp store the other day and this woman was like, “what’s the difference between hemp and marijuana?” She didn’t even know there was a difference. You forget. Like, we live in a bubble and it doesn’t mean that everyone else feels that way. (12F)

Finally, during the interviews, several of the participants mentioned that their experiences had provided them with insight into the values and perspectives of corporations. For most of these participants, their realizations were relatively negative. 20M shared his reactions to a section in the book *No Logo*, “I remember reading about Nike in there and it was studying the sweatshop conditions and things and I was really horrified”. He experienced a strong emotional reaction to this and other related knowledge which resulted in new insights regarding the role of corporations in our society. He believed that corporations were engaged in “cultural manipulation”, noting that “this isn’t all by chance that it came about this way. There are certain people that are trying to manipulate cultural values because they want certain results out it”. Another participant discussed learning about corporations in an international development classes, stating,

... you also saw at the time companies being purchased by larger companies that then took production [overseas]. They start off with principles, I guess, as a company and then pressures mount. (18F)

35F wrote in her journal about the effect a recent article on an international retailer had in her and how it had impacted her thinking, providing a whole new view of the company and their values, as well as the media. She recounted the experience,

Traditionally, H & M is a store that I frequent; however, after reading this recent article about how their New York store (and who knows where else!) destroys their unworn/unsold clothing instead of donating it to charity, I've decided to boycott them.

I just don't understand why H & M would be so irresponsible. H & M's response to the uproar infuriated me even more.

“We donate garments that do not meet our quality requirements to organizations such as Gifts In Kind, UNHCR, Caritas, the Red Cross and Helping Hands. However, we do not donate clothes that do not meet our safety requirements, chemical restrictions or are damaged.... We are currently looking into if we can further improve our routines.”

Lame! It's insulting that H & M's response was so haphazard. This negligent multi-million corporation aside, I'm disheartened by the fact that so few medias covered this story and as a result, I watched as piles of womyn ignorantly, or for a rare few, not-so-ignorantly, merrily file in and out of H & M.

Shared Values & Goals

Even though this category is only mentioned in one theoretical paper (Diduck et al., 2012), “shared values and goals” was especially relevant to this study, in which participants' practices and attitudes were heavily influenced by social and cultural norms. Being able to identify and comprehend collective ideologies is essential to moving towards a sustainable lifestyle. In the case of clothing sustainability, recognizing the role of clothing in society and the influence of the fashion industry on our shared perspectives were two of the vital realizations commonly discussed by participants.

Several participants gained an understanding of the pervasive role clothing plays in our social interactions. 18F commented that she had recently started “noticing the impact

that clothing can make on how you are seen”, in particular in the context of relationships, noting that there is “... real pressure to look good while you’re young and single”. She and a number of others also discussed the role of clothing in the workplace, particularly the expectations to dress in a “professional” manner. They spoke about the restrictiveness of these norms and how they limited one’s ability to dress more sustainably. 23F, who valued comfort and enjoyed making her own clothing, had experienced difficulties at work because her attire did not necessarily conform to the collective views on professional attire. She explained,

Yeah, a couple of times I have been told that maybe I could dress a little bit more business-like and my answer is “but, that's not available in cotton.” So, they know me now. I have been so consistent that I, yeah, the pressure is not there as much. So, I have to say that I have my own style and they know it. They are appreciating more and more my handmade stuff and it’s more acceptable now. (23F)

Similarly, just before our second interview 12F had started a new job. She commented, “My boss, even my first day, talked to me about proper dress and how it is sort of expected”. Unfortunately, finding clothes which met both professional dress standards and her personal values around sustainability was a struggle. She shared:

I needed a suit for my job interview ... So I bought a second-hand suit, \$15.00, which was nice, and five second-hand coloured shirts, so that was good, but I ended up buying a [brand] new suit because that one did not fit that well and I needed to go to a press conference last week. Anyway, I thought it would be more official. I didn’t probably need it, which is unfortunate ... I was just fed up with trying to find something second hand.

Finally, 28F, one of the more sustainably-oriented participants, strives to not purchase new garments (sustainable or not), to minimize her purchase of second-hand

clothing and to keep her clothing as long as possible. Appearance is not a significant concern to her, nor is it to those within her immediate social circle. She commented, “I’m not trying to say that I think you can’t look good, but I also think that my value on that is less now that I’ve thought about all of those things and because I know the harmful effects of so many of the things that go into it”. However, no matter how strong her convictions are, she does live within our society and she recognizes that to a certain degree these expectations apply to her as well. She continued, “I certainly am engaged in that world as well. I think professionally I am involved in communities where I’m required to do some of those things in order to be accepted into certain circles that I want to be a part of.”

As discussed in Chapter 4, many people commented how the fashion industry, through the manipulation of our collective values and norms, has gained a significant influence over clothing consumption and perceptions of beauty. Participants also commented on the overarching drive to consume in our society. One of the participants recounted how they came to recognize our shared values, beliefs and attitudes about consumerism:

I was raised in a middle income, fairly affluent type of home. Especially in a small town where it’s sort of easier to be well off, it’s all relative. So, just seeing how much importance was placed on like conspicuous consumption, like nice cars and nice house, and then how little emphasis was placed on like wholesome foods or like care for this, that or the other thing. That didn’t seem to be making anyone too happy – all the conspicuous consumption of stuff. It seemed to be bit of a rat race in order to impress people, so it was like well, like those people aren’t terribly happy. (18F)

Another participant, 19F, recalled becoming more aware of the myths surrounding the North American lifestyle after returning home from a trip to South America, where she spent time with HIV positive orphans:

Those kids were still happy and they were playing even though they were getting a dozen meds every day and they knew they were sick, but they were still -- it seemed like they knew they had to make the best of every day ... [I] started realizing that you can't buy happiness. You can be happy no matter how much or how little you have.

29F revealed how learning about our society's drive to consume, led her to learn more about herself and the action she could take to reduce her impact.

She shared,

In university I started to connect with groups, like (inaudible) and Amnesty, and then learning more about, like further injustices that were happening in other places due to our – to this consumer appetite here in the West. That is when I really started to look at my purchasing ... That is when I became more aware of the cloak of consumerism and I felt like that was a real practical thing I would outside of just writing and doing research, because I was in university. I am like, “well, okay, I am learning about all of this, but what can I do?” So, then I learned that I can do something. My purchases have an impact.

7.1.3 Emancipatory-Related Learning Outcomes

As noted in the beginning, although other studies (Diduck & Mitchell, 2003, Kerton & Sinclair, 2010) have viewed learning related to social action as a separate sub-category of communicative learning, I believe the social-action learning witnessed in this study falls into the existing sub-categories of instrumental and communicative learning. For example, as presented under instrumental learning, individuals learned different ways to

engage in social action, such as organizing a sustainable fashion show, approaching companies and asking questions or to holding them to their quality guarantee, leading by example, and making mukluks. As for communicative learning, emancipatory-oriented realizations relate to matters such as the need for social action to induce change and envisioning a different path for society. One instance of an individual gaining insight into his personal values and interests within the context of social action was 20M. After being introduced to many new concepts related to the environment and social justice, he stated, “I started really questioning, not making assumptions that society is the way it is. There was, “oh, it could be something else”.” In another instance, participant 18F discussed learning about the values and interests of others as related to social action. Having worked for two different organizations engaged in sustainable purchasing practices, she found it frustrating that other organizations did not institute similar policies:

Recently at work, we decided to print new t-shirts ... it was an interesting decision to make as a group. I would have chosen organic cotton t-shirts, but instead we chose Just Shirts, which works with a cooperative in El Salvador. After going to their website, I read that what galvanized their cooperative was an order of 40,000 t-shirts from the Canadian Federation of Students in 2007. This made me feel really proud as a representative of that organization while I was in school. If large organizations can make change, then why can't every volunteer t-shirt in North America come with a sweat-shop free and organic cotton label? Put it in the budget, tell people about the importance of this type of principled approach to the products they buy.

7.2 The Transformative Learning Process

As the examples above show, it is through communicative and instrumental learning that we become aware of different facets of our world. Reactions to a trigger (Chapter 6), in which an individual is exposed to a novel concept or experience, can vary greatly. Some people may choose to dismiss them, deeming them as untrue or deceitful (Mezirow, 1991). Others may assimilate the experience, accepting the new knowledge, attitude, beliefs or values without question (Mezirow, 1991). Some may also choose to consider the experience in greater depth or seek to compare their ideas about the experience with those of others. They may also wish to reflect upon the occurrence, examining the new ideas they have encountered in relation to what they already know or believe (Mezirow, 1991). Those electing to explore alternative notions, views, beliefs, motives and approaches are deemed transformative learners. The following section describes the process that such learners embarked upon to convert newly acquired information into beliefs and knowledge. Specifically, it compares and contrasts both the communicative and instrumental learning process as described in the literature with the data obtained in this study.

7.2.1 Communicative Learning: Discourse and Critical Reflection

To effectively appreciate and interact with others, individuals must explore their personal views of others and the world, comprehend the meaning of the communications of others, and identify ways in which they, themselves, might successfully interact with others (Mezirow, 1991). In order to deduce what someone else is communicating, be it

through discussions, books, internet, paintings, plays, television, and so forth, individuals must engage in two closely entwined processes – discourse and critical reflection.

Discourse

Discourse is “that specialized use of dialogue devoted to searching for a common understanding and assessment of the justification of an interpretation or belief” (Mezirow 2000, p. 11). In other words, it is the process through which we gain the opinions and thoughts of other people¹⁴ regarding our interpretation of a particular message or the character of the individual sharing the message (Mezirow, 1994). It describes how we confirm the aptness, truthfulness, lucidity, validity or authenticity of these interpretations (Clark 1993; Merriam & Cafferella, 1999; Mezirow, 1991).

Unlike instrumental learning, our understandings of human communications cannot be proven to be true or false – there is no correct interpretation, no exact answer. Thus, as noted above, in order to justify or affirm one’s interpretations, learners must seek feedback from others (Mezirow 1994). Mezirow explains that learners will seek out the views and judgements of those they deem to be “most informed, objective and rational” (Mezirow, 1994, p. 225). Gathering the amassed input, a learner will attempt to develop a unified opinion by “weighing the supporting evidence and arguments and by examining alternative perspectives” (Mezirow, 2000, p. 11). For example, following a shopping trip, 01F discussed investigating a favoured retailer, assessing their honesty and authenticity based on their website. She explained,

¹⁴ We obtain the insights of other people either through in person exchanges or through interactions with their creative works.

In 2006, so not all that long ago, when my mom and my sister and I went shopping, we went to Cotton Ginny and there was a whole bunch of stuff on sale and we bought a whole pile of things and I got all these things that said organic on them. So, I was curious and I went and looked on their website and they've got a lot of stuff on there, and I read through. I read through to partly get information and partly, sort of critically, to see if I thought they were actually doing what they were saying they were doing, or whether they were just sort of greenwashing.

She later compared the practices of this retailer with others she frequented and commented,

It is obvious they're really thinking about [sustainability] because they've got pages and pages of stuff. Reitman's did not have anything, which surprised me. I actually sent them a note and said, "I'd like to know ...". And then Jacob has like two paragraphs, which seems kind of like, "look we are doing good things". But, two paragraphs don't really indicate a lot of commitment.

Mezirow explains that in the end the individual will form a "tentative best judgement" (Mezirow, 1997b, 2000) or a "synthesis of existing views and evidence" (2003, p. 61), which may be changed at a later date if new information or ideas are brought to the learner's attention (Mezirow, 1994, 2000). Drawing on the example above, 01F had come to the conclusion that Cotton Ginny was more dedicated to sustainability than the other two retailers. However, if the Reitman's did respond and provide evidence of their efforts to be more sustainable, her beliefs about this retailer may change. Unfortunately, at the time of the interview she had not heard back and commented, "I am kind of disappointed, 'cause Reitman's and Smart Set are like the same company and those are two stores I tend to get stuff at. So, anyways, maybe next time I go in there I'll ask them". Thus, although currently dismayed with their performance, she was determined to get a response to her inquiries to enable her to

formulate an opinion of these companies and to make well-informed purchasing decisions. Consequently, Mezirow explains that “validating a belief through the widest possible agreement is a development *process*, not a one-shot effort at securing consensus” (1998, p. 197, italics added).

Mezirow also notes that “the more interpretations of a belief available, the greater the likelihood of finding a more dependable interpretation or synthesis” (Mezirow, 1997b, p. 6-7). In principle, I agree with the contention that many different perspectives result in a well-informed decision or interpretation. As a result of the internet and social networking, learners now have access to vast quantities of information, providing them with countless differing views. Unfortunately, so many opinions can make it challenging to form one’s own view. It can be simply too overwhelming. 03F noted,

Sometimes, I find the information I get conflicts to cancel each other out. That it just gets really confusing, which is probably why I tend to just purchase stuff that is cheap and available. Because I don’t really know how I could spend what dollars I have to spend and get what I need and have it be environmentally sustainable.

To properly unravel the meaning of an incoming message and develop one’s own assumptions on the matter, the learner must first develop an impression of the communicator (e.g., discussant, author, painter, composer, actor) and determine how their frame of reference might shape their outgoing communications, as “[w]hat one talks about needs to be distinguished from what it means to the speaker and why he or she talks about it” (Mezirow, 2003, p.60). A learner must rely upon facts known about, and cues given by, the communicator to develop a sense of who they are and an impression of their perspective (Mezirow, 2003). The purpose is to allow the learner to assess matters

such as the qualifications, credibility, authenticity, and motives of the person(s) with whom they are communicating (Mezirow, 1998, 2003). Doing so permits the learner to tailor their own communications to best suit the individual with whom they are interacting, improving their chances of reaching an understanding (Mezirow, 2003).

A great deal of the information regarding clothing sustainability is generated by the corporations that manufacture and sell clothing. Unfortunately, much of what participants had seen and heard about large corporations had led them to distrust their communications and actions. They questioned their sincerity and motives in relation to sustainability matters. They asked questions such as: Is the information they have provided truthful? Accurate? Relevant? Valid? Why are they sharing this information? Do they just wish to appear sustainable or are they in fact committed to sustainability? To diminish their concerns, participants discussed visiting company websites and searching for information on sustainability practices, as was the case for 01F. She discussed assessing and comparing the sustainability information found on the website of her three favourite stores (see above).

Conversely, when new information or views were received from someone trusted and respected, participants indicated that they tended to readily integrate what they had been told and did not seek alternative perspectives. While mainstream corporations were questioned, retailers and manufacturers founded on sustainability ideals were generally accepted without scrutiny. Participants did not tend to seek other views of their products or practices; they often willingly accepted what was being communicated. Likewise, people often accepted the word of a friend, in most cases, acting without verification. 28F demonstrated such in the following statement,

I also just learned this from a friend, and I don't know if this is entirely true, but I've been told that there are fire retardants - it's required that all new baby garments have fire retardants in them, which is absolutely disturbing to me if I think about wanting to have children or taking care of children that I know. It seems all the more pressing to change the way we perceive clothing and what clothing is for and whether or not it's meant to keep our skin from burning when we're in a room burning.

Although she had not confirmed this information, this participant embraced this knowledge, which triggered both reflection and action. Specifically, it led to a change in her maintenance routines, resulted in her reconsideration of the role of clothing on a personal and societal level, and encouraged her to question her gift giving practices (for example, the selection of baby shower presents).

Mezirow devised a list of the ideal conditions for discourse (Mezirow, 1994, 1997b, 2000). Although my study has explored informal learning rather than classroom learning where these conditions can be controlled to some degree, some are still applicable to the learning witnessed in this study, in particular the condition of "complete and accurate information". There was near unanimous agreement that this condition was not being met by corporations. As previously noted, the majority of textile and apparel companies were viewed as having failed at providing enough relevant and reliable information about their operations and products¹⁵. With only incomplete information to guide their choices, many participants felt unable to properly assess the possible impacts of products, to compare different companies or textile options, or to prioritize various sustainability factors. For example, some participants questioned which was the most important factor

¹⁵ e.g., factory conditions, employee treatment, types of chemicals applied to the fabrics, and wastewater treatment practices.

when considering apparel purchases - locally made, organic fibres, fair trade, sweatshop free, recycled materials or reused items¹⁶?

Although not listed under Mezirow's ideal conditions, a number of authors indicated that "[f]eelings of trust, solidarity, security, and empathy are essential preconditions for free full participation in discourse" (Mezirow, 2000, p.12). A number of participants made reference to their support network (to be discussed further in Chapter 9) and its role in their learning. 34F, in particular, described her relationship with her neighbours as being a "safe environment" for having conversations and obtaining knowledge, as well as receiving encouragement,

I already had an awareness of the issues and was already trying to move in a certain direction, but then having these people come into my more immediate circle with all of their knowledge, and they are non-judgemental, too. So, to have them as this resource, to ask them questions of "What do you do?" and "Why do you choose to do this? What's your motivation?"

Similarly, 16F described living in a communal housing situation and the sense of solidarity as they journeyed towards sustainability. She shared, "I think it was like the whole house, we kind of learned in different stages, but we learned as a whole house".

Finally, although there is a great deal of evidence to suggest that participants did informally communicate with others regarding clothing and broader sustainability issues, overall there is little direct evidence in the transcripts to suggest or refute that it was done

¹⁶ Following a reduction in their clothing purchases, most participants viewed reuse as the next best option because it allowed them to avoid consuming a new product. However, there were several participants who were not entirely confident this was the best path. As a result of a lack of information, they were unable to determine with certainty whether it was better to purchase sustainable apparel in order to support the development of this market or whether acquiring second-hand clothing had a larger impact.

in a conscious effort to verify their insights regarding their interpretations or understandings of a communication or a communicator. Further, while the majority of participants reported actively engaging in research¹⁷, it is not clear whether the information acquired was simply incorporated into their knowledge base or whether it played a role in discourse, leading to changes in their views and attitudes.

There were a few examples which seemed to indicate, that in some cases, discourse may or may not have occurred with regard to other elements of sustainability (e.g., food, waste, or health), which then indirectly affected their perspective on clothing sustainability. For instance, 28F noted that while an avid researcher of clothing matters in the past, she no longer tended to do so. She did mention, however, that she continued to conduct research on other sustainability topics, which in a circuitous manner confirmed her thinking about clothing. She noted, “my assumptions are continuously validated by other areas”.

Further, as was discussed in Chapter 6, a number of participants provided examples of periods in their lives in which they were exposed to a wide-array of sustainability topics from multiple sources, observed the behaviour of many sustainably-conscious individuals, and engaged in discussions with variety of people regarding sustainability issues. For examples, 29F talked about returning to school in her mid-20s and encountering a barrage of new experiences and people carrying messages about sustainability. She discussed taking international development classes, participating in the development of “Tools for Non-violent Action”, joining advocacy groups such as

¹⁷ For example, participants discussed engaging in discussions with others, visiting websites, following blogs, watching documentaries, checking company websites, and reading books.

Amnesty International, participating in cloth swaps, socializing with sustainably-oriented friends and engaging in university events like free day. All of these experiences and interactions, with the exception of the clothing swap, were not solely directed towards apparel, yet each contributed to her perspectives on clothing sustainability. Thus, although she may not have had discussions with others regarding clothing, her awareness of issues such as human rights, waste, fair trade and consumerism were being developed, all of which play a role in clothing sustainability. This idea will be explored in greater depth in the section below entitled, *Meaning Perspectives*.

Critical Reflection

Critical reflection, the other key process in communicative learning, involves contemplating and questioning previously acquired beliefs, values and assumptions in order to determine whether they still prove valid and useful in the face of new information, occurrences or events (Mezirow, 1990a, 1994). If determined to be inadequate, the learner will engage in efforts to restructure his or her frame of reference, adopting assumptions and values that better allow them to interpret their communications (Mezirow, 1997b). Overall, the goal of critical reflection is to create meaning perspectives which are more inclusive, permeable, mature, and dependable (Clark, 1993; Merriam, 2004; Mezirow 1994).

To engage in critical reflection a learner must first be able to recognize the assumptions they hold in relation to a particular matter (Clark 1993). Once identified, the learner must critically assess these beliefs to ascertain whether they continue to be justified given recent experiences encountered (i.e., do changes need to made to existing

meaning perspectives?)(Clark 1993). An example of this process was provided by 29F, who during her transitional years was quite concerned about her looks and was enamoured with clothing. However, as presented earlier, when she moved to a northern community to live with her mother, she was exposed to very different perspectives on appearance, consumption and what was important in life. These new perspectives and observed behaviours led her to reflect upon her own beliefs and values, leaving her to question whether her assumptions were still relevant and whether they continued to be an effective means to interpret her experiences. She decided they were not, which led to a change in her consumption practices and opened the door to future experiences, such as studying international development and becoming involved in human rights issues. She recalled,

... connecting with my mom and this boy I dated for a while, I mean they were, my mom and this guy, unmaterialistic and so I guess my consumer patterns started to change. I wasn't shopping as much. I wasn't going out and buying what I thought was in style. I mean I guess my priorities slowly started to change.

Critical reflection takes place throughout the learning process. It plays a vital role in the initiation of learning. When faced with an occurrence which contradicts our worldview, learners will draw on critical reflection to help them determine how best to deal with the matter (Mezirow, 1998). As discussed above, an individual might ask: Is this information wrong, a prevarication or is it simply ludicrous? Should I ignore it? Should I just accept it at face-value? Do I need to take the time to consider it in greater depth?

Given that discourse is “dialogue involving the *assessment* of beliefs, feelings and values” (Mezirow 2003, p. 59, italics added), critical reflection is also the “product of discourse” (Mezirow, 1998). It permits the learner to compare and contrast the evidence they have collected via discourse, appraise the merits of each of the different views and negotiate a unified understanding of the experience (Mezirow, 1997b; Sinclair, Collins & Spaling, 2011). The second function of critical reflection in the discourse process is related to an assessment of the communicator. Through critical reflection, learners may not only reflect upon their own assumptions, but also on those of others (Mezirow, 1998). Mezirow explains that “[w]e cannot learn the meaning of what is being communicated without becoming *critically reflective* of sub-textual assumptions about truthfulness, truth, authentic, and coherence” (Mezirow, 1998, p. 188-189, italics added). Through gathering clues about the speaker and assessing these in connection with our existing assumptions, a learner is able to better understand factors such as their own background, their own motives, and their own level of understanding regarding the issue under scrutiny. In her discussion of fire retardants applied to baby clothing, 28F demonstrated the use of discourse and critical reflection, of both her own assumptions and those of others, with regards to second-hand clothing, stating,

... we were just debating that this week. We wanted to bring a gift of clothing to a friend who just had a baby. Is it going to be perceived socially as an inappropriate gift for us to get the baby second-hand clothing? Is that going to be something that the parents are then going to say “Oh, you don’t care about our baby enough because you didn’t go out and shop for something”? Well, actually we do care about your baby because we’re going to get something without a fire retardant in it, or at least has some of the fire retardant washed out of it.

Her anecdote begins with her and her partner engaged in discourse, “debating” the social aptness of this act. She then proceeds to engage in critical reflection on many levels, by considering the view of society on giving a used baby gift, contemplating what the couple might think of such a present, and comparing this act with her own concerns regarding the effects of chemicals on clothing.

Once again, as with discourse, much of this process is presumed, and while there are some examples of it occurring, there are far more instances in which it could not be determined. It was assumed that the journals would be the ideal means of capturing critical reflection. Unfortunately, very few of the entries recorded their thought process in any depth. Rather, their entries focused primarily on their actions, i.e., the success of their most recent act and what they planned to do next. However, the first entry of 11F, which presented her mental struggle over clothing and sustainability, did provide a glimpse into the critical reflection process,

This is my journal/journey of my thoughts as they relate to fashion/apparel and sustainability. I’ve never really articulated my thoughts on this subject in any substantive way, other than talking about it with my sisters, really. I suppose part of the reason behind that is the same reason why I left the apparel industry to begin with. Fashion seems so frivolous and disposable. I thought I should be spending my time/energy on something meaningful!

But... I can’t not think about it. It is who I am and I will always find it interesting. Yet, at the same time I can’t help but think about what’s behind it. The disposability of it, the waste, the pollution, the social injustice (poor working conditions, child labour, exploitation,) etc. So I think this journal exercise will be interesting... it will at once force me to articulate my thoughts which will then be too difficult to ignore when I go out shopping... It’s self-imposed/self-directed social marketing! It’ll force me to rethink my decision to buy that \$6 t-shirt made in China (cuz they all are) that will probably last for a season.

It is evident from this entry there is significant discord between her sustainability values and her adoration of clothing. This conflict is apparent throughout both of her interviews and her journal entries. She acknowledges at the beginning of her remarks that this is not a subject to which she has dedicated a significant amount of conscious thought. Although she had been aware of the negative environmental and social effects of apparel, she had not yet fully associated these impacts with her decision-making as related to clothing. Later in this chapter, I will discuss in greater detail the struggle faced by 11F and other participants as they attempt to find a means to balance their sustainability beliefs and their normative clothing values.

As discussed in Chapter 6, learning was not restricted to those with a non-conscious upbringing. Although raised in a sustainable, action-oriented household, 28F demonstrated that even those with quite progressive views and practices could continue to critically reflect and even transform. She shared her thoughts on locally made clothing,

I'm really starting to understand some of the more spiritual and emotional positive benefits that can come out of having that connection locally and what it means to wear a garment that someone you know made. Or, even if someone you know didn't make it, maybe - like this necklace I'm wearing was a gift from a family member and I'm not actually sure of this, but I know that she does a lot of her own crafting and I'm pretty sure that she traded another local artist in her community for this necklace. So that feels good for me, because I know that somebody's human love and energy went into the creation of this, because a local artist, but also the creation of whatever was created to make this so money did not necessarily have to exchange hands. I think that's beautiful and I think that there's something about wearing handmade garments that is really precious and it's something that I'd like to integrate more into my life. Right now another major reason that I haven't talked about yet is cost and that is a big part of the reason why I don't wear more things that are handmade ... So, I'm trying to understand how I can

better take care of my garments and have a different perception of what clothing is so that I can then justify to myself the economics around someone charging what I know I consider a lot of money for a garment. I would like to readjust my opinion of that and understand that they're actually creating a work of art and it's okay if it costs a certain amount of money and that may actually drive me to take care of it more.

Before moving on to the discussion of frames of reference, it should be noted that critical reflection is not a requisite to learning. Critical reflection is a conscious process, but some researchers have found that not all transformed learners were able to recall the process taking place (e.g., Taylor, 1994). Similarly, in my study, much of what participants contained in their frame of reference related to sustainability, they had no memory of learning. Although in some instances their inability to remember might be the result of the process being forgotten over time, in many other instances their lack of recollection would likely be the result of unconscious or *assimilated learning* (Mezirow, 1998). My research would seem to support Mezirow's contention that when creating a new belief, attitude or understanding, or refining existing ones, learners need not always critically analyze or reflect upon the new information or experience (Mezirow, 1991). Extending that logic, if a meaning scheme can be acquired unconsciously, and a series of meaning scheme changes can transform a meaning perspective, then a transformation may take place unconsciously. Diduck and colleagues (2012) share this reasoning:

Transformations, especially in points of view, often occur without our conscious direction or awareness (Mezirow, 2006), and an accretion of smaller transformations may initiate a profound but non-conscious perspective transformation as well. As adults we can often look back and realise that we think quite differently about some aspects of our world than we did years before, that we must have transformed a habit of mind, but we cannot point to any purposive learning process that has led to the new way of thinking. (p. 1316)

Daloz (2000) also stressed that learners would have countless unrecalled moments which, undoubtedly, would have had an impact on transformations. Such was certainly the case in my study. There were many participants who were unable to recall what set them on this path or when their shift began. For example, when asked what led to changes in her life, 01F said, “I can’t think of all of the things, ‘cause there are too many things and pieces”.

Another perspective held about the role of critical reflection in learning is that rational reflection is not the only “way of knowing”, and that learners can become transformed through other means such as emotions, feelings, intuition or spirituality (Cranton & Roy, 2003; Dirkx, 2001). Examples of this appear to have been found in my study, including 01F and 22F, who both stressed the importance of their spirituality in their journey towards sustainability. Both 24F and 35F provided examples of when they followed their intuition rather than discourse and critical reflection, choosing to act upon their own sense of right and wrong. 03F also discussed reacting to her emotions rather than rational reflection, stating,

... generally speaking I would say that I just tend to causally get my information from my friends and through internet browsing and then something might hit me emotionally and then stick. And that tends to be the stuff that I act on.

Finally, despite his acknowledgement that perspective transformations may occur unconsciously, be it due to assimilation or another way of knowing, Diduck et al. note that Mezirow insists a “conscious-rational approach to transformation [is] a more reliable way of ensuring that it constitutes learning more functional frames of reference that will

serve us better in guiding our actions and decision making.” (Diduck et al., 2012, p. 1316).

Frames of Reference

Mezirow’s version of the transformative learning theory acknowledges four different means of integrating learning into one’s frame of reference. The three which expressly apply to meaning schemes are:

- (i) creating new meaning schemes,
- (ii) clarifying or expanding existing meaning schemes, and
- (iii) modifying existing meaning schemes.

The fourth, and most profound, is a meaning perspective transformation (Mezirow, 1994). Chapter 6 discussed that meaning perspective transformations could occur rapidly following a powerful disorienting dilemma or could be the result of an accumulation of meaning scheme changes (Mezirow, 1994). Once again, there were no cases of an epochal transformation in this study; all perspective modifications were the result of incremental changes in participants’ meaning schemes. For example, 34F stated, “I think it’s been more in the last few years. My thinking about it and sort of practices have been increasing ... There was no epiphany, but these little pieces”.

Meaning Schemes. All three forms of learning related to meaning scheme were present in this study. The encounters and learning undertaken were so diverse, it is not possible to address the full breadth and depth of the learners’ experiences. However, I will

provide a few examples of each form, beginning with the creation of new meaning schemes. At times, learners would encounter an experience to which they had never been exposed; consequently, they had no conflicting meaning schemes because they did not hold any related values, beliefs, or judgements. 17F provided an example of this form of learning when discussing her introduction to the concept of sustainability, in particular sustainable foods. In her transitional years, she spent time in a sustainability-oriented community in British Columbia. She had this to say of their practices,

It's like you go to a different planet. It's really awesome. Everything is organic; there are no fast food restaurants there. You go there and everything is just clean, no litter, and it just kind of wakes you up ... they have markets set up in the street and everything is fresh. Everything tastes totally different. (17F)

Having not been raised in such a manner, these concepts were new and invigorating, and while she lived within this community, she embraced these new practices and the related ideals, generating new meaning schemes.

The next form of learning involves “refining or elaborating our meaning schemes” (Mezirow, 1994, p. 224). Based upon my results, I also consider the *strengthening*¹⁸ of existing meaning schemes to be a key element of this form of learning. There were many examples of participants encountering information or interactions which provided additional support for their existing meaning schemes. These experiences did not improve or expand their understanding, but rather validated and reinforced what they already knew. In terms of strengthening meaning schemes, one example came from 06F,

¹⁸ For the purpose of this research, I am using *strengthening a meaning scheme* to refer to learning in which an individual encounters evidence which is consistent with their existing meaning scheme, thereby reinforcing this particular view.

who explained how an instrumental learning experience reinforced her frame of reference and practices. She stated, “I think [reading the *Tragedy of the Commons*] just validated it. I think it just really validated a lot of things that I was doing that hadn’t been articulated”. Participants also spoke of classes, documentary films and discussions with friends as aids to fortifying their existing views.

In terms of the refinement and elaboration of a meaning scheme, an example comes from 16F, who continually developed her meaning schemes in relation to used apparel over a several year time span. She was first introduced to second-hand clothing in her mid-20s on a visit to Canada. The experience led her to believe second-hand clothing was an attractive and affordable way to obtain brand name clothing, thus creating a new meaning scheme,

Yeah, it was awesome because I thought all of the brands that were so desirable were so cheap, like “oh my God! I can buy all of these things and nobody will know that they were second hand”. So actually before I went back to Peru ... [on] the last day I said “can we go to Value Village” and we went. I think it was Sunday or something and after six and they were closed. So then in Toronto my flight, I think I had to wait for thirteen hours in the airport so I actually went to – not Value Village - but I went to downtown Toronto ... to find a second hand store and I think it was a Salvation Army.

At this point, brands are still very important to her, but she has expanded her thinking to embrace the notion of second-hand brand name clothing. Following her move to Canada and an array of different experiences which introduced her to sustainability, she began to create “green” meaning schemes, which in turn further shaped her views about second-hand clothing. She continued to hold a positive attitude towards used clothing, which enhanced her meaning schemes through the addition of the belief that

second-hand goods are environmentally superior. She stated, “I can use this second-hand clothing because it is fine still. I don’t need anything new. We don’t need to produce more things. We can reuse.” Subsequent experiences and knowledge led her to become more discerning about the specific second-hand stores she would frequent. New information had led her to question the values of certain retailers and led her to form new meaning schemes about the types of principles she wanted in a retailer she supported and expand her views of second-hand clothing. She stated,

Now, I hardly go [Value Village] because, I mean I started going there because it was convenient for me, it was cheaper ... but, then I got more engaged in, not just environmentally-friendly things or like just the cheap thing, for me it was kind of like, oh what this organization is doing, right? So, it’s kind of like when I knew that Wal-Mart was behind this organization I kind of like, “oh, okay,” so I don’t want to go there.

With respect to meaning scheme transformations, there were a number of cases of such modifications. For some participants, an experience or a new piece of information led to a change in their attitudes, beliefs and feelings about sustainable corporations. As noted earlier, a few discussed hearing that a particular retailer they had held in high regard because of their sound labour practices, was in fact notorious for their attitudes toward, and treatment of, women. Such information led them to change their perception of the company and, for some, led them to question the honesty and sincerity of other sustainable companies. Similarly, several participants mentioned learning that apparel brands they had supported, in large part because they made their clothing in Canada, had moved production overseas, including 24F who said,

If it says that it’s sustainable, do I question that sustainability? More and more at MEC to be honest. I think it just annoys me that they’ve shipped out

a lot of their production overseas ... I think they're trying to be more of a company that's being competitive rather than being a co-op.

This is not to say she did not buy products from this company. She agreed with many of their policies and practices; however, her attitudes and confidence in this retailer had changed as a result of what she viewed to be a shift in some of their values.

It should be noted that, as was likely apparent in the above examples, these three forms of learning often overlap and interact, with a single experience eliciting more than one form of learning. For example, there was a participant discussed in Chapter 4 who detested shopping; for her, finding clothing was an unpleasant experience. However, a few years ago a friend began to host clothing swaps. These events simultaneously created new and modified existing meaning schemes. Specifically, obtaining clothing did not have to be a negative experience (modification of existing meaning scheme) and clothing swaps were great for getting clothing in a sustainable-manner, as well as being a pleasant social activity and a self-esteem booster (new meaning scheme). With regard to the latter, she explained that the women in the group would encourage and compliment one another, noting, "... you become more, I think more comfortable and more body positive as a woman, because it is such a nice environment."

Meaning Perspectives. Our frame of reference is essentially a vast network of meaning schemes, continually interacting and comingling in different configurations to form myriad perspectives of the world and its people. I do not believe that the sheer complexity of our frames of reference is sufficiently depicted in the transformative

learning literature. Although the theory portrays meaning schemes and meaning perspectives as relatively straightforward concepts with clear boundaries separating them, in practice, as is often the case, this is not so. It is well-established that meaning schemes compound to form meaning perspectives, but the point at which a collection of meaning schemes constitutes a meaning perspective change is ambiguous.

Mezirow's describes a meaning perspective as a group or constellation of meaning schemes (1991, 1994), a statement with which I concur. However, I would take this idea one step further, proposing that constellations of more basic meaning perspectives comprise more complex meaning perspectives, which in turn combine to form even higher level, more comprehensive meaning perspectives. In order to understand the relationship between meaning schemes and meaning perspectives in the context of sustainability, I envisioned there being multiple layers of meaning schemes, comprising meaning perspectives of increasing complexity and scope, all of which are constantly interacting, conflicting, supporting and otherwise influencing one another.

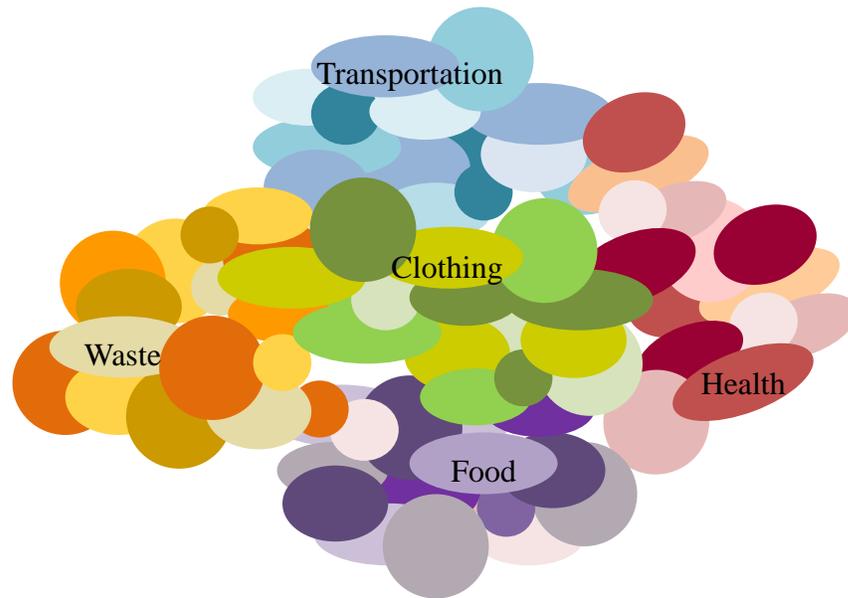
I have considered meaning schemes related to apparel consumption, fashion, the role of clothing, and concerns about clothing's impact, as the foundation to one's perspective of Clothing Sustainability. Figure 7.1 demonstrates how these many apparel-related schemes could combine to form a lower level meaning perspective.

Figure 7.1: Clothing Sustainability Perspective



Similarly, meaning schemes held about organic produce, local farms, fair trade products, treatment of animals, conventional agriculture, and so forth, would comprise a perspective regarding Food Sustainability. Additional meaning scheme groupings discussed by study participants included sustainable transportation, holistic medicine, voluntary simplicity, buying “green”, waste reduction/prevention, and sustainable home operations/maintenance. Collectively, these basic meaning perspectives would comprise a constellation of meaning perspectives pertaining to Sustainable Living that come together and collide (Figure 7.2).

Figure 7.2: Sustainable Living Perspective

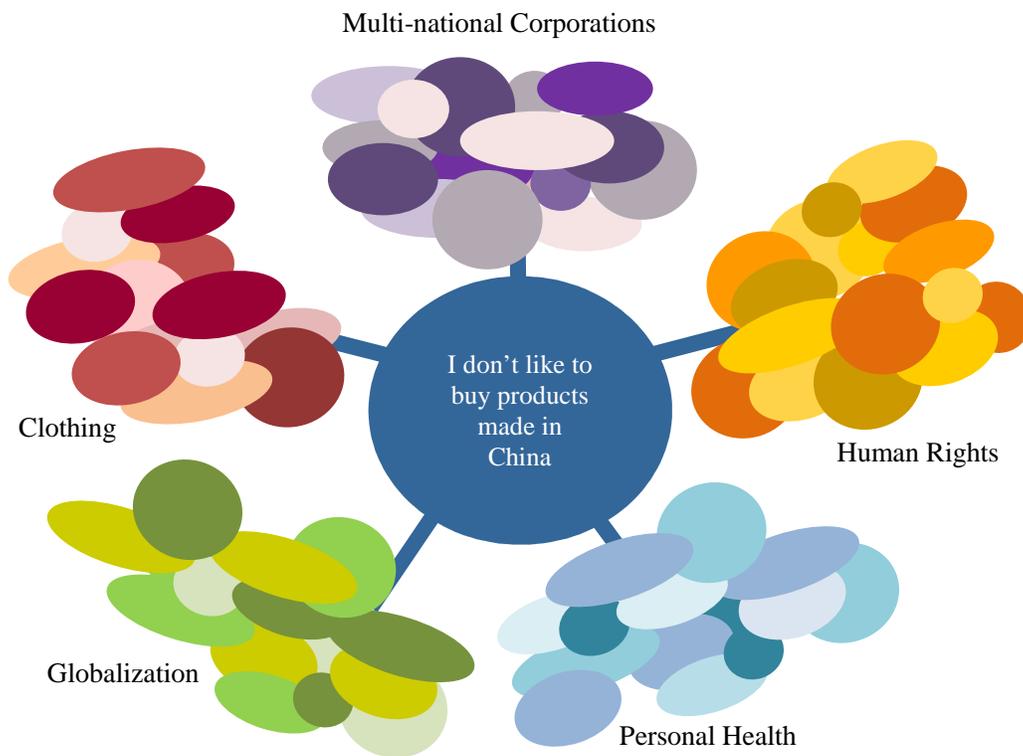


In turn this constellation would join with other constellations to form a broader perspective about Sustainability in general, which would likely include perspectives concerning resource management, stewardship, globalization, fair labour practices, animal rights, sustainable economics, community development, culture preservation, and so forth. Finally, at the broadest level of socio-linguistic meaning perspectives would be our foundational views about the external world, including our perspectives on economics, politics, social norms and cultural ideologies, human rights and the environment.

It should also be noted that one meaning scheme may contribute to multiple meaning perspectives. For example, a number of participants discussed refusing to buy clothing made in China. Negative attitudes towards Chinese products would not only

contribute to their perspective on clothing sustainability, but it might also help shape their perspectives on consumption, human rights, globalization, personal health, multinational corporations, and the like. As such, by transforming a single meaning scheme you can in fact impact, to varying degrees, countless perspectives (Figure 7.3).

Figure 7.3: A Meaning Scheme's Link to Multiple Meaning Perspectives



As previously discussed, all participants in the study experienced some form of change to their knowledge, their frame of reference and their actions. However, the degree of change varied greatly. Three broad groups emerged – those having experienced a series of changes in meaning schemes, those having experienced a

transformation in their perspectives, and those who were in the midst of the transformative process. The first group described adding, strengthening and modifying their meaning schemes, while at the same time changing existing practices and adopting new behaviours and activities. However, despite these additions and modifications to their frame of reference, these individuals had not experienced a fundamental shift in their lifestyles or world view. Participants in this group did not actively seek to build their knowledge in relation to sustainability, nor did they demonstrate a desire to add to, or strengthen, their skill set. Finally, most of the behaviours and activities these participants practiced were relatively simple to implement, i.e., those which did not require the individual to overcome any substantial barriers.

The second group experienced a fundamental shift in their knowledge, thinking and actions related to matters such as consumerism, fashion and clothing. For the majority of those who had experienced a transformation, they recalled their path being relatively direct, as they slowly expanded and modified their meaning schemes over time, leading to a gradual transition to a more sustainable lifestyle. Most did not recall any great struggle or strife in their movement towards clothing sustainability. However, for the majority of these participants, fashion, clothing and consumption were not central to their childhood or adulthood.

The third group, the *strugglers* first mentioned in Chapter 4, were those that had moved beyond meaning scheme changes. They were engaged in discourse and critical reflection and were experimenting with new roles, relationships and activities, but they had not yet wholly embraced clothing sustainability. Their newer perspective on sustainable living was at odds with their long-standing perspective on clothing. They

were able to think and act sustainably in many other areas of their life, such as reducing, reusing, recycling, composting, using more sustainable modes of transportation, purchasing more sustainable food options and making wholesome foods; but clothing sustainability remained a challenge. It should be noted that although these participants are on the transformative journey, this does not necessarily mean they will be successful. Although two of those falling into the aforementioned “transformed group” had once themselves been strugglers, this does not mean that these participants will also undergo a transformation. Their progress may plateau or they may revert back to well-established unsustainable clothing practices.

Many participants in this study received pleasure from admiring clothing and developing their own personal style, which in and of itself was not a problem. When appreciation for apparel was limited to simply observing clothing or combining their limited wardrobe in unique ways, there was no struggle. It was when their delight extended to shopping for new apparel that internal battles were waged. Their shared sentiment, “I love clothes” (03F), tended to lead them to shop often and to buy a lot. Needless to say, their perspective regarding clothing was highly incompatible with their more recently acquired perspectives on sustainability. The contrast between this behaviour and their sustainability values resulted in them feeling frustrated, as is documented by 11F, who said, “I struggle with it all the time. I like fashion, but it’s disposable. So it’s this constant conflict. I am not sure how you deal with it ... how do you marry the two and feel good about it...?”

Through their journal entries, the strugglers were able to elaborate their difficulties. Forward progress was discussed with much pride; however, there were also a number of

entries documenting a “one step forward, two steps back” scenario (11F). For example, participant 03F proudly described a situation in which she avoided new purchases. “I managed to resist buying a bunch of new clothes before starting my new job, but it was hard!” Unfortunately, a month or so later, she described the aftermath of a clothing and accessory shopping spree for her children, “My mother’s teasing and smugness about my non-eco, impulse shopping, combined with the gross smell of the off-gassing backpacks left me feeling depressed and annoyed.”

When the strugglers were able to resist acting upon their existing clothing perspective, they saw it as an accomplishment, feeling pride in moving away from what they now regarded to be a flawed point of view. On the contrary, when participants succumbed to their strong desires to buy clothing, going against their sustainability beliefs, my study found that they experienced one of three different reactions (or some combination thereof). First, some devised justifications for their behaviour, such as 18F, who after having purchased a new purse stated, “the feeling I have about it is somewhat guilty, and my job is to use it till it absolutely wears out”. After a shopping spree, which included buying clothes from China, 11F commented, “I’ll tell myself that it was at least shipped here by boat, and not by air!” and 35F in discussing her trip to L.A. stated,

I feel that I have to be cautious while I’m here; not just being careful in the quality and quantity in which I choose to buy clothing, but also not to beat myself up for consuming as long as it’s in healthy moderation, right? I think that question is rhetorical, or perhaps I’m just looking for justification for my impending fall from grace.

Secondly, some participants sought to reverse their actions by returning the clothing. Such was the case with both 18F and 34F, who had discussed in one journal

entry making a sizeable clothing purchase, and then in the subsequent entry indicated that they had returned many or all of the items. 18F noted, “I did return the clothes to MEC, just because I didn’t really need them, and the dress didn’t have great material, and my jacket still functions well”, while 34F wrote,

I ended up returning about ½ of the items I ordered from J. Crew last month ... I would like to not order online from J. Crew, because I don’t think their practices are good. I do it because it is easy and I really like the way their clothes look. I am trying not to look at their website!

Thirdly, most felt remorse over their actions that conflicted with their sustainability beliefs and values. Two of the participants commented:

I love fashion/clothes. I don’t love that I have to spend money on it/them, that it/they are disposable, that the way it/they are manufactured is likely not in line with what I think is right. So while I shop, there is always a little bit of guilt (sometimes more, sometimes less). (11F)

I do like fashion and sometimes I get really excited and I want to go out and buy some clothes and then when I do, then I feel guilty and I go, ‘oh, I really don’t need this’ and ‘what have I done’. (10F)

Although pride and guilt are opposite reactions, it would seem that they both served to reinforce the participants’ amassing meaning schemes regarding clothing sustainability, thereby contributing to a potential shift in their overall perspective on clothing. For most strugglers, not only did their Sociolinguistic Codes related to clothing clash with their sustainability perspective, but so did their Psychological Codes¹⁹. It was

¹⁹ Chapter 2 discussed that meaning perspectives “serve as one of three sets of codes significantly shaping sensation and delimiting perception, feelings, and cognition: sociolinguistic codes (e.g., social norms, ideologies, language games, theories), psychological codes (e.g., personality traits, repressed parental prohibitions which continue to block ways of feeling and acting), and epistemic codes (e.g., learning

observed that some of the primary drivers for shopping were psychological in nature. They believed shopping gave them pleasure, provided stress relief, offered them comfort or filled a void. For example, one referred to receiving an intense rush or thrill from shopping, "... once in a while when I am shopping, I'll find a few good things which leads to "shoppers' high" and then I am grabbing everything and it's a successful trip" (03F). The participant who had been inspired by a friend to commit to a one year shopping hiatus, often used shopping as a means of managing stress, and as a result, her initial efforts to cease shopping were unsuccessful. She described the day it failed,

So I lasted for about ... two and a half months and I broke down and it was just not even for a good reason. It was I had a really, really bad day and I went out and I bought something because I unfortunately, also subscribe to "retail therapy" and I cracked. I just had a terrible day and I just cracked. (35F)

One struggler often used shopping as a diversion, an excuse to avoid unappealing tasks. Another referred to it as a hobby, while a third expressed that shopping was something to do, "I would say I probably shop for necessity less than just being, 'Well, it's Saturday, I am just going to go out and have a look' ... If I don't have anything else to do, as a time-filler" (35F).

Despite their struggles, there were certainly significant strides made by some of the participants during the journaling period as meaning schemes began to change. Participant 35F, who had once subscribed to "retail therapy", re-initiated a 6-month shopping hiatus while recording her entries and wrote this of her experience, "I never thought I could feel such positive feeling *not* shopping". In the follow-up interview, she reported that she had

styles, sensory learning preferences, focus on wholes or parts, or on the concrete vs the abstract)". (Mezirow, 1994, p. 224).

been able to maintain her hiatus for 14-months. 34F also recorded, “It feels like an addiction and this is the hardest that I have pushed myself to reduce my purchases. Despite the struggle, it feels good to be thinking about it. I feel good when I get home empty handed, not having consumed more things that I probably don’t need”.

The end of the six-month journaling period saw three of the participants had moved towards more sustainable clothing practices, another stayed at par, and the last discovered she had a far greater interest in food sustainability. However, even for those who had successfully begun to merge their sustainable living perspective with their clothing perspective, a considerable gap still remained. Whether these participants will in fact be able to harmonize these perspectives remains to be seen. Concluding journal entries provided some insight into the participants’ level of confidence in their latent transformations. As is seen below, 34F feels positive about her current progress and optimistic about her future endeavours. 11F is hesitant to say whether, in the long run, she will be successful, and 03F indicates clothing sustainability is not a significant priority, and as such, I would predict she will not undergo a perspective transformation within the foreseeable future.

Overall, I am spending more time thinking about my lifestyle and my purchases than I did before. I am trying to research products myself instead of accepting at face value how a company places the product. My goal is to continue further on this path to greater sustainability and simplicity! (34F)

... for the purposes of this exercise I wanted to at least have an opportunity to comment on whether or not this experience in journaling about sustainable apparel and all its extensions has changed my habits. And, to tell you the truth, I still don’t know. If I were to lean one way or another, then I would say yes. The experience hasn’t necessarily taught me anything new but rather forced me to confront/acknowledge the things I already know - regularly.

That is, that buying stuff, including clothes and shoes has an impact on many levels. (11F)

This journaling experience has led to clarifying that, for me, food and cosmetic issues are a bigger priority for me than clothes (and I struggle a lot with being consistent and committed here as well). I care more about what I eat and put on my skin than about my clothes. (03F)

7.3.2 Instrumental Learning: Confirmation and Critical Analysis

Learners receive information from countless sources. In the case of this study, participants discussed gaining facts, figures, explanations, suppositions, and demonstrations from discussions, first-hand experiences, formal classes, workshops, websites, blogs, documentaries, observation, books, and products. However, obtaining information does not equate to learning. Mezirow explains that “[n]ew information is only a resource in the adult learning process. To become meaningful, learning requires that new information be incorporated by the learner into an already well-developed symbolic frame of reference, an active process involving thought, feelings, and disposition” (Mezirow, 1997b, p. 10). Although I concur that information must be integrated into our being to have meaning and to be of use to us, Mezirow, through his focus on frame of reference, does not take into account the importance of instrumental learning and perhaps overplays the significance of communicative learning. The transformative learning literature has explored in detail how information is transferred to our frame of reference. However, theorists and researchers have said relatively little about the instrumental learning process, specifically regarding how information is converted into skills and knowledge and integrated into our base of knowledge.

Fortunately, my study has provided some insight into the sub-processes involved in this form of learning. Interview data at least partially indicates that the processes underlying instrumental and communicative learning are relatively similar. Since both processes are seeking to “assess claims” regarding a particular aspect of an experience, verification and evaluation are essential to each of them. As already established, verification in communicative learning is realized through discourse, which entails learners attempting to affirm their interpretations about a particular communicator or a communication experience. Conversely, in instrumental learning, the learner means to confirm the actual contents of the communication. Is the information accurate, valid, and reliable? Is the skill learned effective, efficient, and valuable? Is the identified cause and effect relationship identified accurate? For the purposes of this discussion I will refer to this sub-process as *confirmation*.

Confirming what has been learned can take many forms, including conducting research, performing experiments/hands-on exploration, or engaging in observation. With respect to research, participants discussed watching documentaries, visiting website and blogs, reading books or engaging in conversation with trusted individuals. Two of the participants discussed some of their past research efforts,

... when I was researching diapers for my children, I intensively treated it like a graduate school project. So, I checked sources. I made sure it was accurate. Because at first I was being seduced by what the diaper companies were saying about their product. And then I kind of got past the whole advertising seduction and started looking into the actual information. (03F)

I’ve definitely read a lot of articles that have been written about American Apparel and both the good things that they’ve done, but also the bad things that they’ve done. So, that’s one example where I’ve been interested in that.

But usually its hearing about the company first through word of mouth, or hearing about an issue first through word of mouth, then seeking out more formal information. (34F)

Participants also engaged in experimentation (trial and error, hands-on exploration), in which they tested cause-and-effect relationships, such as the success of a particular construction technique or the effectiveness of a “green detergent”. For example, 19F recalled her mother telling her to always stick to a sewing pattern and never deviate, advice she has not followed as she expands her skill set,

Nope, I’m trying new things. I kind of make up my own patterns. I have an outfit that I like. I just cut out a skirt yesterday that I liked and I’ll be working on that. I just kind of sew and cut until it fits the way I want it to.

A learner may also confirm an experience through observation. For example, they may watch another person performing a skill in order to confirm what they have already learned.

As they engage in confirmation, learners also critically analyze the initial information they have encountered, the results of the confirmation process, and their existing knowledge related to the information. They then compare and link what has been learned with what they know and assess whether the information gained is of significance or use to them. Thus, rather than critically reflecting on the intangible (values, beliefs, feelings and motivations), the instrumental learning process is analytical in nature, involving evaluations of physical or rational matters. I refer to this process as *critical analysis*. This process allows learners to convert new information into skills and knowledge, such as a consciousness regarding the chemicals used in textile production or

an understanding of the relationship between cheap clothes and the abuses of overseas garment workers, and to then integrate this knowledge into their knowledge base.

As was the case with discourse, participants did not always engage in the confirmation process. Reasons cited for their failure to participate in these processes included time constraints, uncertainty as to where to find supporting or opposing information, trust in the communicator and an overall lack of interest in the subject matter. Despite not engaging in confirmation, many still did critically assess the information they attained, comparing it to their existing knowledge and understandings and evaluating its value and potential contribution to their overall knowledge. This was most often noted in cases where participants had significant general environmental knowledge, and rather than engage in the confirmation process, they created new linkages and understandings of the effects of clothing by drawing on their existing knowledge. One such case was that of 28F:

In the past I would actively seek [information] out with a major goal to understanding how I could have better or less harmful impacts on the world around me and also with the goal of raising awareness within my peers and others around me. Now, I'm way more passive. I spend more time considering the impact of my actions in my own head and making things up to justify my choices. So I don't actively go out and back up the information to say this choice is more sustainable than that choice, I'm basing it mostly on previous knowledge and previous experience and I guess extrapolations that I then make based on my previous knowledge. So, I make an assumption that there are a lot of chemicals affecting an indigenous population because of dyes and pesticides and fire retardants in new clothing without having a statistic to back to that up. I don't have a source for that and I don't know that that's necessarily true, but I assume that based on knowledge around how our world is functioning around land use, around indigenous rights, around where chemicals are dumped, around human rights activists being killed because of speaking up for their environmental needs, you know all those things.

Thus, even though she has not confirmed such incoming information, she is comparing it against her existing knowledge; if it corresponds, she integrates it into her knowledge base and acts upon it.

As was previously discussed, new values, beliefs and attitudes are integrated into our frame of reference, a repository of meaning schemes and perspectives, which we use to help interpret our experiences and guide our actions. I propose that, being an important aspect of our being, our knowledge and abilities would also be integrated, not into our frame of reference, but into our *cumulative knowledge*. I use this term to describe our amassed mental and physical skills, knowledge and cognitive understandings. I further suggest that Mezirow's ways of learning, discussed above, are equally applicable to cumulative knowledge. That is to say, new skills, knowledge and understandings may be formed; existing skills, knowledge and understandings may be refined and strengthened; and previously learned skills, knowledge and understandings may be amended. In terms of new additions to participants' cumulative knowledge, some of the new knowledge and skills discussed included an awareness of where to source sustainable apparel, basic knitting techniques and an appreciation for product lifecycles. The refinement or fortification of existing knowledge occurred through a variety of means, including practicing a skill to improve one's proficiency (e.g., sewing, knitting or effective second-hand shopping); conducting research to learn more about a particular issue (e.g., different ways to create repurposed clothing, how to support efforts to combat sweatshops, or the effects of cotton cultivation); or analyzing existing knowledge to reveal an understanding not previously recognized (e.g., conserving energy by hanging clothes to dry has not only financial benefits, but also environmental benefits).

Cumulative knowledge may also be modified if a learner is exposed to new information which indicates that their technique is flawed, their existing knowledge is erroneous or their understanding of a concept or relationship is incorrect. For example, one individual discussed shopping in a community which had a two-tiered pricing system, meaning people with a lower income would be charged a different price to accommodate their limited means. The experience altered 20M's concepts of economic system. He noted,

... in the stores they had where, depending on your income, up to your conscience, there was two prices, and so you could pay more or you could pay the low income price, and it was totally up to you to decide ... it was a real eye-opener. This is here, this is in Canada, this is right now. This isn't a potential, it's happening. Again it just shows it can happen; it's not impossible. It's not even hard.

7.2.3 Relationship between Instrumental and Communicative Learning

Before concluding this discussion of instrumental and communicative learning processes, it should be noted that although these two types of learning have been presented as separate processes, more often than not they are both present during a learning experience (Diduck et al., 2012; Mezirow, 1996). The results of my study indicate that instrumental and communicative learning may occur simultaneously, may serve as triggers for one another, or may interact and support one another. A new experience or piece of factual information may trigger both instrumental and communicative learning at the same time. Drawing on the American Apparel example discussed earlier, several participants discussed learning of the company's negative attitudes toward women, spurring these participants to seek out more information in order to allow them to confirm and analyze the anecdotes they had heard (instrumental

learning). A number of participants also concurrently engaged in discourse and critical reflection, specifically examining their attitudes and feelings about this company's practices, comparing the retailer's positive and negative practices, and exploring their own personal desires to purchase the garments (communicative learning).

Instrumental learning may also serve as a trigger for communicative learning. The confirmation and critical analysis processes may lead a learner to reflect critically on the assumptions underlying their newly incorporated knowledge or understandings. As information is verified and further facts are uncovered, participants may begin to explore what such information means to them; in particular, how it enhances or changes their understanding of themselves, others or society. It should be noted that it was not uncommon for participants to possess knowledge of the harmful aspects of clothing production, yet not have any strong meaning schemes related to it and not be engaged in action to countermand the situation. I suggest that, in part, this may be because they had not yet engaged in discourse or critical reflection on this knowledge, and therefore had not yet given it personal meaning. Vice versa, communicative learning may trigger instrumental learning. Discourse and critical reflection may peak one's interest in a particular subject matter, which the learner may pursue further through confirmation and critical analysis. An example of this was 03F, who earlier voice having had concerns about the environmental impacts of diapers, compelling her to engage in research to determine the best way to alleviate those concerns.

Finally, these two forms of learning interact and support one another, particularly in the case of discourse. Instrumental learning is dependent on discourse to verify whether the sources used for confirmation are credible and trustworthy, e.g., is the speaker being

truthful or are their opinions biased? Likewise, discourse is dependent on instrumental learning as our research, problem-solving and communication skills reside in our cumulative knowledge.

7.3 Case Study

This final section presents a case study of 35F, one the strugglers. Of all the participants, the strugglers provided the greatest insight into the learning process. Their childhood foundations ranged from moderately to very unsustainable, at least in the case of clothing, resulting in a significant clash with their sustainability ideals. This particular case draws together all the elements of the transformative learning process as described in both this chapter and Chapter 6. It demonstrates how, over her lifetime, 35F has continued to evolve her thinking and practices, moving ever further away from her unsustainable roots. It begins with a brief look at both her unsustainable foundation (childhood) and her transitional period (late teens to early twenties), a stage of concentrated learning in which a host of participants were first introduced to sustainability concepts and actions. It then documents her learning throughout adulthood and concludes with her most recent learning experiences and her struggles with conflicting meaning schemes/perspectives.

35F was raised in a very wealthy household and in a social circle in which conspicuous consumption was the norm. She recalled the following,

I grew up in Hong Kong and in Toronto and in a family and a society and a culture where consumerism is like, consumption is just encouraged very much. Where I remember being twelve and my friends being like “oh, is that

your Gucci bag?” and “oh mine’s Coach” and it’s about the brand and it’s about the money, it’s about what you have and I remember having a fur coat when I was four years old. That was the world I grew up in and I was with my family all the way until I was sixteen and that was the only world that I knew.

In her first year of university, living in Ontario on her own, she formed friendships with a group of young women with similar attitudes regarding shopping and the value of clothing. A strong support network encouraging her to shop, coupled with an ample allowance, led to rampant clothing consumption and reinforced her unsustainable perspectives. She explained,

[T]he girls that I lived in res with, they were more fashion conscious ... definitely thought about clothes. Because when I was in university I was living on my own for the first time ever, so I got a lot of money from my parents and my parents were kind of like an endless pit of money for me and it was just never a question of if I had enough money. Whatever I wanted I could buy and I could buy it whenever I want ... so it was just like a free for all. So, that was definitely when my clothes in my closet and my spending really sort of exploded. I just remember, I would go to the mall and I would come back and one of my friends who was paying their way through university and she would come back with a shirt and I would have four pairs of jeans and two t-shirts and a purse and makeup. So, I was definitely very excessive in my spending.

It was also during her transitional years that she was exposed to the notion of sustainability. For fun, she joined a production of the *Vagina Monologues*, where she was introduced to some very different concepts and ideals regarding clothing and life. She stated,

I got involved with the *Vagina Monologues* in the winter of second year. So that was when I met these other worldly women who just dressed very differently and just had very different priorities to me and my friends. They

were definitely like the kind of hippy, socialist kind of girls, where they weren't dressing to go pick up boys at the bar ... it just opened my eyes to a different lifestyle, which I honestly believe that I was not aware existed in this world.

As Mezirow describes, transformations are typically filled with difficulty. In the case of 35F, exposure to novel world-views, the creation of new meaning schemes and the formation of new relationships caused conflict with her pre-existing perspectives and relationships. She felt as though she was straddling different worlds, each pulling her in a different direction. She shared feeling the need to balance,

... my friends in school that were very into what they were wearing and we all wanted to look good going to the bar and then there were the girls who I met through the *Vagina Monologues* who were hippy, granola eating kind of girls and then I had my friends from Hong Kong which were like Gucci buying, like Prada wearing, everything was brand new ... So I think that is why it took me awhile to move to the left of the continuum.

Friendship groups were not the only source of tension; there were also conflicts with her parents over changes to her consumption patterns. As will be described in Chapter 8, her mother had a very negative reaction to her declining a shopping expedition during a trip home, telling her "it was like she wasn't a girl anymore".

Through her sustainably-conscious friendship group, 35F learned a great deal about feminism, volunteerism, and natural and organic products. She also learned about clothing-related matters, including sustainably produced and organic clothing, local designers, higher-quality apparel, and clothing acquisition. Regarding the latter, she explained, " ... primarily they were all vintage shoppers and ... shopped at Value Village

and that sort of thing, which I had, for many years, a block towards Value Village. My parents would disallow me from shopping there”.

As seen from this statement, instrumental and communicative learning regarding second-hand clothing led to a conflict with her established assumptions about used apparel. Even though introduced to second-hand shopping at this time, she did not in fact engage in the practice for several more years.

In the mid-2000s, she moved to Winnipeg with her partner. Although at this time she began to purchase natural beauty products for the first time, her dedication to other sustainability-related issues, such as organic foods, volunteering and clothing sustainability, waned. “Winnipeg kind of stifled me a little bit in terms of where I felt like I could have gone if I hadn’t left [Toronto]”. In part, this was related to the fact that the selection of vintage and sustainable apparel was woefully lacking. However, the most significant factor was, in all probability, the loss of her support network, the importance of which has been discussed earlier and which will be addressed again in Chapter 9. Her partner did not share the same beliefs as her about sustainability, which presented her with many challenges to engaging in such practices. She noted that, “he was not really interested in paying the additional price for organic food. He was a student at the time so he was just not really open to it.” However, when their relationship ended, she seemed once again attracted to the ideals of sustainability, and began “eating solely organic food”. A new friendship and a significant trip helped stimulate dormant meaning schemes and inspire new practices. She had this to say about these experiences,

... when we broke up and I moved out on my own and one of the girls who really sort of took care of me ... her and her partner go to a lot of sweat lodges

and they do a lot of Value Village wear and that sort of thing. ... And they were very sort of non-luxurious people. They were very back to basics kind of people. So, I think they just kind of grounded me a little bit. They sort of reminded me of the friends that I had in Toronto that I kind of felt like I was missing in Winnipeg.

I actually was at a yoga meditation retreat for the first six days in Sierra Nevada and the woman ... fed me organic raw food the entire time that I was there and that also was a very, very big part of like, when I came back I was straight up organic and felt strongly about it ... So for a week I ate fantastic vegetables and organic milk and raw milk, you know, that sort of thing which was sort of unknown to me.

Being able to discuss sustainability matters and practices, thereby gaining new ideas and support for existing notions, was vitally important to both maintaining and fostering sustainability.

When I first met 35F, she had just recently rekindled her relationship with her ex-partner. The renewal was very disorienting, leading her to question many aspects of her life, clothing consumption included. She said,

I was going through a difficult time, just kind of emotionally in adjusting to being back together and dealing with some of the issues that we had as to why we broke up and all that kind of stuff. So I was just emotionally very unstable and I think that is where it became really alarming to me that “retail therapy” was a part of my defence mechanism and my coping mechanism. So, you know, that in conjunction with therapy, I think it sort of came to light that it was something that I needed to get under control.

Her own words revealed that the emotional pain caused by her separation and subsequent reconciliation with her long-time boyfriend triggered the learning process. This was her initial realization that her coping mechanisms no longer worked. In other words, she came to recognize that a component of her frame of reference was deficient,

and with the assistance of a therapist, she began to critically reflect and explore these ineffective meaning schemes/perspectives. Thus, what was once perceived to be a positive, enjoyable experience, shopping began to assume negative connotations, as she began to come to terms with the fact that shopping was not simply about the act and the product obtained, but also involved deeply rooted Psychological Codes. This realization, together with the inspiration provided by a friend who had successfully refrained from consuming clothing for a year, led her to initiate a 1-year shopping hiatus. She expressed “I just remember being so completely astounded that somebody was able to do that. So [my friend] was like a big source of inspiration that was a plausible solution that I could try because she had just finished it.”

This brings us to our initial interview. When I first met with 35F, she had just recently “fallen off the wagon”. Her first attempt at refraining from shopping was relatively short-lived, lasting only six weeks. The aforementioned Psychological Codes driving her to consume were responsible for derailing her efforts. She explained that a difficult day at work had led her to a shopping spree. However, she decided to persevere and attempt to once again halt her shopping, but this time for a more modest six months. The journaling exercise caught the initiation of this second attempt. Her entries, which have been used throughout the results chapters, documented her preparation for this hiatus, including practising (i.e., avoiding shopping while on trips), engaging in discourse with friends, and reflecting on her thoughts regarding shopping, consumerism and its societal effects, relationships, desire and wants, and personal strengths.

When we met for our second interview she informed me that she had been successful in her second attempt. Easily making it to six months, she decided to continue to challenge herself and went an additional eight months without buying clothing. Once again shopping, she shared that she had been able to keep her purchasing within reason, focusing on what she needed rather than what she wanted. She also discussed finding a good local tailor to repair her garments when needed. Thus, for least the time being, perhaps even permanently, she has been able to live up to her sustainability ideals. I recently learned that 35F has moved back to Toronto. It would be interesting to know the impact this move, in particular reuniting with old sustainably-oriented friends and having access to more retailers – sustainable and otherwise - will have on her sustainability journey.

7.4 Chapter Summary

The transformative learning process, specifically the domains of instrumental and communicative learning, was the focus of this chapter. The first part of this chapter was dedicated to exploring the types of learning outcomes attained by participants. With respect to instrumental learning, the theory and data shaped three categories of outcomes - skills, knowledge and cognitive understandings. Similarly, the literature and findings revealed three communicative learning themes - insight into one's own values and intentions, insight into the values and intentions of others, and insight into societal values and goals. Ample evidence was found for each of these themes, including acquiring knitting skills, extending an understanding of the adverse impacts of cotton production,

realizing a personal dependency on shopping, and developing an awareness of the influence of the fashion industry on societal consumption.

The second part of this chapter sought to better understand how an individual moves from the trigger events described in Chapter 6 to the aforementioned learning outcomes, which were eventually incorporated into their frame of reference or cumulative knowledge. Refining, creating, strengthening or changing a meaning scheme/perspective requires engaging in discourse and critical reflection, processes that have been well-documented in the literature and partially supported by my research. The process for integrating new proficiencies and cognitive understandings into one's cumulative knowledge involves engaging in confirmation and critical assessment. In other words, new skills or knowledge are gained and enhanced through a process of confirming a particular fact, testing a new approach or verifying an understanding by way of experimentation, research, or observation. It also involves critical analysis of the facts, conjectures and results obtained from the confirmation process, comparing them to one's own knowledge, others' knowledge and commonly-accepted ideals. The confirmation, assessment, and integration of factual and practical understandings into cumulative knowledge is an element of adult learning that cannot be glossed over, particularly in the case of sustainability, where skills, knowledge and understandings are vital to advancing ones practices, creating awareness in others, and questioning our established systems.

Another important finding was related to frames of reference. Based upon the interview data, I sought to elaborate our understanding of meaning schemes and meaning perspectives, drawing attention to the very complex nature of our frames of reference. I have proposed that there are myriad layers of interacting and overlapping meaning

perspectives, growing in scope with the addition of each new meaning perspective. In addition, meaning schemes are not limited to a single meaning perspective. They too interact and overlap, contributing to many different meaning perspectives simultaneously.

Finally, this chapter explored the relationship that exists between communicative and instrumental learning. The learning in these domains may occur concurrently (i.e., independently, yet transpiring at the same time) or they may occur in unison, together guiding a learning experience. Instrumental and communicative learning experiences may also serve as a trigger for one another.

Chapter 8

CONTRIBUTING TO CHANGE: SOCIAL ACTION

8.0 Introduction

Mezirow's theory of transformational learning, while recognizing the overall importance of social action and acknowledging that such action may arise as the result of a learning experience (Mezirow 1989, 1991), scarcely develops the concept or its relationship to transformative learning. Many researchers and theorists, believing that societal critique and social action should be the inevitable outcome of adult learning, have identified Mezirow's limited exploration of social action as a significant shortcoming of his theory (e.g., Collard & Law, 1989; Hart 1990).

In response to his critics, Mezirow explains that the TLT is intended to be a comprehensive theory of adult learning and not all adulthood learning culminates in social action (Mezirow, 1996). He explains that "... although social action is crucial, it cannot be the only goal of adult learning and education ... there are diverse forms of perspective transformation – sociolinguistic, epistemic, and psychological – and each has its own form of praxis" (Mezirow, 1991 – p. 211). In other words, learning may be of a personal nature, leading to a better understanding of oneself (psychic perspective transformation), or it may alter the way in which one learns and processes knowledge (epistemic perspective transformation) – neither of which involve the need to pursue social action (Mezirow, 1989, 1994).

Only Mezirow's third form of perspective transformation – socio-linguistic – is believed to serve as a catalyst for social action. A transformation of one's socio-

linguistic codes involves an exploration and evaluation of “social norms, language codes, ideologies, philosophies, and theories” (Mezirow, 1994, p. 228). It should be noted, however, that Mezirow does not state that learners who have undergone a socio-linguistic transformation *will* engage in social action, only that they will be inspired to do so. He maintains that “[t]ransformative learning which involves sociolinguistic perspectives will result in learners *motivated* to take collective social action to change social practices, institutions, or systems” (Mezirow, 1994, p. 227 , italics added). Mezirow explained that learners often encounter barriers which may prevent them from following through on a desire to act on their transformed frame of reference. He identified three variables which may hinder participation in social action – situational constraints, psychological factors and a lack of knowledge or skills (Mezirow, 1989, 1991).

The focus of this chapter is social action. Drawing on the study findings and related literature, I propose a definition of this concept and discuss its key variables. I also expand upon the barriers identified by Mezirow and consider the difficulties associated with overcoming such challenges. Finally, I consider the factors that are required to move from learning to social action, proposing a model to depict the process.

8.1 Nature of Social Action

This first section explores the purpose, role and characteristics of social action, from both a general perspective and with respect to clothing sustainability. It defines social action and explores the key aspects of this definition, namely oppressive systems, individual and collective social action, and praxis. It concludes with a presentation of the key variable of social action as identified by the data.

8.1.1 Defining Social Action

Drawing on the works of Freire, Habermas and Mezirow, as well as literature from the emerging fields of social learning and critical consumer education, a working definition of social action was presented in Chapter 2 which stated: *social action is informed action taken by an individual or group(s) for the purposes of bringing about a change in society which they deem beneficial to the welfare of human beings, the environment and/or other species.* In large part this definition was proved valid by the findings of this study. The vast majority of acts discussed by participants were preceded by some form of learning and a subsequent shift in their frame of reference, and thus, these participants likely would be considered informed. The acts were undertaken by individuals, couples, families, small groups, informal collectives and formal organizations. In other words, actions were undertaken as individuals, as well as in varying sizes of collectives. The concerns and motivators prompting action related to matters such as protecting the rights of workers, building a strong community, preserving our natural resources, and preventing the abuse of animals. All of these support the notion that social action is undertaken with the intention of safeguarding humans, the environment and other species.

However, analysis of the data reveals a shortcoming in this definition, at least in the context of sustainability. Specifically, the data indicated that not all social action aimed at placing society on the path to sustainability necessarily requires a system *change*. Actions may be taken to *maintain* positive elements of the existing system, which are often practices and beliefs threatened by modern technologies, attitudes and lifestyles. In terms of clothing, examples included hanging clothes to dry, sewing clothing, knitting

clothing and accessories, and buying locally made products. There were also a number of examples of other sustainable lifestyle practices, such as food preparation, growing fruits and vegetables, composting, and making soap. Actions may also seek to *restore* practices and attitudes that have been effectively lost to the majority, if not all, of modern society. One example of restoration is the production of specialty textiles (e.g., processing raw wool, spinning yarns, looming fabric), a skill rarely learned or performed today. For one of the participants involved in this unique practice, a key motivator for fabricating textiles was in fact a concern that these traditional skills might one day be forgotten entirely.

This participant commented on a project her mother-in-law was involved with,

In Quebec there is a movement right now where they are collecting the fabric craft knowledge of this generation of these older women and documenting how to weave, how to spin, how to do embroidery, how to do all of these things and they are compiling an encyclopaedia of Quebec handcrafting, so those traditional skills that came over with the pioneers into Quebec, going as far back as Cabot, are not being lost. You know, basic dress making - how to cut a pattern, how to look at a person's body and where to measure so you can make a pattern to make a pair of drawstring pants. But, it's all the pioneer skill level and [my mother-in-law] has been asked to write two chapters of this book - one on loom weaving and the other on knitting.

With regards to other sustainable activities, one such example was related to rearing farm animals, such as chickens and goats, an ability essentially lost to urban dwellers. A few of the participants discussed teaching, learning or desiring to learn these skills. 09F was an example of one of these participants,

We just recently bought eight chickens with another couple. We just slaughtered four of them a month ago and I have two in my freezer ... [I] only know how to do that because of my grandmother and my mom. Yeah, nobody else had ever [done] that before. We did it in probably the most humane way we possibly could. But everyone else was like, "Okay, now you teach us how

to do the plucking.” The plucking and the taking off of the oils, all that junk. So, it was a cool experience.

Finally, actions may be undertaken with the intent of creating *alternatives* to the existing systems, rather than trying to work within the current socially-derived framework. Such actions often involve an individual removing themselves from the present social structures and living an overall alternative lifestyle. Two of the participants discussed living in eco-communities, with one talking about building their homes from straw and growing organic vegetables. In terms of clothing, one alternative practice mentioned was the wearing of communal clothing. Two discussed a heap of clothing from which they would choose their attire each day. One of these participants was 24F, who stated this of the experience:

... there was sort of a pile of clothes in the basement that you could pick and choose from or just even sharing clothes between people in the house. Somebody said, “Oh I love these shoes, can I borrow them?” and then kind of having that free flow of borrowing.

Although within some families, or between some friends, this type of sharing may be routine, within mainstream society such a practice is not common within larger, less intimate groups. Regarding other sustainable practices, one example of taking an alternative path was provided by 20M, who hoped to bypass the municipal water system by constructing a filtration system using an old bathtub (and algae) to clean his home’s greywater.

As a result of this expanded understanding of social action for sustainability, I propose a modified definition of social action. *Social action refers to informed action, taken by an individual or collective, against an oppressive system, for the purposes of*

protecting or enhancing the welfare of humans, the environment and/or other species.

The aforementioned goals of social action will be included in the discussion of social action variables below.

8.1.2 Oppressive Systems

Through their writings, both Friere and Habermas' explore how oppressive powers manipulate and warp our social structures. In his works, Friere describes the principles of oppression, which address how the elite seek to conquer, manipulate, invade, divide and rule socio-cultural systems (Friere, 1970/2000). Habermas' theory introduces the notion of the System, a term he uses to refer to our collectively-generated social structures (e.g., political, economic, and cultural systems). He explains that due to the System's orientation towards wealth and power, it distorts, coerces, and seeks to control the Lifeworld, our collective frame of reference, which serves as our basis for communications and actions (Habermas, 1984; Mezirow, 1991; Pietrykowski, 1996). The following sub-section will address how, through the corruption and manipulation of our shared frame of reference, the market system oppresses North American society.

In our culture, consumption is no longer simply a way to fill a need; it is also promoted as an approach to attaining happiness, freedom and prestige (McGregor, 2001, 2002, 2005b). As has been seen in this study, shopping has also become a distraction or form of entertainment, a technique for coping with stress and difficult situations, and a method for bolstering mood and self-esteem. Public figures are amongst those perpetuating the merits of shopping and related attitudes, behaviours and values. Tammy Faye Bakker is one such figure, stating, "I always say shopping is cheaper than a

psychiatrist.” Other famous quotes on shopping include one from Bo Derek, who claimed, “Whoever said money can’t buy happiness simply didn’t know where to go shopping” and another from Joan Rivers, who expressed her appreciation for shopping by saying “Thank God we’re living in a country where the sky’s the limit, the stores are open late and you can shop in bed thanks to television”. Not only have such assumptions and attitudes permeated our socio-cultural system, they have also invaded our interpersonal relationships, with some individuals in our lives encouraging or pressuring us to consume.

Market system manipulations and the public’s eager acceptance of consumerism has led to exceedingly unsustainable consumption practices, including frequent shopping excursions, buying excessive amounts of goods, purchasing products which are not needed, selecting products with a short-lifespan or built-in obsolescence, and prematurely disposing of goods in an unsound manner (McGregor, 2002; Schoot Uiterkamp, 2007; van Koppen, 2007). In turn, these destructive patterns have led to a further corruption of the Lifeworld, with participants and researchers noting that these forces are suppressing individuality and creativity, devaluing apparel, promoting individualism and the importance of fulfilling personal desires, decreasing our sense of community, and jeopardizing the well-being of disenfranchised workers and the environment (McGregor, 2001, 2002; Cheek & Easterling Moore, 2003).

All participants in Phase Two (and some of those in Phase One) had given consideration as to how these systems limit actions, distort communication, hinder society’s movement towards sustainability and dominate our socio-cultural foundation. Most discussed the corruption of our shared perspectives and practices as being

perpetrated by the fashion industry through the use of fear tactics and enticements in order to increase clothing sales. The fear of not fitting in if you are wearing the wrong clothes or the promise of happiness if you buy the right garment was well described by 28F,

... the idea that we're all really stuck on shopping and that we need to shop, shopping makes us feel good, shopping makes us feel better, it's a treat, you're going to do something nice for yourself and your going to go buy a new outfit. That kind of thing. Shopping adds self-worth, so all the issues associated with that and how that is a really corporate-driven value, that's been taught to us very intelligently...

07F commented on the distortions created by the fashion industry, stating:

Well, I think the overall, "you're not pretty unless you've consumed," is destructive on a personal level and on the environmental level. I would say that it is tragically flawed. I think if it was geared down quite a few notches it would be a lot better and just focused on the art and the aesthetics of the whole process instead of the image and making money process.

29F describes how the fashion industry's drive for wealth results in abuses and manipulations. She shared,

Well, I mean it's like any sort of business - that whole idea of wanting people to consume more and as much as possible because it's a business and people want to make money and, again, that's where the cheap labour and labour abuse practices come into play. That's a definite concern of mine and I think that the fashion industry plays on people's insecurities and that whole idea of, well if you just own this you'll be popular, you'll be liked. It's like somehow how you dress can sort of transform you as a person and, yeah, I think that's really dangerous.

Thus, consumerism is the oppressive force to which those engaged in clothing sustainability seek to overcome through their actions described in Chapter 5.

8.1.4 Individual and Collective Social Action

Friere and Habermas' notions of oppression are clearly reflected in my study. However, their approach to combating these oppressive forces is far narrower than that revealed in my research. To overcome ones "oppressors", these theorists agree, as do many other researchers (e.g., Blackmore 2007; Finger & Verlaan, 1995; Steyart & Jiggins, 2007), that social action is a collective enterprise, not an individual one. Finger and Verlaan (1995), in discussing large-scale environmental problems, claim "there is no individual way out. The way out must be a collective endeavor" (p. 505). As such, much of these theorists' and researchers' work focuses on how groups communicate in order to develop and enact a plan for action. Throughout their writings are terms such as negotiate, interact, mutual, organization, unity, and cooperation. Thus, their interpretation of social action involves individuals, within a group, engaging in dialogue and negotiations in an effort to come to a common understanding of the issue at hand, thereby laying the ground work for the development of a plan of action.

Although I agree with many elements of their positions, overall, I find them limiting in that they do not account for *all* forms of social action. Following my research findings, I contend that the "social" in social action relates to social change, maintenance or restoration, not that the action necessarily be a social undertaking (i.e., activity performed collectively). In other words, social action does not necessarily entail a group

taking action (collective social action), it may also refer to action carried out by an individual (individual social action). This is a notion shared by Mezirow, who in his works about TL and emancipatory education, wrote that learners may take “individual social action (writing your congressman, financially supporting a cause, changing your vote, changing relationships within a family or a workplace) or group political action” (1990b, p. 358).

Sustainability requires the effort of all players – industry, government, non-government organizations, communities, families and individuals (Bubolz & Sontag, 1993; Shaw et al., 2006). Without individuals shifting their perspective regarding sustainability and changing their personal practices and behaviour, our journey towards sustainability will be unsuccessful. Authors, writing from perspectives such as human ecology, critical consumer education, and community-based social marketing, agree that a societal shift towards sustainability can be influenced by the actions of individuals. Some of their sentiments include, “the world’s ecological health depends on decisions and actions taken not only by nations, but by individuals and families (Brown et al. 1989)” (as cited in Bubolz & Sontag, 1993, p. 425), “changing individual behaviour is central to achieving a sustainable future” (McKenzie-Mohr, 2000a, 544), and “an environmentally sustainable society ... can only be realized if individual behavior changes substantially” (McDonald, 2006, p. 280).

Many practitioners also believe the individual is an essential component of our transition to a sustainable society. Countless existing and emerging plans aimed at encouraging community shifts towards sustainability, target various players, including individuals. For example, Manitoba’s recently released Green Plan states,

The Government of Manitoba accepts its responsibility as a key player on environmental action, but cannot do it alone. The province needs all Manitobans to take action and do their part. Everyone has a duty to reduce their environmental footprint for the long-term health of the planet and future generations. (Manitoba Conservation and Water Stewardship, 2011, p. 4)

It must be noted at this point that individual social action refers to the planning and execution of a physical act by a single person. It does not, however, imply that the individual is acting in isolation. Mezirow explains that social action may “pertain to working in concert with like-minded individuals as well as collectively to effect cultural as well as political change” (Mezirow 1994, p. 227). In the case of sustainability, the overall premise is commonly understood and through their individual actions all participants in my study were attempting to contribute to the broader sustainability agenda. Thus, while they may have individually purchased and used an environmentally-friendly laundry detergent, they did so in an effort to support sustainability ideals. Similarly, when emailing a company to inquire about their labour practices, while not a part of a larger collective campaign, the individual was doing so for sustainability reasons, thereby contributing to this wide-scale effort to reduce our negative impact on others and the environment.

Although the participants, through their action, sought to contribute to the broader sustainability cause, each had their own unique perspective on the priorities which need to be addressed, the appropriate methods for addressing them and their own roles and responsibilities in striving for sustainability. With respect to clothing sustainability, participants’ intentions and actions varied significantly. For example, 11F was concerned about working conditions in apparel factories and the lack of transparency in the clothing industry. She endeavoured to avoid mass-manufactured clothing, choosing instead to

either buy second hand or make redesigned garments when possible. 35F's concerns, on the other hand, were around consumerism and overconsumption. To combat these, she significantly curbed her clothing consumption. 04F expressed frustration over the excess consumption of cheap, poorly made clothing. To address her concerns, she purchased high-quality garments and took great care to maintain them. In the end, despite these diverse concerns and approaches to clothing sustainability, there is a shared desire to reduce the impact of their clothing and clothing practices.

Although these examples draw attention to acts carried out in an effort to contribute to the greater good, not all acts which reduce degradation or enhance sustainability were in fact conducted for sustainability reasons. Interviews indicated that whether an action performed by an individual constituted social action or another form of action is dependent upon the individuals' motivations for acting. Two of those initially interviewed, but not included in the final study, had not previously regarded their actions as being sustainable until learning of this study. They stepped forward to be interviewed because they engaged in the practices discussed in the promotional materials, but playing a role in moving society in a more sustainable direction was not the reason why. For one, although a fervent second-hand shopper, her intent was to save money and find unique items, not to contribute to sustainability efforts. For the other, a life-long sewer who constructed clothing for herself and her family members, her motivations were enjoyment, making unique items and creating special gifts. For this reason, the data collected from these two interviewees were not included in this study. However, this is not to say that all of those chosen for the study only considered sustainability when acting. As discussed in Chapter 4, participants often had multiple motivators for

engaging in more conscious practices, those that were sustainability based and those that were personal in nature, such as finances, aesthetics, and practicality.

Finally, it was found that individual social action, in the context of clothing sustainability, tended to be expressed as a practice, such as washing in cold water, participating in clothing swaps or repairing damaged clothing, while collective social action most often took the form of a well-organized act or series of acts (e.g., fashion show, a letter-writing campaign or a protest). Consequently, when engaging in individual social action, participants were less likely to give consideration to the impact their behaviour would have on an oppressive system. Collective social action, on the other hand, involved one or more groups cooperatively deciding on what they wish to achieve and formulating a strategy to guide their success; thus, their actions were born of a well-developed plan of action.

8.1.4 Praxis (Informed Action)

In the *Pedagogy of the Oppressed*, Freire considered the interconnected relationship between learning (reflection) and action, emphasizing the importance of equally recognizing and integrating learning and action (i.e., praxis). He stressed that alone, neither is effective at exacting societal change. In terms of my study, participants provided ample evidence of having experienced transformative learning, offering examples of triggers, instrumental and communicative learning outcomes, confirmation, critical analysis, discourse, critical reflection and subsequent changes to their cumulative knowledge and frames of reference. Accordingly, in the majority of cases participants' actions would be considered to be informed (i.e., they incorporated the necessary

knowledge and/or reflected on their meaning schemes prior to taking social action). However, there were certainly incidents in which participants were not engaged in praxis. Rather, what was described was action taken without adequate reflection, or as described by Freire - “action for action’s sake” (1970/2000, p. 87). In these instances, an experience, either negative or positive, created a strong reaction and triggered the desire to act. However, before taking action, the participants failed to take the time to truly reflect on the experience, the learning outcomes, their own meaning schemes, or their chosen actions. This is likely a result of the learning being unconscious or attained via another way of knowing, rather than through critical reflection. In the two cases presented below, in which both acted hastily, the participants did take time afterwards to reflect on their reactions and approaches to the situation/issue. In her initial interview, 16F was adamant about not buying Chinese products:

Two years ago I was travelling in India and I was in Dharamsala which is kind of the limit between India and Tibet. So I got all these Tibetan ideas throughout Tibet - no China at all - so that when I came back I said, “you know what, I don’t want to even support anything from China.” It’s really hard though because like pretty much everything comes from China, but that’s my criteria whenever I buy stuff.

A strong reaction following an exposure to new knowledge and being immersed in a tense situation, led to immediate action without consideration for all sides of the issue and the effectiveness of such action. In her second interview, 16F revealed that after reflecting on the matter, she was no longer boycotting Chinese products:

I struggled a lot for maybe one year or a year and a half ... I just realized that there is something bigger, you know? There is not like China, you are against China. It is not a concrete thing. So it is more a political

issue ... it's not China per se, it is not Chinese people, it is not like Chinese – it is actually something different. So it is not as easy to fight.

Another example came from 20M, who described an experience from his transitional years in which he had acted hastily, with little consideration for his actions and their impacts - something he regrets to today. He told me of his last days working at Shell,

I remember hearing about all the atrocities in Nigeria committed by Shell and everything, and I was just like, “man how could I be working for these people?” And I believe it was the national manager of Shell coming to do a tour of the station and this was like a big deal around the station and we weren't supposed to tell anybody and this guy was all high up and everything ... So me and my friend got really drunk and made up these posters saying that this guy was going to be there and come out and throw a pie at him or something. I woke up the next morning and it was like, maybe that wasn't the smartest idea but it's too late now. So I went into work that day and then told [my boss] an hour before he came that I was quitting and walked out and she freaked out and started smoking again. It was a messy situation. Nobody really ended showing up to throw pies or anything.

With regard to reflection without action, there were many comments related to things to which participants had given consideration, but had not yet acted on or had not yet been able to maintain. As will be seen below, the primary reason for not taking action, despite being informed and concerned, related to the barriers to social action.

8.1.5 Social Action Variables

Based on the social action literature reviewed in Chapter 2, I proposed a model of social action (Figure 2.1). The Learning-Action-Outcome Model demonstrated how

these three elements of social action coexisted along a continuum, interacting and influencing one another (as is represented by the braid). The continuum ranged from “individual” to “collective”, denoting that learning, action and outcomes may exist in an individual form (e.g., transformative learning, hanging clothes to dry), a collective form (e.g., social learning, group of NGOs joining to lobby the government), or any form in between.

The data analysis indicated that this model is not the most effective way to depict social action. While it is true that the proposed three factors do closely interact and do significantly influence one another, they do not reflect all of the key variables of social action identified in this research. Thus, instead of the three-braid model, I propose six variables of social action – (1) the broader *system* sought to be impacted by the action, (2) the overall *goal* of the action, (3) the *actor or actors* involved in carrying out the action, (4) the *approach* used to meet the goal, (5) the *means* used to fulfill the approach, and (6) the *audience* intended to be influenced by the action (Figure 8.1).

1. Target System

In striving for clothing sustainability, participants directed their efforts towards the oppressive system or systems associated with their concerns. As noted previously, the systems most often targeted were the economic system (market system) and cultural system (consumer culture). For example, as discussed in Chapter 5, in an effort to confront these two systems, two participants engaged in mall protests aimed at dissuading people from shopping. A number of those purchasing second-hand were also seeking to

impact these systems. By purchasing second hand, rather than new, they avoided engaging in either of these systems (e.g., 13M, 15M, 20M, 27M).

2. Goal

Following the definition of social action developed in this study, the overall purpose of social action is to protect or enhance the well-being of people, the environment or other species. It has been presumed by some theorists, among them Friere (1970/2000), Habermas (1984), and Mezirow (1994), that *changing* an oppressive system is the way to achieve this end. However, at least in the case of sustainability, the goal of social action need not only be to alter a component of a problematic system, as was discussed earlier (8.1.2). The goal may be to preserve beneficial elements of the system, in particular those threatened; to restore a positive element of a system lost over time; or to establish an alternative system (i.e., one outside the existing system).

3. Actor(s)

The third variable addresses who is engaging in action, i.e., the *actor or actors*. As this study showed, an actor may be a concerned individual, a small business owner, a couple, a friendship circle, a volunteer student advocacy group, or a non-government organization.

4. Approach

Approach refers to the general way in which the actors go about achieving their goal. This research indicated that participants attempted to: (i) influence behaviour, (ii) increase awareness, (iii) advocate for change, or (iv) promote an alternative.

- (i) *Influencing Behaviour.* This approach involves preserving or enhancing well-being through introducing, eliminating, improving or supporting a particular activity or practice. This can be accomplished by influencing the behaviour of others or affecting one's own behaviour, for example, choosing to adopt new behaviour or deciding to terminate an unsustainable practice. Actor(s) may seek to retain or increase their level of participation in aspects of a system viewed as emancipating, thereby contributing to the benefits generated by the system. For example, participants who organized fashion shows hoped to encourage attendees to purchase clothing from small local retailers, thus supporting the existing local economy. In terms of shaping one's own behaviour, a few participants discussed taking classes on a particular construction skill (e.g., sewing, knitting, mukluk making), with the aim of developing or improving that proficiency and thereby increasing the probability of incorporating that skill into their repertoire of sustainable clothing practices. For example, 19F talked about her sister-in-law getting a pair of mukluks and wanting to get a pair as well. She shared how rather than buy a pair, she decided to learn how to make them, telling me, "I saw the leisure guide Mukluk class. I just figured I could spend the money on classes and materials and get that skill or I can just buy a pair of boots. I decided to go for the skill." She explained

that in learning the skill not only would she be able to make more pairs, but it would also permit her greater control over the materials used to make this footwear, discussing the possibility of sourcing moose or bison leather for future projects or tanning the hide of a deer which her husband had hunted.

Participants also discussed reducing or halting participation in adverse activities, thereby reducing their contributions to the resulting environmental and social damage, locally or abroad. Boycotts were one example. Participants discussed refusing to buy from certain retailers, shunning shopping malls, avoiding clothing (or other products) made in China and not purchasing new apparel, all in an effort to retract their support for practices and ideologies they did not support .

- (ii) *Awareness-Raising*. Through this approach, actor(s) endeavoured to increase the awareness of others. Participants in this study were involved in raising the awareness of individuals or collectives about the impacts of conventional clothing production and consumption, as well as the actions which can be taken to reduce these impacts. Such efforts might also include increasing others' awareness of advocacy tools and initiatives. Awareness-raising tends to be a "bottom-up" method, in which individuals/consumers (the "oppressed") are provided with information and tools in the hope they will change their practices or engage in broader social action. Increasing people's consciousness of either a negative or positive aspect of the system may be undertaken in a variety of ways. For example, individuals typically sought to share information with the

people in their social sphere (e.g., telling a colleague about a new local designer, cautioning a friend about a retailer's poor sustainability track record).

Collectives, on the other hand, often reached out to the general public (e.g., handing out garment workers' rights pamphlets as part of NGO campaign, joining with others to organize a sustainable fashion show).

- (iii) *Advocating for System Change.* Advocacy, on the other hand, is a “top-down” method, in which social action seeks to persuade key players in the system, namely government, industry and consumer society (the “oppressors”), to either modify or maintain their policies/practices in order to change a negative element or support a beneficial element of a system. Once again, such advocacy efforts may be undertaken by an individual (e.g., emailing a retailer to inquire about their buying practices, asking retail staff questions about their products) or as a collective (e.g., taking part in a national letter writing campaign, coordinating a “Buy Nothing Day” protest).

- (iv) *Promoting Alternative Systems.* Rather than change or maintain the existing system, the promoting alternatives approach involves establishing and supporting a unique, new system or element of a system. Rather than attempting to transform the existing problematic system, actors seek to create and foster a new, more just, and less destructive system. In the case of this study, participants' efforts focused primarily on building alternatives to that which they deemed to be either a flawed market or cultural system. For example, one

entrepreneur established her own sustainable business making handbags from recycled upholstery. In comparison to the existing system, it was unique in that it did not rely on the conventional supply chain for raw materials and it created a market for waste upholstery materials. The same can be said of repurposed clothing in which the raw materials for garments are comprised of used clothing items. Such endeavours propose an alternative perspective to the design and production of textile products by eliminating the use of virgin raw materials, bypassing a significant portion of the textiles chain. Both these activities also introduce unique products to consumers, overcoming the complaint of many participants that all mass-produced apparel looks similar. As for working outside the existing system and supporting alternative systems, although not clothing related, a few participants discussed avoiding the conventional economic system. They engaged in bartering, trading their skills or hand-crafted goods for goods or services they needed (e.g., 03F, 19F, 20F).

5. Method

Method describes the specific activities undertaken or behaviours adopted by an actor in an effort to achieve their ends. Chapter 5 provided a wide range of examples of actions, including buying sustainable apparel, emailing apparel retailers to inquire about their practices, signing a petition about workers' rights, delivering a presentation on sustainable living, or hosting a clothing swap. The form of action taken was closely linked to the barriers associated with it. If there was a barrier, especially one that

required significant effort to overcome, participants were often dissuaded from taking that particular action.

6. Target Audience

The sixth variable is *target audience*, or the specific individual, group or institution the action is intended to impact. There are many players that may affect the sustainability of the clothing system and the actor must determine to whom to direct their efforts. A target audience may range from an individual (e.g., family member or colleague) to a large collective (e.g., a major retailer, large institution, group of consumers or government).

Relatively few participants targeted large collectives. The more common audience that participants targeted for social action were those within their social sphere. Leading by example or telling others about their practices were the ways through which participants sought to influence the behaviour of these individuals. There were, however, a small number who did seek to engage government and corporations. Most of these participants did so indirectly, by “voting with their wallet”, while a few were more direct in their approach, participating in petitions and email/ letter writing campaigns. There were also participants who sought to influence somewhat smaller collectives, such as a group of students or a workplace, through presentations and fashion shows.

Figure 8.1: Social Action Variables



8.2 Barriers to Social Action

Once again, undergoing a meaning scheme or meaning perspective shift does not necessarily result in an individual taking social action. As described above, Mezirow identified three variables which may act as barriers, preventing a learner from engaging in action – situational-based, psychologically rooted, or knowledge-related variables (Mezirow 1989, 1991). The data gathered through my study confirm that these variables did in fact create impediments for individuals motivated to take social action in support of clothing sustainability; however, they were not the only obstacles learners faced in their efforts to act. Further to Mezirow’s personal or individual type barriers, emerging from both the data and the literature were two additional levels of barriers, interpersonal and environmental (Table 8.1). The following section will introduce each of these

categories and, drawing from the interview data, will give examples of these three levels of barriers.

Table 8.1: Barriers to Social Action for Clothing Sustainability

INDIVIDUAL BARRIERS	
Situational	<ul style="list-style-type: none"> ▪ Limited finances ▪ Lack of time (e.g. for construction, hanging clothes to dry, research, swaps, finding sustainable apparel or second-hand clothing, engaging in collective social action) ▪ Inadequate amenities (e.g. not enough room for sewing or hanging clothes to dry, no clothes line, no laundry facilities)
Psychological	<ul style="list-style-type: none"> ▪ Strong affinity for clothing (e.g. provides pleasure, entertainment and/or stress release) ▪ Compulsion to consume ▪ Desire to meet others' expectations related to clothing ▪ Challenge associated with prioritizing and balancing priorities (e.g., cost vs. sustainability; organic vs. locally made) ▪ Complexity of the relationship between clothing and self-esteem, self-image, and self-expression ▪ Personality (e.g. openness to change, ability to resist pressure to conform, level of comfort with different forms of social action) ▪ Childhood foundation (e.g. strength of non-sustainable meaning schemes) ▪ Other sustainable lifestyle choices are of greater importance
Lack of Knowledge	<ul style="list-style-type: none"> ▪ Lack of construction or repair skills ▪ Unaware of where to find information on impacts, products and companies

	<ul style="list-style-type: none"> ▪ Uncertainty as to how to effectively purchase sustainable apparel or second-hand clothing ▪ Unacquainted with where to find sustainable apparel ▪ Unaware of what criteria to look for in sustainable apparel ▪ Unaware of options for engaging in collective social action
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INTERPERSONAL BARRIERS

Interpersonal	<ul style="list-style-type: none"> ▪ Pressure from family and friends to meet social norms related to clothing (e.g., appropriate attire for attending a wedding, attracting a mate, or not looking out of place at a party) ▪ Pressure from family and friends to shop ▪ Pressure from co-workers and employers to maintain a professional appearance ▪ Direct dismissals of values and wishes by family (e.g., giving undesired gifts)
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ENVIRONMENTAL BARRIERS

Human-built	<ul style="list-style-type: none"> ▪ Limited selection of sustainable apparel (i.e., work wear, formal attire, stylish pieces) ▪ Dearth of retailers supplying sustainable apparel, textiles or yarn ▪ Limited selection of second-hand clothing ▪ Inconsistent stock at second-hand shops ▪ Complications associated with online shopping (i.e. inability to see, feel and try on apparel) ▪ Decline in Canadian apparel manufacturing ▪ Limited availability of trustworthy, valid information
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Socio-cultural	<ul style="list-style-type: none"> ▪ Positive attitudes towards consumption (e.g., new is superior, the more the better, shopping is fun) ▪ Favourable perspective on fashion ▪ Pressure to consume (e.g., must be fashionable to fit in, to be successful, or to maintain ones self-worth)
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	<ul style="list-style-type: none"> ▪ Societal taboos related to second-hand clothing ▪ Cultural manipulation (i.e., the market manoeuvring social norms in order to create a continually expanding demand for clothing) ▪ Globalization (e.g., loss of local economic activities, low labour standards, poor quality goods)
Bio-physical	<ul style="list-style-type: none"> ▪ Climate

8.2.1 Individual Barriers

Situational variables refer to personal constraints resulting from one’s lifestyle or current circumstances that hinder participation in social action. The primary situational barriers identified were time and finances. Less frequently discussed was accommodations. With regard to time, many participants remarked that sustainable practices often took longer than conventional ones. Specific activities that were addressed included hanging clothing to dry, carrying out research, organizing and participating in clothing swaps, conducting repairs, finding specific sustainable or second-hand apparel items, constructing textile products (e.g., sewing, dyeing, spinning, weaving) and developing construction skills. Commonplace practices, being far more expedient, were often more appealing. For example, 18F said, “I probably only hang-dry 10 to 20-percent of the time and I know it’s better, it’s just a convenience issue”. Those involved in constructing fabrics or garments commented they tended to do so only for specialty items, including 23F who stated, “I don’t sew clothes that I go to work in for the most part ...‘cause there’s so many hours in a week, so I’d rather spend the time to create things that are not available as easily as other choices”.

Although reducing purchases and buying second-hand were economical practices, those choosing to buy more sustainable *new* products (e.g., eco-textiles, sustainable apparel, green detergents and related laundering products, and efficient washing machines) often had to pay more than they would for similar conventional products. For many, their budgets could not accommodate this additional expense. In discussing clothing acquisition, 21M stated, “looking for the organic, more sustainable clothing is great although, again, because of the costs when you’re buying new it’s just pretty much out of range for us”.

Finally, living arrangements were a barrier for some participants, in particular in relation to cleaning clothing. Some of those renting mentioned having a lack of control over many aspects of a more sustainable lifestyle, including the efficiency of their washing machine and dryer, the settings on these machines and the availability of a clothes line. Even those with a clothes line, depending on the placement of the line and their location in the city – tree sap, bird excrement and incinerator ash were also mentioned as being barriers caused by one’s accommodations.

Learners’ psyches were also responsible for obstructing their involvement in more sustainable actions. *Psychological impediments* were related to one’s frame of reference. Chapter 7 presented the strugglers, participants with a strong affinity for clothing and a compulsion to shop that greatly hindered their efforts to reduce their consumption and to buy more benign forms of clothing. These participants described situations in which they found themselves lured into purchasing conventional apparel, thereby failing to carefully consider their purchase (e.g., is it needed? does it meet my criteria?), the environmental and/or social implications of their choice, or the more sustainable options available. In

her journal, 03F described an item she purchased on a whim, writing “I didn’t give a thought to brand, material, or any environmental or ethical factors. Impulse shopping is my worst enemy.” Similarly, 11F shared:

... all the good that I had done for the New Year (whatever that was I’m not sure!) went out the window when I had a chance to shop in the Mall of America. Yikes! When you [typically] have limited time and limited selection and all of a sudden you’re set loose (without kids!) in a giant mall that has an H&M and a discount shoe outlet then all principles seem to disappear!

As was discussed in Chapter 7, most of the strugglers, in addition to a few other participants, described a psychological draw to shopping – using terms such as “retail therapy” and “shopper’s high”. They believed it would fulfill some sort of psychological need, such as an escape from a stressor or unpleasant situation (e.g., depression, work problems), a distraction from boredom (i.e., “hobby” or “something to do”), or a rush of excitement. Since these shopping drivers were typically bound to more deeply rooted psychological issues, curtailing clothing consumption was a complex matter. For example, as previously discussed, 35F believed that, “retail therapy” was part her coping mechanism.

Participants’ relationships with clothing²⁰ influenced its importance in their lives and shaped their clothing choices and their preferred sustainable clothing practices. The aspects of this relationship explored in this study included participants’ attitudes, values and beliefs with regards to clothing in relation to factors such as self-expression, self-

²⁰ The term *relationship with clothing* describes ones attitudes and beliefs regarding the self in relation to clothing.

esteem, self-image and pleasure. The way in which this relationship complicated apparel choices, was explained by 24F,

There's so many things connected to clothing that might not necessarily be connected with decisions about food or those sorts of things. It's about body image and it's about how you see yourself and how you want to portray yourself and it's about how people see you or how you perceive their perceptions of you. It's all that much more complex.

Stemming from their relationship with clothing, every participant made some reference to their personal clothing criteria (i.e., the fundamental characteristics they sought when selecting apparel), such as style, fit, comfort, and colour. Universally, participants tried to avoid wearing clothing in which they felt ill at ease (i.e., garments which did not meet their clothing criteria). As a result, some of the participants grappled with how to honour their sustainable beliefs related to clothing when sustainable apparel was deemed in many cases not to be as attractive and second-hand clothing could be ill-fitting and/or shabby. For instance, two of the participants made the following comments:

So far, at my price point, I haven't found things that suit my style. Designer enviro-wear, which I have only seen in pictures on the net, is gorgeous and if I could afford it, oh my god, I would buy it. But what I have seen looks like post-Apocalyptic movie wear, where everyone is in the Matrix wearing all their hemp clothing or else it is too brightly coloured and I feel like I should be wearing it on my trip to India. It just does not feel like it fits into my lifestyle in Canada and I haven't shifted my lifestyle to suit the clothes. (03F)

[It] can be more challenging to put together a second-hand outfit. I still want to look nice, I mean, that's also a factor, because I think sometimes when you're shopping second-hand ... it's hard to look put together. I mean I don't want to look like a bum. (29F)

Finally, a *lack of knowledge*, more specifically a lack of factual knowledge, cognitive understandings or skills, was also a prevalent barrier. Examples included not knowing where to find sustainable apparel, an inability to knit or sew, a lack of awareness regarding which conventional retailers were more conscious of sustainability and those which had poor track records, and an uncertainty as to how to conduct certain repairs. Specifically in terms of information, a number of the barriers discussed in Chapter 5 under Sustainable Apparel are worth noting again, including the time and diligence required to research and remain up-to-date on the latest information and participants' distrust of the materials which are available. 30F captures the frustration of many of the participants by stating:

Nike, I stayed away from Nike for years. Now they say -- it's hard to find the truth though -- they say "oh no, their practices are getting better". So I will let the kids have a Nike sweat top or something, but just because it is just so much work to keep on top of these companies.

8.2.2 Interpersonal Barriers

The above discussion provides strong support for Mezirow's three variables; however, these variables did not encompass all of the obstacles identified by participants. The inhibiting factors proposed by Mezirow's TL theory adequately describe the *personal* challenges faced by individuals, accounting for their unique impediments such as their living conditions, financial standing, personal preferences and skill sets. Yet the scope of obstacles encountered by participants transcended their own conditions. Falling outside the boundaries of Mezirow's impediments were challenges such as the limited

availability of sustainable clothing, norms regarding appropriate work attire, negative perceptions of second-hand garments and pressure from friends to buy unneeded clothing. To better understand the nature of these barriers, I turned to writings on the role of power in transformative learning, McKenzie-Mohr's work on community-based social marketing and *Human Ecology Theory*, specifically the *human ecosystem model*, which depicts the relationships between humans and their environments. This section and the next will address these two other levels of barriers emerging from this literature and the data – interpersonal barriers and environmental barriers.

Learning does not occur in a vacuum. It is influenced by our relationships and interactions with those close to us, and is shaped by societal norms, beliefs, values and behaviours. Many scholars have been openly critical of Mezirow's failure to adequately address the role of power in influencing the transformative learning process (Hart, 1990; Inglis, 1997; McDonald et al., 1999; Pietrykowski, 1996). Power, in the case of learning, refers to the ability of our normative ideologies to corrupt or prevent discourse and/or action (McDonald et al., 1999). Hart explains that "norms and normative systems establish self-perpetuating forms of power-bound, distorted human interactions" (1990, p. 131-132).

Taylor (2007), in discussing the findings of McDonald and colleagues (1999), notes that Mezirow's perspective of transformative learning "gives too much attention to the individual and not the individual within his or her soci-cultural [*sic*] context" (p. 185). This is a significant weakness of the theory given that a number of authors contend that an experience cannot be attributed meaning without comprehending the context in which it occurred (e.g., Clark & Wilson, 1991; McDonald et al., 1999). Further, Inglis (1997)

believed that “[b]eing able to transform social life necessitates being able to understand different types of power and the ways in which they operate in society as a whole, as well as in the lives of individuals” (p. 8). In order to create a comprehensive, all-inclusive theory of adult learning, Mezirow explains that he has purposely neglected the learner’s milieu, or the social conditions in which learning or action is being undertaken. He does not deny their existence or influence. He believes, however, that the basic elements of transformative learning, which are the focus of his work, are consistent no matter the context in which learning occurs. He stated,

The who, what, when, where, why, and how of learning may be only understood as situated in a specific cultural context. However, the content of a comprehensive learning theory cannot be dictated exclusively by cultural interests. What we have in common are human connectedness, the desire to understand, and spiritual incompleteness. Cultures enable or inhibit the realization of common human interests, ways of communicating and realizing learning capabilities. (2000, p. 7)

Turning now to the work of McKenzie-Mohr (2000a, 2000b), who, while developing the community-based social marketing process²¹, came to appreciate the vital importance of understanding the nature of barriers when seeking to inspire or help guide the adoption of more sustainable activities. He identified two categories of barriers - internal and external. Internal barriers, or the barriers within an individual, equate to Mezirow’s three variables. External barriers, on the other hand, are formed outside the

²¹ Community-based social marketing draws on both psychology and social marketing in an effort to develop effective programs for promoting altruistic behaviour. Doing so involves carrying out four steps – identifying barriers to a specific behaviour in order to determine which barrier the program will target; developing a program which will overcome the chosen barrier; conducting a trial of the program; and performing an evaluation of the program (McKenzie-Mohr, 2000a, 2000b).

individual, or as Mezirow's critics would likely view them, those pervasive peripheral forces which may corrupt perspective transformations and social action.

Due to the wealth of literature supporting the concept of external barriers (e.g., Hart, 1990; McKenzie-Mohr, 2000a, 2000b; McDonald et al., 1999; Shaw et al., 2007) and the disparity between my results and Mezirow's impediments to action, I thought it prudent to further explore these broader forces thought to be influencing an individual's patterns of learning and action. To accomplish this, I began with a more comprehensive examination of the works of Hart (1990) and McDonald et al. (1999).

Hart and McDonald et al. each emphasized the significant influence power relations have on individuals engaging in transformative learning, taking part in social action, and attempting to sustain new perspectives and behaviours. In Hart's analysis of emancipatory education, Mezirow's variables/barriers are described as being "highly unsatisfactory", in large part due to their failure to acknowledge power relations (1990, p. 27). Her article includes an exploration of three distinct, yet closely related levels of communicative distortions (i.e., manipulations or obstructions to discourse), namely, the social-cultural, the interpersonal, and the intrapersonal/psychological levels. She explains, "all three are closely interrelated, and an attempt to critique one distortion, occurring within one particular dimension, can never be severed from a critique of the other two" (p. 130). Using these levels as a framework for interpreting their data, McDonald et al.'s (1999) research provided concrete examples of how power at each level can be a hindrance to emancipatory learning, as well as to emancipatory praxis (i.e., social action). They add, "[e]ach level of distortion affects the others so that breaking free of these distortions is a daunting task" (1999, p.8). Thus, even if an individual

overcomes their own intrapersonal/psychological distortions, unfortunately they must still face the powers of the other two levels (McDonald et al. 1999).

The *individual level* is discussed in psychological terms by both Hart and McDonald, with Hart relating it to an individual's self-identity, needs, interests, consciousness and motivations. I liken this level to Mezirow's psychological variable, which has been discussed above. However, interpersonal and socio-cultural level barriers are new concepts that have not been directly addressed in Mezirow's TLT. These levels extend our understanding of the obstacles faced by individuals and help to answer the call of critics who have "argued for recognition and exploration of the relationships of the individual to large scales, defined as families, communities, or cultures" (McDonald et al., 1999, p. 8).

McDonald regards the *social-cultural level* as the source of our normative ideology or the "systematic values, beliefs, and concepts that are widely held so as to be typical of a culture" (1999, p. 7). Distortions generated at this level "have the power to "immunize" norms against critique" (Hart, 1990, p. 130). In other words, because these values and beliefs are accepted nearly universally within a culture, they are taken for granted. However, if an individual does begin to doubt an aspect of the collective frame of reference or attempts to take action which counters the norm, there are many forces – conscious or unconscious – operating against the individual, attempting to "return them to the fold". In the case of ethical vegans, "[s]ocial-cultural power was manifested in the pervasiveness of the ideology of human superiority within family, community, industry, and education, and was operationalized through misinformation, selective information or lack of information (Forester, 1989)" (as referenced in McDonald et al., 1999, p. 164).

These researchers further explained that although their participants had experienced perspective transformations, they faced a great deal of adversity in the process and many had to temper their actions and the expression of their meaning perspective in order to “fit in”. They stated:

Successful at becoming vegan, the participants emerged with an intact transformed perspective, albeit at a personal price. The sustained power of the normative ideology, however, brought subtle changes in the vegans’ praxis over time. No longer shocked by animal cruelty, and worn by *social-cultural and interpersonal challenges* to veganism, their praxis became less outspoken (p. 19) [italics added]

Likewise, individuals striving for clothing sustainability were repeatedly thwarted by the social-cultural level. As the source of our societal drive to consume, our unrealistic ideals of beauty, our narrow views about acceptable appearance and dress, and our rigid norms around acceptable lifestyles, normative ideologies obstruct the path to sustainability. During our interviews, participants discussed their concerns and frustrations over the destructive nature of our societal norms and attitudes regarding fashion and clothing consumption, as they manipulate our self-identity and worth, interfere with our personal interactions, persuade us to ignore injustices and encourage us to condone the abuse of our environment. For example, 04F stated,

It’s sort of unfortunate and there is this ethos that people believe that the more you have the more successful you are, so people like the idea of the \$2.00 pants and having, you know, 1,700 pairs of jeans.

She also noted,

People just don't know what they are buying, who is being impacted, children working in sweatshops. I don't think people want to think about it. You know they look at the fashion industry and clothing consumption as being glamorous, as being part of the cool. They don't want to think about where it comes from. The same thing with everything, right? It's the same thing with like diamonds and precious metals and everything; people don't want to think about where it comes from.

Also, just as the vegans' praxis were tempered, so too were the activists in this study. Three participants – 07F, 20M and 28F – were all outspoken promoters of sustainability, with some of their efforts addressing clothing. However, over time a number of factors, including a lack of time, waning interest in the topic, a health scare, a new non-sustainable friendship group, angry family members, and non-receptive recipients of their activities, led to a reduction in their actions.

The *interpersonal level* is the expression of normative ideologies within our relationships and interactions. These ideologies can impede the transformation of our perspectives or our willingness and ability to bring about societal shifts. The power of interpersonal barriers arises from the fact that our social interactions “not only express distorted experiences, but they also perpetuate these distortions in each and every “normal” (i.e., socially sanctioned) interactive encounter” (Hart, 1990, p. 132). As such, the beliefs, attitudes and values of family members, friends, colleagues and other peers, absorbed through socialization as a child or internalized through assimilation during adulthood, can greatly influence our thoughts and actions. A critical comment or encouraging remark, be it subtle and non-confrontational or overt and aggressive, can

sway or strengthen our meaning schemes, as well as shape how we express or act upon these meaning schemes.

The interpersonal level of barriers was noticeably evident in the lives of the participants. Enduring social pressure to look a particular way (e.g., criticisms, reprimands, and ridicule) or receiving positive feedback for adorning a specific look often made adopting sustainable clothing practices more challenging, as acquiring clothing in a more sustainable manner generally means one's clothing is not current or fashionable. Participants noted they felt such social pressures to conform from colleagues, supervisors, friends and family members, as was described in Chapter 5.

Participants found most sustainable apparel tended to be too casual for work attire, as was discussed above. In some cases, there were formal expectations of management regarding employees' appearances, with one participant being written up for her casual attire and home-made articles of clothing. In other instances, pressure was perceived, as described by 34F:

... it's peer pressure, right? And it's not peer pressure in the sense that they are telling me "You should wear this". It's that – it's an environment where there is other women wearing nice clothes, so then you want nice, new clothes.

Further, a few recent graduates discussed the need to move away from their former styles and adopt a more professional look as they entered the workforce. Unfortunately, for several of these individuals this meant leaving behind some of their more sustainable clothing practices, such as purchasing second-hand or sustainable apparel, making garments, and/or wearing clothing until it was no longer useable. Of course, social norms

regarding appropriate work attire were likely not the only factor shifting them away from SCP. Their increased income would have opened new apparel options as well, which may have significantly shaped their clothing choices.

In terms of social attire, several shared stories of feeling pressure to purchase new clothing and to fit a particular mould. A few comments included,

Sometimes I find my perception is a barrier - like people, if they find out, "Oh, where'd you get that?" - "Oh, I got this at Goodwill", they're like, "Oh", or "I got it at a clothing swap", "Oh". In terms of some of my family members, I'll say, "Oh, I got it at a little boutique downtown." That's a way of just being surreptitious about - like I don't broadcast that I'm a thrift store shopper to everybody, sometimes, like depending on who it is. (24F)

I just attended a wedding in Toronto, and used a dress I found at Value Village. There seemed to be a lot pressure to have the proper accessories, shoes, and matching purse, and I felt a little dowdy with my 'found' items - things I had in my closet. (18F)

Conversely, 18F discussed the positive social feedback which is reaped upon those who follow the social norms, stating:

But I find that we are all really rewarded by our social circles for buying new and for buying those kind of exotic pieces. It's really like, "Is that new? Oh, my goodness, it's so nice. You look so good." So, there's certainly positive feedback for going the fashion route and maybe a little bit of, I don't know if I state it as strongly as being ashamed, but like, "Weren't you wearing that at my house at Christmas four years ago?".

Another social pressure discussed by three regular second-hand shoppers related to gift giving and the stigma associated with buying something used. As 31F said, "I wouldn't give necessarily something [second-hand] to some people for baby gifts, there's still social pressure to buy new", while another stated,

“People, when you say, “Oh, I made this,” they’re like, “Oh wow”, but then if you say, “Oh I got this at Goodwill”, they’re like, “Oh, hmmm, okay”” (24F).

McDonald et al. (1999) discovered in their study that “family members in particular played havoc with the transformational learning of some of the vegans”, and that family pressures were a strong interpersonal force preventing performance or making maintaining sustainable acts more difficult (p. 15). Similarly, 03F talked about how her mother often ignored her values when purchasing items for her children. In recalling a recent birthday, she stated:

As for [my son], he has a new pile of dye saturated Disney merchandise clothing. So, while I am able to steer the grandparents towards the items he needs, I have no power or control over the things they actually choose. [His paternal grandmother] does buy about a quarter of the stuff for the kids second-hand, but my parents go for the super fashionable, overpriced stuff, or for the Pixar characters. I specifically asked my mother not to buy clothes, and that [my son] had two bathing suits already. She bought him a third bathing suit and told me, “Too bad, now he has three”.

Likewise, several discussed receiving gifts for themselves from family members which were either unwanted or unsustainable. For some, it was a continual frustration, while others described that over time their family came to accept their beliefs and values and either stopped their gift giving or began to purchase more sustainable items. One of the former individuals stated,

My other parents have sort of been thinking [my sustainable lifestyle] is a phase forever and kind of a joke. They don’t really get it. It was not until recently that they finally stopped sending me clothes, like tons and tons of clothes all the time, to the point where I would end up just giving them away to the thrift store because I didn’t want them ... so they are just so different than me that I just

sort of don't talk to them about stuff because they don't care or understand, even still. (12F)

Two described incidences of being rejected and ridiculed by family members for their beliefs and practices. Following her adoption of a different perspective on clothing and shopping, returning home was challenging for 35F when she was confronted with the more mainstream views of her parents. She stated,

I remember very vividly going home one year and [my parents] were like, "Okay, let's go shopping. What do you want to buy?" And I am like "I don't really need anything – I don't" and they were just like "What do you mean?" It was such a point of contention that I didn't want to buy anything and they didn't understand why and I remember my mom saying to me, "I don't know what happened to you, you used to love to shop – it's like you are not a girl anymore". Luckily, I was old enough and strong enough not to be beaten down by such a terrible thing that your mother would say. But, it was definitely a very, very big point of division.

29F also discussed an unpleasant experience one Christmas:

I got called a communist, not this year, but last year, because we did Secret Santa and I'd brought fair trade coffee, chocolate, something else and no one wanted it ... I was like, "Well you guys, it's fair trade," and I tried to explain and basically someone's like, "What are you, some kind of communist?" I just got shut down. So, it's really difficult with my extended family.

Another discussed the change in her behaviour from sustainable to non-sustainable when visiting her home and spending time with her old friends:

... when I was living in Calgary I was getting into this new kind of circle of thinking and I went back to Peru to visit my friends. It was just one year that I was in Calgary, so I went and I went with this new idea, you shouldn't even use pads, this is the Diva cup that you can use. My friends were like, "woe, that's gross." I was wearing the clothing that I got in Calgary and I was in

Peru for five weeks and I think my way of thinking wasn't settled yet. So I got into like, by the third week I had some clothing that I had in my house that I left in Peru and whenever I was going out with them I was wearing, like my usual things. I started to move again to this kind of, because they were my friends and I started talking like them and hanging out with them and going to the places that I used to go. So the new clothing that I had, it wasn't, you know, appropriate to this. I will all the time, like at the beginning, I will all the time generate some "shhh....what's going on?" So I was kind of like "oh my gosh, I can't do this here." So I started doing like behaving, it was kind of like going backwards. Then I said "you know what, I need to go back to Calgary." At the same time I was kind of like in this, "oh my gosh, I know that I was actually kind of like, how I could be like that and now I am getting back again." So yeah, I had a lot of social support, I guess. Yeah, you need it if you are like the only one you get kind of surrounded by that and then it's like, you don't realize and boo! You just go to what you were used to.

Finally, during a visit with a friend, 35F shared the story of her efforts to refrain from shopping for a year. Her friend was very interested and supportive, until they went shopping and her choice to abstain from buying a pair of inexpensive, poor quality shoes led to a disagreement. The fallout of the experience was the realization of the many levels of obstacles faced in the transition to be a more sustainable society. In her journal she wrote,

As soon as we left the store, I explained to Denise my theory and she adamantly disagreed; she said, "I would have just bought them and wore them for this; you're not going to want them in a year anyway because they'll be out of style." I retorted by explaining to her about the importance of reducing consumption and reminding her why I was going on a hiatus. After going back and forth between our opposing point-of-views, it became clear to me; it wasn't that she didn't understand, but it was because she didn't see the importance of the issue.

It was concerning to me because up until this point, I had made the assumption that people weren't educated on the issue, but if the truth is that some people

just didn't care about it, well, that's a whole other level of obstacles that us, as a society, will need to face.

At the individual level, 35F was struggling with the pull to purchase the shoes and the drive to reduce her consumption. At the interpersonal level, she felt unequivocal pressure from her friend to conform to the common belief that you should buy cheap, no matter the quality, because you will be replacing it very soon. Finally, at the social-cultural level, she had attained a new understanding, specifically that individuals' inaction and lack of concern were not necessarily the result of a lack of awareness, but, rather, stemmed from the fact that for many the desire to consume was simply greater.

8.2.3 Environmental Barriers

The findings of this study corroborated the conclusions reached by Hart (1990) and McDonald et al. (1999) that the strong influence of our interpersonal relationships and the broader social-cultural system can present considerable obstacles to those attempting to transition to, or maintain, a more sustainable lifestyle. However, beyond our individual struggles, our social relations, and our socially-constructed structures, further challenges to engaging in social action were encountered by participants. A review of the human ecosystem model allowed me to identify these remaining barriers and provide a more comprehensive understanding of the interactions and the interconnectedness of the participants with their environment, and the influence their environments can have on action.

The Human Ecology Theory is multifaceted and complex and I am not suggesting the exploration and adoption of all the nuances of this perspective. However, I believe it

is essential to acknowledge, as others have written, that learning and action take place within a broader context or, in the case of this theory, three interconnected environments which together comprise the human ecosystem. At the core of the human ecosystem model are humans themselves, as individuals, families and communities. These entities are surrounded by three external influences or environments, described by Bubolz and Sontag as comprising “the totality of the physical, biological, social, economic, political, aesthetics, and structural surroundings for human beings and the context for their behaviour and development” (1993, p. 432). The immediate environment is the *human-constructed* or the environment which humans have physically built (e.g., building, roads, vehicles, pollution and products). This environment is embedded in the social-cultural environment, which equates with McDonald et al.’s (1999) social-cultural level, and consists of systems such as the political system, market system, financial system and cultural structure. These two environments are then surrounded by the natural bio-physical environment (Bubolz & Sontag, 1993). Supporting body functions, providing nutrients and allowing for quality of life, this system makes all the other elements of this model possible.

Human-Built Environment

The *human-built environment* is described by Bubolz and Sontag (1993) as including, “alterations and transformation made by humans of the natural physical-biological environment (e.g., roads, cultivated land, urban settlement, material artifacts, and polluted air and water) for survival, sustenance, and the attainment of other ends” (1993, p.432). One of the primary complaints made by participants, related to the

human-constructed environment, was sustainable clothing, in particular its limited quantities, accessibility and selection, as outlined in Chapter 5. This was particularly true of Winnipeg, where there were a relatively small number of retailers providing a narrow selection of garments. One such frustrated consumer, 04F, stated, "...if there was an option to shop in a store that provided stylish clothing in a sustainable and responsible way, I would do it, but I can't wear T-shirts and sweatpants to work". Similarly, participants who were making their own articles of clothing, noted how the cost of their work was high, in comparison with the cost of ready-to-wear apparel, due to the high cost of the fabrics, supplies and equipment. The ability to pay these costs could be deemed a personal barrier, but the high prices for these goods would be related to the human-built environment, including factors such as the demand, the quantity produced and the cost of raw materials.

Publishing in 1993, Bubolz and Sontag define the human-constructed environment as being our tangible creations derived from the natural resources of the bio-physical environment. I would suggest that 20 years later, the human-constructed environment should also include our virtual creations. As such, I believe that the information generated by companies regarding their practices and products, in either a physical and virtual format, would fall within this environment. Many of the participants felt there was a significant amount of information available; however, the validity and credibility of much of it was questionable. One of the participants discussed the dearth of trustworthy information in relation to her favourite retailers,

I don't think that there's a lot of good information out there. I certainly haven't seen a lot of good information and we as consumers go into stores and there is no real information about the types of products that we are

consuming. I really like Jacob and I always question where things are being manufactured and even the people who work in the stores don't really have much information about that. I know that it's a Canadian company and I know that it's designed in Canada but that doesn't mean that it's manufactured anywhere even close to this hemisphere. There is really limited information about that, so I don't think that there is really good information for people to make responsible choices. (04F)

Chapter 7 established that the availability of "accurate and complete information" is one of ideal conditions for discourse (Mezirow, 1994, p. 225). However, as observed by 04F above, the absence of reliable information complicates the decision-making process, leaving many participants either unable to take action or doubtful of their decisions. For instance, 24F discussed her attempts to weigh the partial information she had about the practices and products of a leading sustainable goods retailer:

I think it just annoys me that [MEC has] shipped out a lot of their production overseas. It actually really irks me because to me that's not - it's to become more competitive, which I understand, but I think they're trying to be more of a company that's being competitive rather than being a co-op and agreeing to let people spend \$20.00 for a t-shirt instead of \$12.00 if it's organic cotton and made in Canada. But then I know that they look at the labour practices in the factories and you know, companies like Patagonia do that too, and they make a really good high-quality product with good materials and lifetime guarantee, which I think is the responsibility of the corporation to say, "Yeah, well if you're not satisfied, we'll take it back and we'll replace it." That's good because it's encouraging them to make a product that's going to be long lasting and satisfying. But even though it says like, "Oh yeah we look at the labour practices at the factories", I don't know what sort of criteria [is used]. Is that just based on the one next door that's really bad or ...? So I guess that's part of the mental juggling that I do.

Socio-Cultural Environment

In the context of clothing sustainability, the social-cultural system is the most powerful of the three environments, significantly influencing the other two, dictating what, and how, humans construct and how humans consume or preserve the natural environment (Bubolz & Sontag, 1993). Bubolz and Sontag's described the social-cultural environment as including:

(1) the presence of other human beings (e.g., neighbors who organize community action groups), (2) abstract cultural constructions (e.g., language, laws, norms, and cultural values and patterns), and (3) social and economic institutions, [e.g., the social-regulatory system, agricultural-industrial system, and the market economy (Koenig et al. 1975)]. These provide the basis for communication, order, and the coordination of human activities and have powerful impact [*sic*] on the natural physical-biological environment and on humans (Andrews et al, 1980)." (1993, p. 433)

I interpret this to mean that the human ecosystem model regards the social-cultural system as being relatively expansive, recognizing the overwhelming power of our socially-constructed, interrelated systems (Bubolz & Sontag, 1993). Taking a narrower view, McDonald et al.'s and Hart's notions of the social-cultural level of distortion, discussed above, focuses on the "abstract cultural constructions" element of this environment, or our shared values, beliefs and attitudes. Viewed through Bubolz and Sontag's more comprehensive lens, we can begin to consider the effect this environment has on retailers, apparel companies, governments, non-government organizations, consumers, and citizens. As previously noted, actions are generally the by-product of socialization and the assimilation of shared social-cultural beliefs and attitudes, e.g., new is fashionable, more is better, shopping is fun, and second-hand is unfashionable and

shabby. Again, many participants commented on the detrimental effects of the fashion industry, sharing statements such as,

I don't think it is healthy to go out and buy so much because it's not about the clothes It's about you and I think your clothes should reflect you, but I don't think a lot of those clothes do, because they just follow, this is what the fashion magazine says I need to wear this season, so that is what I am going to do. Then you have a bunch of people that all dress almost identical and nobody really, you know, their self doesn't really shine through. (19F)

Sometimes people don't seem to have as much control over what they wear because the norms are so strict that if you step outside of them, like if I continue to wear bell bottoms, people would be like "Oh, that's the girl that wears bell bottoms. She's obviously not noticing or caring". So, I would be saying something that I'm not noticing or caring anything about the fashion that's going on around me. So it's like trying to stay in certain boundaries of acceptability, because it is kind of unacceptable to wear unfashionable clothes if you're trying to give public presentations and that sort of thing, which I do in my job. (18F)

Although participants' comments focused primarily on socio-cultural barriers, there were several references to the power of the market economy. In particular, they discussed globalization and its related ills (e.g., loss of Canadian apparel manufacturing and abuse of manufacturing workers) and how the market manipulates our cultural system in order to create a perpetual, rampant demand for consumer goods. The political system also undoubtedly plays a role in clothing sustainability. In consuming nations, political considerations may include creating incentives for local production or sustainable product designs and developing tactics for pressuring or supporting change in nations failing to protect the environment and people; while producing nations' political institutions might give greater care to matters such as developing strong(er) environmental and labour laws and ensuring the broad needs of citizen-workers are being

met (e.g., health care, education). Despite the actions which could be, yet are not being, taken by the political realm, there were no comments from participants on the effects political institutions had on their efforts to engage in clothing sustainability.

Bio-Physical Environment

Although the social-cultural system may be viewed as the most powerful in terms of guiding our interactions with the other environments, the *bio-physical environment* is the most essential to human existence. According to Bubolz and Sontag, “[t]he natural physical-biological environment includes physical and biological components (e.g., atmosphere, climate, soil, water, minerals, plants and animals) as they exist unaltered in nature” (1993, p. 432). Barriers to clothing sustainability are generated primarily by our social-cultural environment, which distorts our economic and political systems, warps our cultural identity and subsequent interpersonal relationships, and dictates the garments that are to be manufactured. Nonetheless, the natural environment can also create limitations for our actions. In the case of clothing, the environment can indirectly impact participants by presenting unfavourable growing conditions for organic cotton, leading to higher prices – one of the obstacles discussed by my participants. However, there was one direct bio-physical barrier to action, an impediment also noted by Moyer’s (2012) study of environmental work in Kenya – and that is the climate. Although the associated challenges differed significantly, in both my study and Moyer’s study, participants found their actions being compromised by forces very much out of their control. The climatic-related complaint in my research was related to vast temperature range experienced in

Winnipeg and the ensuing need for appropriate clothing for each season in order to remain physically comfortable. Participant 31F stated,

Having lived in warmer climates, you don't need all the variety of clothing, but coming to Winnipeg, living in Canada, you could have, to be comfortable and spend time outdoors, three or four winter coats even and then a couple of spring coats and a couple of fall coats. Sometime I feel ashamed to own so many things, but then I think you can't live like Gandhi here, he lived in a warm climate. Here you need a lot of different footwear, a lot of different garments to be comfortable.

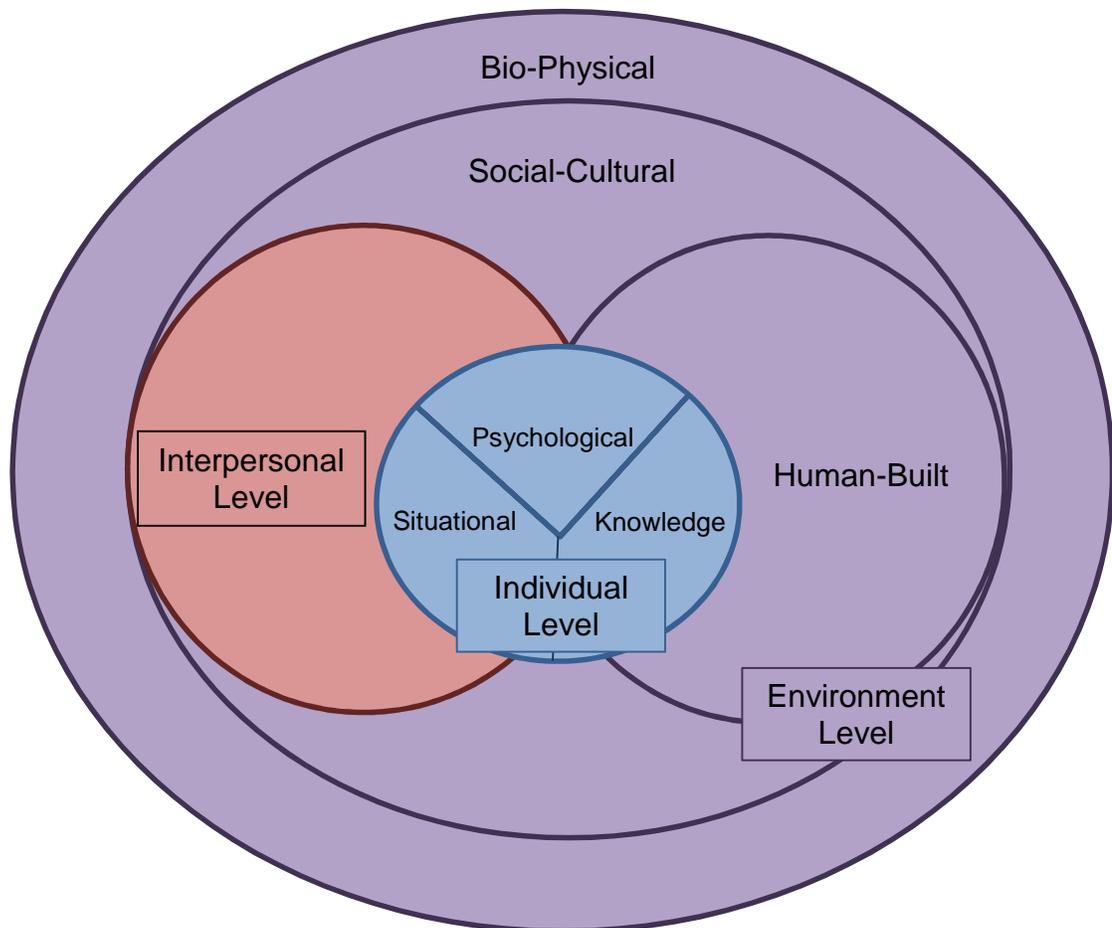
Although the incidences of barriers arising from the bio-physical environment were limited in my research, I believe in other studies of sustainability or natural resource management, bio-physical challenges would be far more significant. For example, as previously mentioned, a barrier noted by Moyer (2012), in her study of the work of religious NGOs in Kenya, was climatic variation, which negatively impacted agriculture.

8.2.4 Social Action Barriers Model

Combining the above ideas from the literature and the findings presented thus far in this thesis, I propose that the factors influencing whether an individual participates in social action or not, can be classified into one of three different levels: the individual, interpersonal, and environmental levels (Figure 8.1). The *individual level*, as established by Mezirow, is comprised of the unique circumstances that affect each individual's ability to engage in social action (i.e., situational challenges, psychological obstacles, and knowledge constraints)(Mezirow, 1989, 1991). Next is the *interpersonal level*, representing the effect our relationships and interactions with those close to us can have

on learning and action (Hart, 1990; McDonald et al., 1999). The outer level, the *environment level*, epitomizes the universal conditions impacting individuals' contributions to social enhancement. It is sub-divided according to the three environments recognized in the human ecosystem model – the human-constructed environment, the social-cultural environment (also identified by Hart, 1990 and McDonald et al., 1999), and the natural bio-physical environment (Bubloz & Sontag, 1993).

Figure 8.2: Barriers to Social Action Model



8.3 Overcoming Barriers to Social Action

Following a change in one's frame of reference or cumulative knowledge, an individual will often have to engage in some type of preparatory activities designed to overcome obstacles before they can participate in social action. The next section will address how the complexity of the barriers associated with sustainable behaviours can hinder one's ability to overcome them. It will also draw upon the data to identify the common approaches participants take to overcome barriers.

8.3.1 Increased Challenges Associated with Social Action for Sustainability

As previously discussed, in his development of the concept of community-based social marketing McKenzie-Mohr explored the nature of barriers to action (2000a, 2000b). Many of the characteristics of the challenges to sustainable behaviour identified in his papers provide insight into why it is so difficult for many people, even the environmentally- and socially-concerned, to overcome obstacles and engage in action. First, he explains that sustainable action is either a one-time act or repetitive behaviour, with repetitive actions being more challenging to uphold over time (McKenzie-Mohr, 2000a, 2000b). He described these two classes of actions as follows:

One-time actions enhance efficiency on an ongoing basis with little further thought on the part of the individual. Repetitive actions, in contrast, often involve curtailment - that is, giving up comfort or amenities so one may conserve resources. In general, it is significantly more difficult to bring about and maintain changes in repetitive behaviors than it is to foster one-time actions. (2000b, p. 532-533)

Most of the sustainable clothing actions discussed in Chapter 5 are repetitive (e.g., hanging clothes to dry, buying sustainable or second-hand apparel, donating clothes to charity), rather than one-time actions (e.g., buying a resource-efficient washer/dryer, taking an introductory knitting class). As such, the challenges associated with these practices are formidable, as they must be faced again and again. This repeatedly dissuades individuals from acting in a sustainable manner and encourages them to follow social norms. Household recycling is the single example of a repetitive sustainable action that has been instituted en masse. Unfortunately, McKenzie-Mohr calls attention to the fact that the conditions allowing for this success have proven difficult to replicate. He wrote:

... curbside recycling requires no changes in consumption and therefore no loss in comfort, requires a minimal time investment, and is supported structurally by municipalities through curbside pickup. Further, the outcome of the activity, a clear reduction in household waste, is evident to each participant and is therefore immediately reinforcing. Finally, the involvement of other households in the activity is also evident, which has a strong normative impact on the behavior. (2000b, p. 533)

He emphasizes that recycling is a unique case and that in most instances not all these factors converge to support a repetitive sustainable behaviour (2000b). This certainly would be true in terms of many social acts related to clothing sustainability. Unlike recycling, individuals wishing to engage in clothing sustainability must curb their consumption; many of the activities require a commitment of money and time; there is limited infrastructure to support sustainable acquisition and disposal; the outcome is not always evident (e.g., changes in the producing nation); and, although an individual may

have an intimate support network, there are no broad societal pressures or incentives to act sustainably in relation to clothing.

Secondly, McKenzie-Mohr notes that multiple obstructions can exist for a single practice. As was demonstrated in my study, the more barriers there are to a particular act, the less likely the individual is to engage in that act. According to my survey, activities with relatively few barriers were more frequently practiced (e.g., washing in cold water, buying higher-quality garments, and donating used clothing to charity); while those activities which involved overcoming various barriers such as an additional cost, a time commitment, research, or skill development, were practiced less frequently (e.g., purchasing sustainable apparel, making clothing, or penning a letter for a national protest campaign).

Lastly, McKenzie-Mohr observed that barriers tend to be specific to a particular behaviour. This means that the skills developed, research conducted and time dedicated to overcome the barriers associated with one sustainable clothing activity will not necessarily assist an individual in overcoming the obstacles hindering their participation in another. Thus, participants who have mastered second-hand shopping will face a whole new host of barriers in attempting to buy sustainable apparel.

8.3.2 Common Approaches to Overcoming Barriers

In addition to supporting the research findings of other scholars, my data uncovered an array of tactics used by participants to overcome barriers. These tactics fell under one of four approaches - increasing knowledge, shifting meaning schemes, changing routines

and establishing a support network. With regards to knowledge, participants discussed activities such as: taking classes on construction techniques; interacting with others in an effort to gain the information necessary to engage in social action; and conducting on-line research on products, companies, impacts, and alternative activities or practices.

Unfortunately, as addressed earlier, the validity and reliability of the information available to consumers is often questionable, leaving individuals to develop different means of coping with any gaps in their knowledge. As noted in Chapter 5, Shaw and colleagues' (2006) study of ethically produced clothing, established that in the absence of adequate information, ethical consumers relied on several different methods for ensuring, as best as they can, that the garment has been made sustainably, including: conducting research into company practices (both the good companies and the questionable ones); purchasing from retailers they trust (i.e., they believe the retailer has conducted research before selecting the products they would sell); and checking labels, in particular the country of origin. Participants in this study also acknowledged using these techniques.

Another common approach to overcoming barriers was to engage in discourse and critical reflection in order to shift their meaning schemes. Although concerned with the environmental or social impact of clothing, in order to change their behaviour, some participants had to adjust their attitudes and beliefs surrounding clothing practices and acknowledge different ways of acting. For instance, for a number of those dedicated to second-hand shopping, changes needed to be made with regards to their shopping meaning schemes. They had to develop more patience, be perseverant, and become comfortable with the fact that they would not likely be able to get everything they needed/wanted immediately. In some instances, changes of a psychological nature

needed to be made, such as an individual gaining the self-confidence to act in a manner contrary to societal norms. As addressed earlier, reflecting on a trip home to South America shortly after adopting more sustainable clothing practises, 16F described being persuaded by family and friends to revert to old behaviours and attitudes. Several years later, returning for another visit home, she no longer felt the pressure or desire to conform. She was now confident in her practices and was able to maintain her views and actions even when confronted by individuals who placed great value on shopping and brands and held very negative attitudes towards second-hand clothing.

A third means for overcoming barriers involved participants finding time in their schedules to participate in one-off activities and incorporating new practices into their personal routines. Many sustainable acts require a dedicated timeframe, a longer period of time to complete and more planning than conventional activities. As a result, participants reported occasionally having to rearrange their routines and schedules in order to accommodate new practices or actions. For example, as mentioned in Chapter 5, second-hand shopping requires frequent visits to the shops; on-line shopping requires waiting for delivery and perhaps a longer wait if an exchange must be made; and hanging clothes to dry requires finding the time to both hang the clothing and to wait for it to dry. Routine changes were even more evident in other forms of sustainable activities. For instance, adopting more sustainable food practices may require learning what products are most sustainable, researching where to shop, experimenting with different recipes, scheduling time to cook possibly more involved meals, engaging in gardening, participating in buying through a buying club, raising and preparing chickens, and

hunting large game. Many of these activities are a deviation from the participants' typical practices and regular routines.

The last approach emerging from the data was the establishment of a support network, which involved participants seeking out and associating with like-minded individuals. Methods discussed by participants for building a social network included attending a clothing swap, joining a social networking site and participating in a buying club. As will be discussed in Chapter 9, support networks play a vital role in an individual's learning and action. Thus, finding another person, group or community with similar desires and intentions can greatly assist individuals in their efforts to overcome barriers.

8.4 Social Action Process

As has been established, a transformation of one's meaning scheme, or even perspective, is not enough on its own to result in action being taken. The gap between attitude and action has been identified and explored by a number of researchers studying sustainable behaviour, including those in the field of clothing and textiles (e.g., Dickson, 2000; Joergens, 2006; Kim & Damhorst, 1998; McKenzie-Mohr, 2000a, 2000b; Shaw et al., 2007). A common finding among such studies is that "enhanced knowledge and supportive attitudes often have little or no impact on behavior" (McKenzie-Mohr, 2000b, p. 531). In the case of my study, as has been discussed, barriers hindering social action were identified by every participant. Their reactions to these barriers, however, varied significantly. Some individuals sought to overcome these impediments, striving to develop or expand their knowledge, meaning schemes and actions, or endeavouring to

alter their situation or relationships. Others, despite being concerned about environmental and social sustainability and wanting to do something about it, chose not to face these challenges. McKenzie-Mohr explained,

Although environmentally relevant attitudes and knowledge are sometimes positively related to behavior, frequently the relationship is weak or nonexistent. Why are attitudes and knowledge not more closely related to behavior? Intuitively, it appears that there ought to be a close relationship. Attitudes and knowledge, however, are only two of the *barriers* to the public engaging in behavior that will promote sustainability. (2000b, 532, italics added).

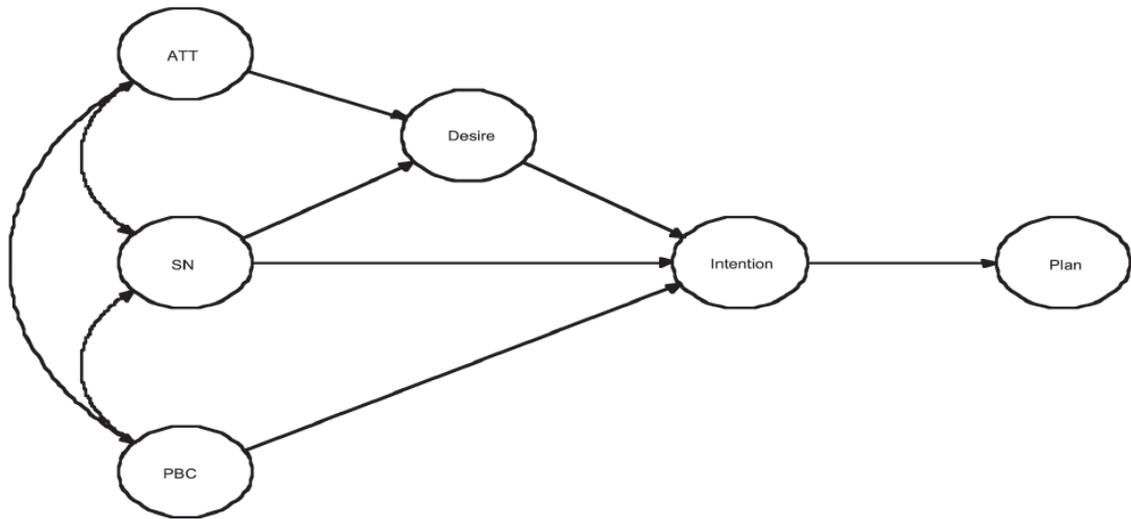
He seems to be indicating that attitudes and knowledge, in and of themselves, are not the starting point for behaviour and action, rather they are cogs in the social action process, a notion supported by the work of Shaw and colleagues (2007).

Shaw et al. (2007), in their study of “consumers’ intentions to avoid sweatshop produced apparel” (p. 31), sought to identify the variables determining the likelihood an individual would refrain from buying non-ethical clothing by proposing a revised model of the Theory of Planned Behaviour (TPB)²². Demonstrating the necessary components to initiate and drive the action process, this model proved useful in organizing and analyzing my findings related to social action. It provided insight into how an individual moves from learning to social action and the factors which may hinder or support the individual’s attempts to overcome the barriers to action. Their model identifies attitudes, subjective norms, perceived barrier control, desire, intent and plan as the factors

²² The Theory of Reasoned Action (TRA), first presented by Ajzen and Fishbein, “is a theory of attitude-behaviour relationship which links attitudes, subjective norms, behavioural intentions and behaviour in a fixed casual sequence” (Shaw, Shiu & Clarke, 2000, p. 881). Found to be inconsistent in its ability to predict behaviour, Ajzen added an additional factor to the theory, perceived behaviour control, referring to the revised model as the Theory of Planned Action.

necessary to convert an attitude into a behaviour (Figure 8.3). Shaw et al. explain that *attitudes* (ATT) towards a particular behaviour and *subjective norms* (SN), or what they perceive those close to them think about the act, together shape the *desire* (i.e., “personal motivation”) to act (p. 34). Desire, subjective norms and one’s *perceived barriers control* (PBC), or the beliefs held about the barriers to a particular act, draw together to form one’s *intent* to act. Intent refers to an individual’s purpose for engaging in action and it was explained by these researchers that “events were intended in so far as an individual’s will impacts their occurrence” (p. 31). In order for intentions to evolve into action, they must first be “operationalized through a plan to act” (p. 32, italics added). *Plan* is “reflective of the actual efforts/steps expended to undertake the behaviour” (p. 32). These researchers concluded that plan is “particularly apparent in contexts where there may be barriers to behaviour, such as found in addictive behaviours (e.g., smoking) and in behaviours where conflict may exist, either with self or significant others (e.g., lifestyle changes, sustainable behaviour)” (p. 35).

Figure 8.3: Enriched Theory of Planned Behaviour Model



(Shaw et al., 2007, “Final Empirically Validated Model”²³)

Each of the factors above was witnessed in my study. The foundation of TPB (i.e., ATT, SN and PBC) is in fact, collections of beliefs, attitudes, assumptions and judgements. In other words, the basis of their model is the components of our frame of reference related to a particular act or behaviour.

First, participants’ clothing- and action-related attitudes, together with their subjective norms, form their desire to act. For example, if they believe that those around them have positive attitudes towards second-hand shopping and they too view second-hand shopping as environmentally and economically beneficial, the individual would

²³ Republished with permission of the Association for Consumer Research, from *Intending to be ethical: an examination of consumer choice in sweatshop avoidance*. Shaw, D., Shiu, E., Hassan, L., Bekin, C. & Hogg, G, *Advances in Consumer Research*, Vol. 34. Copyright 2007. Permission conveyed through Copyright Clearance Center, Inc. on May 20, 2014.

likely develop the desire to buy second-hand clothing. When these factors are in disharmony, the data seem to indicate that the person still can form the desire to act, but it is more challenging. For example, those without family support, especially spousal support, can find it very challenging to act; however, they can devise ways to do so. Some seek out individuals or groups who will support their sustainable activities. Others may choose not to share information about their actions, such as the 24F who told her family members she got her clothing from a “boutique downtown”; or they may find methods to work around the conflict in views, such as 35F, who came to an agreement with her partner about purchasing organic foods. If the individual does not have a positive attitude towards the act, they may still find themselves forming a “desire” to act, often with guilt being the primary driver.

However, even though an individual may desire to engage in a behaviour, their willingness, or intent, to act is also dependent on their beliefs about the barriers to the act, specifically the range of barriers and how challenging they are to surmount (i.e., PBC). In the case of clothing sustainability, earlier sections of this chapter have presented the wide array of challenges participants believe hinder their ability to perform. For many participants, there were certain behaviours they deemed to be too difficult to enact and as such, never moved beyond desire (e.g., buying sustainable apparel or taking part in collective awareness-raising). For example, 19F had both positive feelings towards sustainable apparel and felt pressure from her husband not to buy conventional apparel. Thus, she had formed the desire to purchase sustainable clothing; but, she found many challenges to doing so in Winnipeg. Specifically, it was difficult to find retailers, suitable styles and reasonably priced goods. That was until, while on a trip, she discovered a

community which sold a wide-array of well-priced sustainable apparel. Her PBC shifted and she now felt able to engage in that behaviour (i.e., she formed intent).

Plan, or effort, also plays a vital factor in influencing individuals' engagement in social action for clothing sustainability. Effort refers to the steps required to move from a willingness to act to undertaking that act. It involves developing a plan of action, which may include charting a course, gaining new knowledge or developing a new skill, and devising means to overcome perceived barriers. Efforts related to managing the obstacles to social action may entail, as is discussed above, making modifications to one's meaning scheme, enhancing one's knowledge or proficiencies, changing one's routine or establishing a support base. As one would anticipate, it appears that the easier it is to participate in a behaviour or activity, the more likely it is that the participant would actually do so. Activities which were well-established in social norms, familiar, and easy to perform (such as washing in cold water, donating clothing to charity, and keeping clothing a long time) were more commonly practiced as compared to activities which countered normative ideology, required new attitudes or patterns of behaviour, demanded the acquisition of equipment or materials or involved a substantial learning curve.

Unfortunately, making the effort and meeting the challenges barring action does not mean these barriers will not once again be a source of adversity. For example, 12F, who was discussed in Chapter 7, had stopped purchasing conventional clothing years earlier, choosing instead to buy sustainable and second-hand apparel. However, when she moved to a new community after accepting a job with greater responsibility and a public profile, she found herself buying some new, unsustainable items and feeling a great deal of guilt. When seeking out professional attire, she was faced with several obstacles, including

where to shop (she was in a new city and did not know where to go), availability (can she in fact find sustainable business attire), not enough time to be able to determine where to go and what is available, and frustration over visiting second-hand stores and not finding what she needs.

This model will be revisited once again in Chapter 9, when I examine its possible utility in enhancing our comprehension of the relationship between transformative learning and social action.

8.5 Chapter Summary

Social action is essential to sustainability. Without it, no forward progress will be made. Our environmental and social conditions will remain in a perilous state. Comprehending the notion of social action, its variables, barriers and means to overcome these barriers is vital to the sustainability movement. To address these considerations, this chapter began by defining social action and exploring the variables that shape it - target system, goal, approach, actor, means and audience. It also introduced the various ways in which action may affect a system. It explained how social action may seek to change the system, to maintain a particular element of the system, to restore an element of a pre-existing system, or to promote an alternative system. Further, it provided evidence to support the notion that social action may be performed by individuals, as well as collectives.

It then turned to an exploration of the obstacles faced by participants, barring their pursuit of action. The barriers were numerous and varied in terms of their complexity

and difficulty in overcoming. To better comprehend them, combining the works of Mezirow, McDonald, Bubolz and Sontag, among others, I proposed a model for envisioning the various layers of barriers. These layers were individual (situational, psychological and knowledge), interpersonal and environmental (human-built, social and bio-physical). I then turned my attention to the ways in which participants overcome the barriers they face. Four tactics emerged from the data – increasing knowledge or skills, modifying meaning schemes, adjusting routines and schedules, and developing a support network. I concluded with the introduction of Shaw et al.’s model of the factors affecting one’s likelihood of engaging in action. The model presented the precursors to action and demonstrated the complexity of the journey from new meaning scheme or knowledge to social action and, in doing so, clarified why so many people never move from new/modified attitudes to behaviour.

Chapter 9, the final chapter in this thesis, will combine the discussions of social action presented in this chapter with the ideas put forth in Chapters 6 and 7 regarding transformative learning. It will explore how these two concepts interact with and influence one another and propose a model to depict their relationship.

Chapter 9

CONCLUSIONS AND NEXT STEPS

9.0 Introduction

Sustainability is a journey, not a destination is an adage which certainly holds true for those seeking to live a sustainable lifestyle. Perhaps the essential factor inducing and guiding this movement towards a sustainable consciousness is *learning*. This thesis explored the continuing journey of a select group of individuals as they moved towards a more sustainable way of life, focusing specifically on their thinking and actions regarding clothing.

The study was divided into two phases. Phase One, through both an interview and a survey, sought to gain a better understanding of participants' values, beliefs, concerns, motivations and actions related to clothing sustainability, and to some degree, other aspects of sustainable living. Phase Two involved an in-depth life-grid interview, documenting the sustainability journeys of a subset of participants, from childhood through to present day. Emerging from these interviews was new knowledge regarding the types of experiences which trigger learning for sustainability and the key introductory points for sustainability throughout the participants' life spans. The data also provided a greater sense of what was learned, how it was learned and its ultimate impact on participants' cumulative knowledge, frame of reference and sustainable practices. Further, study findings provided insight into the nature of social action; specifically, the collected information identified key variables, expanded awareness regarding the barriers participants encountered in putting their learning into action, and revealed different aspects of how barriers can be overcome.

This final chapter will take a last look at the findings of this study as they relate to the purpose and objectives established in Chapter 1. Comments are also made on the usefulness of the life-grid method for gathering retrospective data, in particular in relation to transformative learning research. Finally, I discuss the significance of the results and provide recommendations for further research.

Chapter 1 introduced the purpose of this study, which was to examine the role of transformative learning in adults' adoption of sustainable clothing practices and engagement in other forms of social action to advance clothing sustainability, and the possible implications of such shifts for sustainability. Accompanying the purpose statement were a series of objectives, research questions and assumptions, addressing four key areas: transformative learning, social action, the relationship between transformative learning and the social action process, and the relationship between clothing sustainability and general sustainability. The following section will associate the results presented in Chapters 4 to 8 with the queries and postulations detailed in this thesis' introductory chapter.

9.1 Transformative Learning Related to Clothing Sustainability

The following section relates to Objective 1, which sought to understand the learning which accompanied participants' adoption of more sustainable clothing practices and other forms of social action. The conclusions below are drawn from the discussion of findings presented in Chapters 6 and 7.

9.1.1 Learning Triggers

The learning process must be catalyzed by an event or interaction which gives an individual pause. Chapter 6 explored the triggers to learning for clothing sustainability. In particular, it examined the different ways in which triggers may be categorized. It began with Mezirow's approach, which establishes two different triggers – disorienting dilemmas and accumulated events. As discussed in that chapter, Daloz (2000) and Newman (2012) questioned the validity of the concept of epochal transformations. In my study, I only witnessed learning resulting from accumulated events, leading me to agree with their assertion. Despite some relatively profound experiences²⁴, no participant underwent an epochal transformation in relation to clothing, sustainability, or any other aspect of life. Many did discuss their transformation occurring over time, the result of many different experiences, resulting in many small changes. In describing their transformations they used phrases such as “gradual process” (13M), “slow awakening” (34F), and “snowball effect” (21M). As will be discussed in 9.3, many also discussed their transitional years (late teens – early twenties) as being a pivotal stage in their journey, a time when they were introduced to many sustainability concepts and practices.

Clark (1993) also put forward an alternative approach for viewing triggers, classifying them as *predictable* or *unpredictable*. Based on my data, I proposed a third trigger be added to this classification approach, that of the *initiated* trigger, or a planned learning event. It is appropriate for situations in which an individual intentionally sets in motion a learning event, knowing that the experience will expose him or her to new

²⁴ For example, spending time in an orphanage for HIV children in Bolivia or moving from a consumeristic way of life in Peru to a “hippy commune” in Canada,

knowledge and/or viewpoints, but not knowing the form or effect of such learning. In terms of the knowledge gained, the individual does have some control over what is learned. For example, if an individual signs up for an outdoor experiential learning program, he or she has a general sense of the types of things which will be taught and the instrumental learn outcomes likely to be achieved (e.g., knowledge of indigenous culture, orienteering, how to survive without modern amenities). However, with regard to exposure to new viewpoints, the individual has little to no control over the type of communicative learning that may ensue (e.g., the subject matter, the intensity and the significance). For example, what effect will living outdoors for three months have on a person's thinking related to modern society, their possessions, their future academic and vocational plans and their relationships.

Also in Chapter 6, I proposed a third means of classifying triggers. It seeks to refine the previously proposed categories of triggers, making them more specific to the situations which instigated learning. The four types of triggers I put forward were:

- (i) exposure to an alternative way of being (e.g., travelling to a developing nation or working in a corporate environment),
- (ii) exposure to new knowledge (e.g., learning to knit or the name of a local designer),
- (iii) inspiration from someone they know (e.g., a friend curbs consumption or a neighbour explains their practices), and
- (iv) change in circumstances (e.g., major move or having a child).

9.1.2 Instrumental Learning

In the context of clothing sustainability, participants acquired a wide range of skills, knowledge and cognitive understandings. Examples of proficiencies acquired include learning how to: construct clothing, source information on clothing sustainability, purchase sustainable apparel and effectively increase the awareness of others. Knowledge primarily pertained to what they knew about the negative aspects of clothing production, consumption and disposal (e.g., pesticide use in cotton production, abuse of workers and energy consumption due to dryer usage) and the positive acts they could take to reduce these effects (e.g., reduce consumption, buy second-hand clothing and use eco-friendly detergents). Cognitive understandings were how participants came to comprehend the impacts and risks of clothing and the alternatives to conventional products and behaviours, such as being aware of the positive effects buying local has on a community and the relationship between inexpensive clothing and the poor treatment of workers. Table 7.1 provides an overview of the key learning outcomes.

As has been discussed throughout this thesis, despite Mezirow (1994) referring to TLT as a comprehensive theory of adult learning, in his writings, and in much of the discourse on transformative learning, the focus has been on communicative learning and meaning perspective transformations. However, many working in the area of natural resources management and sustainability have found that instrumental learning plays an essential role in their work (e.g., Diduck & Mitchell, 2003; Kerton and Sinclair, 2009; Moyer, 2012; Sims & Sinclair 2008, Sinclair, Collins & Spaling, 2011). Similarly, my findings show that with respect to living a more sustainable lifestyle, not only do individuals undergo a transformation in their meaning structures, they must also develop

the necessary skills, knowledge and cognitive understandings to supplement communicative learning and to prepare for and carry out social action. In other words, instrumental learning was of vital importance to my participants' transition to a more sustainable way of living.

Further, not only did my study reveal an array of instrumental learning outcomes, the data also provided a glimpse into the process that participants underwent to convert information they encountered into a part of their overall knowledge. Once again, although instrumental learning is acknowledged in Mezirow's writings, there is no concise and clear explanation of the process or the cumulative results of such knowledge. This has led me to suggest that instrumental learning outcomes are integrated into a reservoir, which I have referred to as *cumulative knowledge* (Chapter 7). Both instrumental and communicative learning involve some form of information gathering and assessment. According to my findings the instrumental process for testing a new approach, verifying recently attained facts, or substantiating a particular understanding, involves engaging in activities such as experimentation, study/research, and observation, a process I refer to as *confirmation*. Its complementary process is *critical analysis*, which involves an analytical evaluation of the facts, conjectures, and results obtained from one's studies, experiments and performances. Such analyses may involve comparing what has been introduced to the learner to that which is known by others (e.g., family, friends, instructors, researchers or practitioners), an ideal form (e.g., instructor's knitting sample), or their own cumulative knowledge.

In addition, as was explained by Mezirow, communicative learning can take three different forms in relation to meaning schemes; namely, a learner can create a new

meaning scheme, refine or reinforce an existing meaning scheme, or transform an existing meaning scheme. The results of my study indicate that instrumental learning can also take these three forms. An individual can develop, clarify, fortify or modify skills, knowledge and cognitive understandings.

9.1.3 Communicative Learning

With regard to communicative learning outcomes, participants described gaining insights into their own values and interests while developing a better appreciation of the role of clothing in society and its function in their lives. They were reminded that not everyone shares their views – some are far more sustainable, some are unfamiliar with sustainability, and some simply do not care. They also discussed learning about the motivations of the fashion industry and its significant effect on social norms related to consumption, ideals of beauty and creativity.

The literature on discourse and critical reflection is vast, in part due to communicative learning's predominance in Mezirow's writings. In contrast, there was limited direct evidence of either discourse or critical reflection within the interview data. Although it was obvious that participants were exploring the views of others related to clothing sustainability (e.g., conversations, blogs, documentaries, books and websites) and that many underwent a transformation, there is little evidence to prove or disprove that participants' shifts in thinking were the result of discourse and critical reflection. In many instances, participants did not recall how they came to attain specific new thoughts and behaviours. This may have been the result of an inability to remember the process or that the process had been unconscious (i.e., assimilated learning). Another possibility is

that the participant's path was not the result of a conscious-rational process, but rather the result of another way of knowing (e.g., intuition, emotions, spirituality) (Cranton & Roy, 2003; Dirkx, 2001). Or, perhaps most likely, the process was gradual and highly complex, involving most, or all, of these elements. There was some evidence to indicate in a few cases this was a possibility.

Further, in relation to discourse, my findings indicate that participants may form new values, beliefs or attitudes about clothing sustainability based on inference rather than the best tentative judgements born of discourse. Specifically, those with substantial background knowledge on sustainability may apply these understandings to clothing without verifying their assumptions with others. For example, several participants mentioned learning about factory farming. They then used this general awareness to formulate understandings and views about conventional cotton production. A possible explanation for this form of discourse is likely related to my notion of a layered frame of reference. Meaning schemes simultaneously contribute to myriad meaning perspectives. In this case, meaning schemes gained in relation to factory farming - such as a concern over the use of chemicals in agriculture, attitudes towards irrigation or beliefs about the rights of farm labourers - would not only be applicable to one's perspectives related to food sustainability, but could also contribute to one's perspective on clothing sustainability. In this way, a change in one meaning scheme could in fact influence many perspectives, which suggests that meaning scheme transformations may be more significant than has been portrayed in the literature.

I further propose that our frame of reference is made up of many layers of meaning perspectives, ranging from minor outlooks to comprehensive worldviews. Meaning

perspectives at lower levels interact and combine to form high-level, broader-ranging perspectives. It became clear as my research unfolded that clothing sustainability is part of a larger cluster of meaning perspectives – those making up a sustainable lifestyle. Sustainable practices are born of set of common values, attitudes, beliefs, concerns and motivations with respect to the environment, social justice, the economy, politics, and our consumer-culture. The diagrams in Chapter 7 (Figure 7.1, 7.2, and 7.3) demonstrate what I believe to be the interactions and intermingling of meaning schemes and meaning perspectives.

9.1.4 Relationship between Instrumental and Communicative Learning

Several researchers have acknowledged that instrumental learning and communicative learning often occur in tandem (e.g., Mezirow, 1996; Diduck et al., 2012); however, there has been no exploration of this relationship. I assert that there are three ways in which the two learning domains interact - they may serve as triggers for the other, the two processes may transpire concurrently or they may mutually support one another (e.g., instrumental learning requires discourse to assess the legitimacy of the information sources).

9.1.5 Barriers to Learning

The data revealed that there were two main factors which hindered learning – a lack of reliable and relevant information and a weak support network. As mentioned throughout this thesis, participants were frustrated with the dearth of trustworthy information

available to aid their decision making. They deemed much of the information provided by industry, the primary holder of knowledge on the effects of textile and garment production, to be questionable. For example, was the information true? What were the company's motives for providing it? What did they choose not to share? Not being able to find answer for these questions hampered discourse.

The second challenge to some learners was a lack of support from individuals within their social sphere (e.g., family, friends, and colleagues). When a participant had no one to engage in discourse with or the feedback they were receiving was counter to their new ideas and values, the individuals found it more challenging to maintain their ideals or expand their practices. Many of these participants' interpersonal interactions were distorted by our pervasive social-cultural system (Hart, 1990; McDonald et al. 1999), which promotes unsustainable clothing practices and generally discounts sustainable attitudes and behaviours. Support networks are discussed further below.

9.2 Social Action

Referring back to Chapters 5 and 8, the following section addresses how the study findings have provided insight into the concept of social action and its role in clothing sustainability. Specifically, it addresses the key elements of social action, the forms of social action undertaken by participants, the barriers they faced (and continue to face) in their efforts to engage in clothing sustainability and the means they have used to overcome some of these hurdles.

9.2.1 Key Elements of Social Action

I defined social action as *informed action, taken by an individual or collective, against an oppressive system, in order to protect or enhance the welfare of humans, the environment and/or other species*. Accompanying this definition are six variables which shape the nature of the act undertaken - system, goal, approach, actors, audiences and means. Two important conclusions arise from these findings – (i) acts need not be undertaken by a group and (ii) the goal of social action does not necessarily have to be to *change* the system. As noted in the definition, action may be undertaken by a single person (individual social action) or by a group or groups (collective social action). Leading social action theorists such as Friere and Habermas, believe that social action necessitates a group of individuals learning to cooperate, communicate and negotiate a common understanding in order to act. I agree this is one approach to social action. However, an overwhelming number of participants in my study had never engaged in social action in a collective manner, yet all have taken steps to change their own personal behaviour in an effort to contribute to the common good. As noted in Chapter 8, despite the individualistic nature of the participants' actions, there is still a social element to their acts/practices in that they are reaching for a common vision of sustainability. As such, I contended that these individual practices and acts are in fact social action. In relation to goals, it has been traditionally viewed that the goal of social action is to *change* an oppressive system. However, my research has demonstrated that the intent of an act or practice may also be to maintain a beneficial aspect of the existing system; to restore a constructive element of a pre-existing system; or to establish an alternate system.

9.2.2 *Social Action for Clothing Sustainability*

Chapter 5 introduced the wide-array of sustainable acts and practices which participants performed with regard to clothing. Individual social action included both sustainable clothing practices and activities to promote clothing sustainability.

Sustainable clothing practices fell into one of three categories:

- (i) *Acquisition* practices included purchasing sustainable apparel, obtaining used clothing and making garments. It also included practices such as buying high-quality garments, avoiding fashion pieces and continuing to wear clothing for long periods of time, all of which were intended to extend the life of their garments.
- (ii) *Maintenance* practices addressed what participants did to reduce the impact of cleaning and the techniques they used to extend the life of their garments (i.e., reducing the “wear and tear” on their garments). With regard to cleaning, the majority routinely washed in cold water, hung clothing to dry and used environmentally-friendly cleaning products. Also discussed were repairing clothing, continuing to wear stained or damaged garments and spot cleaning.
- (iii) The simpler *disposal* acts were practiced by the majority of individuals (e.g., donating clothes to charity, using for another purpose and giving away to

someone). Redesigning clothing and selling on consignment were not popular options, choices such as composting and returning to retailer for recycling were rarely, if ever, practiced, in part because the infrastructure for doing so is limited or non-existence.

With respect individual social action aimed at influencing others, participants reported either attempting to increase awareness of clothing sustainability or to advocate for change. Awareness-raising activities generally concerned alternative practices or products and were targeted at individuals within their social sphere. Acts included telling a colleague about a local designer and recommending that a family member use an eco-friendly detergent. Advocacy primarily involved contacting companies with questions, concerns or to follow up on a product guarantee. Participants also discussed advocating for change by “voting with their dollar”. In such cases, participants were hoping to send a message to the conventional clothing manufacturers and retailers to change their practices (e.g., boycotts, letter writing campaigns, email inquiries) or to support local production and distribution (e.g., buying from locally owned retailers, purchasing garments from local designers).

Collective social action was less prevalent than sustainable clothing practices. Collectives ranged from likeminded partners to international movements. In general, there were three approaches taken by collectives in relation to clothing sustainability. The first approach relates to changing behaviour and involves groups collectively developing, improving and/or implementing sustainable clothing practices. Examples include, a knitting club encouraging members to keep up with the craft and clothing swaps facilitating the exchange of second-hand clothing.

The second approach to collective action was collective awareness-raising. At times these acts were performed on a voluntary basis, which included blogging, streaming podcasts and handing out pamphlets. However, in general, awareness-raising activities were associated with the workplace. For example, participants delivered workshops and lectures addressing, at least in part, clothing sustainability and put on fashion shows or large scale clothing swaps, which incorporated sustainability messages.

The third approach was collective advocacy, or activities aimed at changing the practices and policies or norms of governments, corporations and consumer society. These acts included protests (e.g., Buy Nothing Day, anti-fur march and a mall protest), as well as letter writing campaigns and petitions.

I have, thus, concluded that although individual behaviour has not been considered to be social action in much of the literature, it can be seen in my findings. As individuals, many participants were able to significantly reduce their clothing footprint and cumulatively these behaviours could have a considerable impact on clothing sustainability. This is not to say that collective social action, even though only practiced by a small number of my participants, was not also an essential component to social action in the context of clothing and sustainability.

Two assumptions were made at the beginning of this research project with respect to action for clothing sustainability. First, it was assumed that more participants would be involved in individual action related to clothing than would be involved in social action. This assumption was proven true. According to both the survey and the interviews, all participant engaged in a variety of individual social acts, and for those who took part in both individual and collective forms of social action, they undertook

individual acts, in particular SCP, far more often than they joined with others to take action.

It was also assumed that purchasing sustainable apparel would be among the last SCP to be adopted, and that when selecting apparel other clothing criteria such as fit, price, and style would precede sustainability concerns. As outlined in Chapter 5, my study, like others before it, has found that sustainability factors are not a top priority when making clothing decisions. Factors such as style, fit, quality and comfort were ranked considerably higher than factors such as fair trade, ethical production, organic cotton and other sustainable fibres (Table 5.2).

These findings, coupled with the fact that only 30 percent of participants routinely purchased sustainable apparel, might leave the impression that when it comes to acquiring clothing, individuals concerned with sustainability did not tend to act upon their beliefs, choosing instead to focus on fulfilling more personal needs and desires. However, because my study examined the full spectrum of sustainable behaviours related to clothing, instead of concentrating solely on the purchase of new sustainable garments, as other studies have done, it was evident that sustainability was in fact a significant factor in their decision-making. My research demonstrated that the majority of participants were not choosing to purchase unsustainable garments rather than sustainable ones. Rather, instead of buying new garments, even if designed or produced in a sustainable manner, most of the participants were opting to restrict their purchases, extend the life of apparel, and buy second-hand clothing. Limiting their participation in the market system was seen as a more effective way of taking action.

When purchasing new garments, although participants may not have considered factors directly related to sustainable apparel (e.g., organic or sweat-free), many did seek out garments which were well-made, long-lasting and not trendy. In other words, participants were able to make sustainability-based decisions using more traditional decision-making factors such as quality, durability and fashion. Further, placing greater weight on factors such as style, comfort, colour and fit is not necessarily contrary to sustainability. It is likely that a garment will be kept for a longer period of time if it meets the individual's criteria.

Finally, careful consideration of which retailers to patronize was in many instances related to sustainability. Many of the participants discussed shopping at establishments which sought to provide products which met their sustainability ideals. They believed these retailers conducted research and carefully selected the products they sold. Therefore, they did not have to worry about sustainability criteria shopping at these stores, which allowed them to focus on other features.

9.2.3 Barriers to Social Action

Chapter 8 explored social action barriers related to clothing and identified, categorized and analysed different levels of challenges. As observed by Mezirow, despite undergoing a transformation related to socio-linguistic codes, not all learners will take social action. Participants identified a substantial number of barriers to their engagement in social action for clothing sustainability. Some were applicable to sustainable behaviours on the whole, such as pressure from family members to conform to social norms and the higher cost of more eco-friendly products, while some were

specific to clothing, including the limited availability of stylish, sustainable apparel and tree sap and soot soiling clothes if hung out to dry.

Mezirow identified three variables which prevented learners from becoming involved in action - situational, psychological or knowledge-based variables (Mezirow, 1989, 1991). All three were witnessed in my study. However, they did not account for all the barriers revealed. Following further research (Bubolz and Sontag, 1993; Hart, 1990; McDonald et al., 1999; McKenzie-Morh, 2000a, 2000b), I concluded in Chapter 8, that although Mezirow's variables represented the personal or individual barriers participants faced, there were also interpersonal and environmental (human-built, socio-cultural and biophysical) barriers which hindered progress towards clothing sustainability.

9.2.4 Overcoming Social Action Barriers

My research also investigated how participants attempted to overcome social action barriers and move forward with clothing sustainability. I found that in some cases they never did overcome the barriers, despite having a desire to do so. For example, in Chapter 8, 28F discussed wanting to purchase locally-made clothing, but could neither afford such attire (situational) nor could she overcome her deeply ingrained notions regarding the value of clothing (psychological). In other instances, individuals were able to overcome barriers, but not consistently. The strugglers exemplified this, successfully avoiding the temptation of shopping (psychological/socio-cultural) for an extended period of time, only later to go on a shopping spree. Finally, there are those who were able to surmount the barriers and engage in a particular action or behaviour.

In an effort to better understand the challenges to overcoming barriers, I sought to uncover the nature of the barriers to social action. To do so, I reviewed the work of McKenzie-Mohr (2000a, 2000b), who identifies a number of characteristics of the barriers to social action, especially in relation to sustainability, which provide an indication as to why these challenges are difficult to overcome. First, social actions related to clothing sustainability are predominantly repetitive and actions which are repetitive are far more challenging to initiate and maintain than one-time acts. Second, many sustainable acts have multiple barriers, which meant that even when a particular challenge was overcome, participants still had others to face. Finally, McKenzie-Mohr noted that barriers tend to be specific to a particular act or behaviour, meaning that the effort expended to overcome the barriers to one action may not help the individual in facing others.

Having explored the characteristics of barriers, I turned to the stories of my participants, attempting to identify themes grounded in the data. Four different approaches to overcoming the challenges barring social action for clothing sustainability were revealed – increasing knowledge or skills, shifting meaning schemes, changing routines or schedules and establishing a support network.

Finally, when addressing the issue of overcoming barriers, I considered the conceptual framework developed by Shaw et al. (2007) to better understand the factors involved in moving from meaning structure changes to social action. As outlined in Chapter 8, the Theory of Planned Behaviour, upon which the framework was based, identifies three cognitive elements needed to embark on action – attitudes (ATT), subjective norms (SN) and perceived barrier control (PBC) (Shaw et al., 2007). The

framework developed by Shaw and her colleagues addresses how these factors interact to form desire, intention and plan - key elements required to move from attitude to action. My study's findings support their model. For example, I found that a participant's attitude towards buying and wearing second-hand clothing, coupled with the opinions of their family members and friends towards used apparel (SN), played an essential role in determining whether or not they wished to adopt this practice. I also noted that when participants believed there were many barriers to acting, in particular if they thought one or more were difficult to overcome (PBC), they were generally unwilling to engage in that activity. Thus, even though they had a desire to engage in an activity, such as hanging clothes to dry, the perceived barriers prevented them from forming intent. Finally, to move from intent to action required participants to make an effort (or plan), which some were unwilling to do. As was just noted, participants relied on four different means to overcome barriers – increasing knowledge, altering meaning schemes, changing routines and forming/strengthening support networks. I would consider each of these to be part of one's effort or plan. Thus, researching a company's practices, reputation and product offerings would be part of plan, as would taking the time to reflect on their purchasing habits and considering how they might reduce their clothing consumption.

9.3 The Relationship between Transformative Learning and Social Action

The following section draws on the data presented in Chapters 6, 7 and 8 in order to describe the relationship that exists between the two key themes of this research - transformative learning (9.1) and social action (9.2). I provide an overview of key points in participants' lives when shifts occurred in their attitudes and behaviours and

acknowledge the essentiality of a support network to both learning and action. I then present a model developed to depict the role of TL in the social action process.

9.3.1 Changes in Attitudes and Behaviour over the Lifespan

The life-grid interviews delved into participants' clothing-related thoughts and behaviours, at key points during their lives, in order to explore the evolution of participants' perspectives and actions throughout their lifetime. Chapter 6 presented the data collected on participants' childhood attitudes, beliefs and practices, which served as the foundation for their frame of reference. For the majority of my participants, the foundation which was established in their childhood directed their adult learning and provided some indication of the attitudes and behaviours changes that would be seen. In general, participants' foundations fell into one of three categories – sustainable, conservative or unsustainable.

At the extreme end of unsustainable were those participants raised in households and/or communities that placed great emphasis on consumption and social status. Unsustainable childhoods, in most cases, led to the strugglers. In their transitional or adult years, these individuals were exposed to the concept of sustainability. Attracted to the notion, they began to learn more and to create new meaning schemes and to convert some of their existing meaning schemes. Unfortunately, for the majority, their deeply ingrained beliefs and values related to consumption and clothing were difficult to overcome, even with mounting sustainability-oriented meaning schemes.

Those having experienced a conservative upbringing were the participants who engaged in many sustainable practices in childhood (e.g., hanging clothes to dry, wearing used clothing, and making clothes), but for reasons of practicality or frugality, rather than for environmental or social concerns. For these participants, adult learning tended to involve incorporating sustainability ideals into their frame of reference.

For the individuals with a sustainable background - raised with positive values and attitudes in relation to the environment, social justice and activism – adult learning tended to involve adding to and reinforcing their existing meaning schemes. However, as was noted in Chapter 6, having a solid sustainable foundation did not mean these participants were unable to experience a meaning scheme transformation. Their stories revealed that they did experience transformations, ones which moved them either further along the sustainability path or in the opposite direction, with the participant becoming less sustainable. Such was the case for 07F and 28F, both of whom were activists in their youth, but in adulthood adopted a more moderate perspective, choosing to concentrate on their personal behaviours rather than attempting to influence others. It is my position that in doing so, they were building a more functional frame of reference. Those at the far end of the sustainability spectrum were more apt to see matters as either black or white, and as such were inclined to exhibit relatively extreme behaviours (e.g., making their own sandals). However, in adulthood, various experiences led them to be more open to the perspectives of others, have a better understanding of others' upbringings, and be cognizant of the fact they must interact and get along with individuals with different worldviews in their daily lives.

It should be noted that my research indicates that the transitional years are of significant importance to learning, at least in the case of sustainability. This period marks the years in between childhood and adulthood and it is during this period that the majority of individuals leave home and begin to make their own way. It is a time when they are bombarded with new views, opinions, principles, values, ideas, and behaviours, many of which they have no reference for and some of which conflict with their existing values, views and principles. For some, it is the first realization that not everyone holds the same attitudes and beliefs. The majority of participants in my study described this timeframe as being a period of growing awareness, the period in which they first encountered people engaged in sustainable thinking and behaviour.

9.3.2 Support Networks

It has been well-established in the literature, and in this thesis, that transformative learning is a social endeavour (e.g., Baumgartner, 2002; D'Amato & Krasny, 2011; Mezirow 2000; Moyer, 2012). My findings have also demonstrated that social supports are vital to the social action process. Those participants with people in their lives who held similar or even stronger sustainability beliefs were better able to expand their knowledge and skills, build positive meaning schemes, overcome barriers, maintain their behaviour, increase the range of sustainable activities they performed and deepen their commitment to sustainability and social action.

For the purposes of this study, I am using the term support network to refer to an interconnected system of sustainably-oriented people, groups and resources that provide encouragement, practical assistance, and psychological and emotional support to an

individual as they move towards and seek to maintain a more sustainable lifestyle. The following section relies on the findings from Chapters 4 to 8 to draw conclusions regarding the importance of support to both learning and social action. Specifically, it delves into the forms and sources of social support received by participants.

Forms of Support

Participants' networks provided support in diverse ways. They helped participants to expand their cumulative knowledge by sharing information, answering questions and assisting in the development of new skills (Chapter 7). They played a vital role in discourse, demonstrating alternative perspectives and providing feedback (Chapter 7). They also served as a source of inspiration – providing novel actions to try, serving as an example, and offering evidence that change is possible to undertake and maintain (Chapter 6). Finally, networks often formed sub-communities where sustainability was the norm, allowing participants to feel they were no longer abnormal. Within this community, their sustainable ideas and practices were justified and regarded as customary.

Sources of Support

As indicated by my findings, support networks are a mixture of individuals, groups and resources. The people, organizations and businesses providing products, services and/or information related to clothing sustainability were regarded as an important resource. These included sustainable apparel retailers, local designers, second-hand shops, NGOs, social networking sites, blogs, or those facilitating

classes/workshops/courses. Support also came from their communities, such as housing co-ops, eco-village, neighbourhoods, university or work environments, and social organizations. However, in most instances the greatest support came in the form of help and encouragement from those within their own social sphere, namely their spouses, families and friends.

An important conclusion relates to the critical role of the spousal relationship in pursuing a more sustainable lifestyle. Spouses tended to be either the largest support or, in the case of non-sustainability oriented partners, one of the greatest barriers to adopting an overall sustainable lifestyle. In the case of the latter, if one spouse wishes to carry out even basic sustainable activities, such as composting, recycling, using green cleaning products, gardening, or eating organic and local food products, it is far more difficult to accomplish if their partner does not cooperate because they do not believe a particular issue is important or they have some objection to the act/behaviour. Examples of this included partners who could not be bothered to throw kitchen scraps in the compost pail, those who complained about the cost of organic products or those who refused to buy organic products if doing the grocery shopping (e.g., 03F, 11F, and 35F).

Aside from those with a strong sustainable upbringing, it was mainly the participants who had meaning schemes attuned to that of their spouse who were the most committed to sustainable activities, including engaging consistently in a wide-array of practices, bringing home new ideas for them to try, and compelling one another to advance their practices. They also tended to make plans to implement more challenging projects, including converting a vehicle to operate on vegetable oil, constructing a natural water filtration system in an old bathtub, and looming fabrics (e.g., 12F, 20M, and 23F).

For issues such as food, it is vital to have both partners in accord to make any substantial strides. Clothing acquisitions, on the other hand, do not generally require mutual agreement and cooperation. Nonetheless, there were examples of dedicated couples supporting one another with regard to their garment selection. For instance, couples who went shopping together for second-hand or Canadian-made apparel were able to encourage one another and reinforce the significance of these practices. One such participant was 33M, who shared how he and his wife, he had chosen to buy second-hand and to integrate the practise into their lives, generally engaging in this activity together.

It should be noted that roughly a third of the participants had a weak or non-existent support network. On the whole, the attitudes and actions of these individuals differed from those participants receiving encouragement and assistance. Individuals without a network tended to engage in sustainable activities on a more intermittent basis, generally favouring activities that were easy to implement, and rarely (if ever) engaging in information gathering.

9.3.3 Role of Learning in the Social Action Process

According to Mezirow, “There can be no simple linear relationship between transformative learning and social action; there are many kinds of transformative learning and many kinds of social action.” (1989, p. 174). In exploring the various components of transformative learning that have been well-established in the literature, such as instrumental learning, discourse, meaning schemes changes, and learning triggers, and in recognizing the diverse ways in which these components manifest themselves, this study demonstrates that there are in fact many different kinds of transformative learning

(Chapter 7). In contrast, Mezirow's assertion that there are many forms of social action has not been a topic that has been well addressed in TL studies and theoretical works. Chapter 8 begins to delve into this gap, revealing an array of variables – systems, audience, means, methods, actors and objectives – which emerge and interact in a variety of ways, leading to divergent forms of social action.

As has been noted by Friere, Habermas, Mezirow and others, *learning* is the foundation of social action and the key guiding factor (e.g., Finger, 1995; Moyer 2012; Sandlin, 2004). Transformative learning is essential in the decision to act, the preparation stage and the evaluation-reflection process, which occurs both during and following the action. Conversely, as has been seen in this study, the social action process may trigger a transformative learning experience or it may help facilitate a meaning perspective transformation. In other words, within the context of social action, learning and action are irrevocably intertwined and, as such, no straightforward, linear relationship exists.

To better explore the complex relationship between these two constructs, I have used the model developed by Shaw et al. (2007), introduced in Chapter 8 (8.3), as a basis for presenting my assertions regarding the role of learning in the social action process. Founded on the Theory of Planned Behaviour (TPB), a well-recognized theory “designed for the prediction and understanding [of] human behaviour” (Arvola, Vassallo, Dean, Lampila, Saba, Lähteenmäki & Shepherd, 2008, p. 443), I initially drew upon the Shaw et al. model in my discussion of barriers, in order to demonstrate the variety of factors standing between learning and action. I now propose modifying this model so that it not only provides insight into the process of social action (i.e., the pre-requisites to action),

but also allows for a more comprehensive understanding of the role TL plays in this process (Figure 9.1).

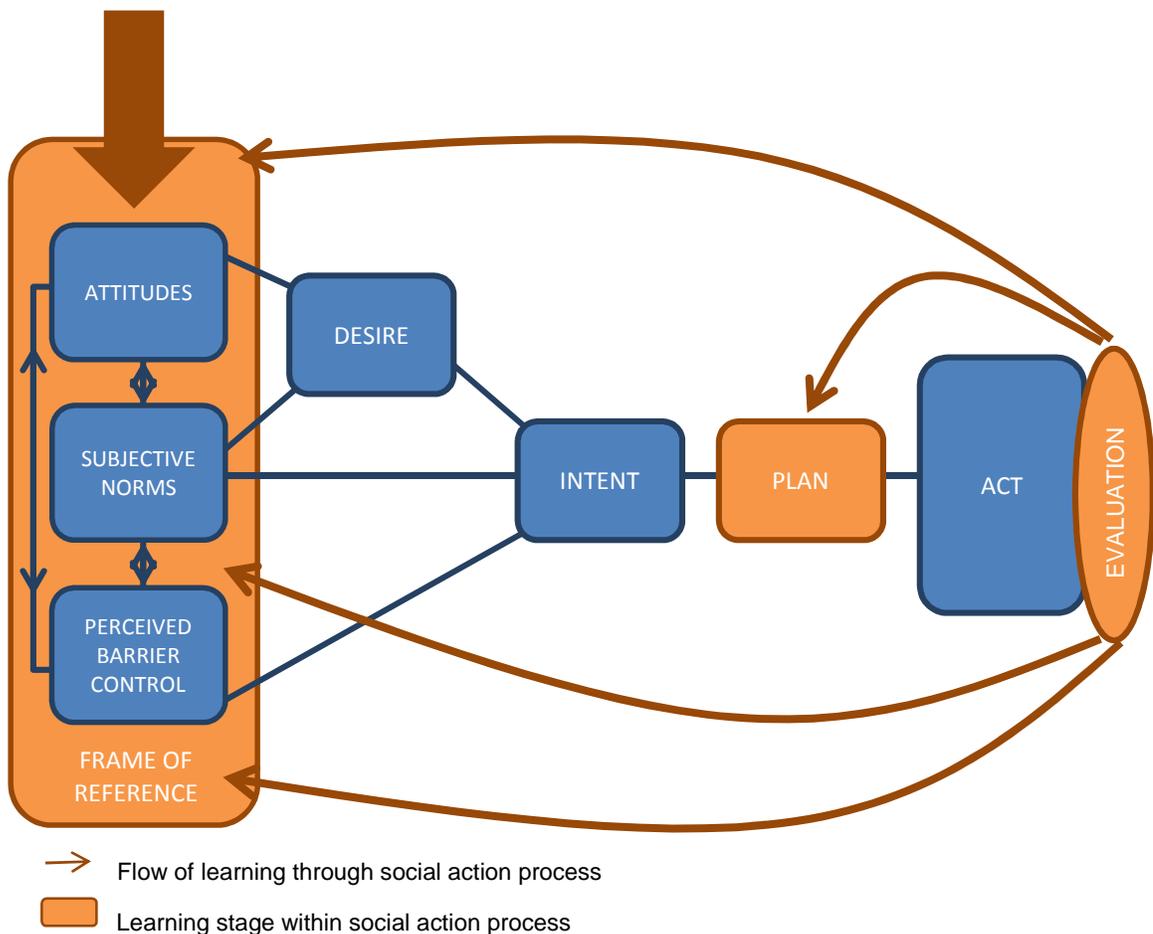
TPB has established that action originates from our attitudes regarding a particular behaviour, our perceptions of others' attitudes towards that behaviour, and how difficult we believe the action will be to undertake (e.g., Ajzen, 2002, 2011; Arvola et al. 2008; Shaw et al., 2000). As discussed in Chapter 8, attitudes (ATT), subjective norms (SN), and perceived behaviour control (PBC) are components of our frame of reference. The meaning schemes making up these components determine whether or not a learner forms the desire and intent to engage in a particular action. Since these meaning schemes are predominantly formed by transformative learning, I maintain that TL serves as the origins of social action. In the proposed model, the role of TL is indicated in a number of places throughout the process, marked by either an orange box or an orange arrow. First, learning directly influences an individual's frame of reference with regard to a particular behaviour. This has been represented by a large orange arrow entering from outside the process and the frame of reference being coloured orange to indicate that it is a learning stage in the process.

Second, in order to convert one's willingness to act ("intent") into action, an individual must form a "plan" and engage in preparatory activities. As such, this stage often involves learning new skills or knowledge, or developing new cognitive understandings. To indicate the learning which takes place during plan, this stage is indicated by an orange box.

Third, based on my findings, I suggest that the *evaluation* of an act or behaviour is an essential stage in this process, from both a learning and an action perspective. Thus,

following “act”, I have placed “evaluation”. The evaluation of an action is in and of itself a learning process that provides the individual with feedback, which in turn generates further learning that influences the foundation of the social action process (i.e., ATT, SN, and PBC) and the plan stage (e.g., if a plan did not attain the desired outcome, how might it be revised?). Accordingly, the evaluation stage is also orange, signifying that it is a learning phase. I have also added orange arrows to indicate the flow of learning from the evaluation stage back to the frame of reference and plan stage.

Figure 9.1:
Role of Transformative Learning in the Social Action Process (proposed model)



Pulling together the findings in Chapters 4 to 8, the following section uses the model to guide the formation of contentions regarding the key areas where TL and social action coalesce. These include ATT, SN and PCB, plan and evaluation.

Attitude, Subjective Norms and Perceived Behaviour Control

I conclude that communicative learning plays a key role in social action, shaping individuals' ATT, SN and PBC, and thereby influencing the initiation of the social action process and the form of action pursued. Learners may take part in discourse and critically reflect on the decision to engage in social action. This may include examining their assumptions in relation to questions such as – what will the people in my life think of me acting in this way? Do I agree with what is happening in society? Do I believe I have a responsibility to act? Do I believe I can make a difference? Do I have time to perform this behaviour? Further, instrumental learning may indirectly shape these base elements of action because of its close relationship with communicative learning (e.g., knowledge gained may influence or inspire communicative learning).

Plan

In preparing to act, my data shows that a learner will draw on both instrumental and communicative learning. Mezirow explains that “[i]nstrumental learning is a vital part of preparation for social action.” (1991, p 20). My findings lead me to concur with this statement. Preparation may require attaining or enhancing a particular physical skill, honing one's skills for critical thinking and problem solving, acquiring additional

knowledge, or developing an understanding of new phenomenon, all in order to formulate a plan or overcome the barriers to the specific action. For example, as noted in Chapter 8, in preparing to reconstruct a garment, 11F sought out information on how to do so, finding a website dedicated to sharing ideas about reconstruction and displaying the creations of members. She continues to frequent this website in order to gain inspiration.

Action preparation also involves communicative learning. It is presumed that, to some extent, critical reflection occurs during the plan stage, with individuals reflecting on what they would like to achieve and the form of action they would like to take. This could involve reflecting on the social action variables and considering the following questions: Should the action taken be collective or individual? Should the action target system change or restoration of past practices? Should the action attempt to increase awareness or to change behaviour? There was evidence in my data to support this assumption. For example, for 34F, completing the survey, in particular the question of how many garments she owned, instigated the learning process. When reaching the plan stage, she explained in her journal how she considered the problem (i.e., too much clothing), identified a reasonable approach to addressing the problem (i.e., reduce wardrobe to 50 items) and developed a strategy for attaining this goal.

Communicative learning also plays a role in helping the learner to overcome barriers to acting, as shown by the findings described in Chapter 8. In surmounting the challenges preventing action, often an individual will have to make changes to their meaning schemes. Such was the case for some participants when it came to washing in cold water or reducing their purchases. Although they understood the benefits of these actions, desired to enact them and believed they could overcome the barriers to

undertaking them, they were not able to act until they were able to alter their notions about the ability of cold water to clean or to develop the ability to tell “need from want”.

Evaluation

Although not a part of the original Shaw et al. model, my data revealed that when relating action to learning, an evaluation of one’s behaviour is essential. Both during and following action, individuals assess many aspects of their action, including their performance, the advantages and disadvantages of their plan, reactions to their behaviour, and the success, or lack thereof, of their approach. All of these aspects may determine if they act again, if they revise their plan or if they decide to abandon their course of action. Both instrumental and communicative learning may be involved in comparing actual outcomes with assumed outcomes.

As Figure 9.1 illustrates, the assessment of action can influence one’s attitudes. An individual who encounters different reactions to, and outcomes resulting from, their emancipatory acts, may begin to reconsider their existing assumptions. That is to say, the social action process may instigate a transformative learning experience, which in turn may shape the direction of future social action undertakings. For example, Chapter 8 introduced several participants who had acted rashly, such as boycotting all Chinese products and encouraging a protest of their employer, without due consideration of their actions. Their later reflections revealed that their actions were not particularly effective, which caused them to reconsider their initial attitudes about the issue and their behaviour and eventually led them to cease that particular approach to clothing sustainability. In another instance, 12F, 34F and 35F, upon learning of sustainable apparel or second-hand

clothing, all gladly acted on this knowledge and happily purchased these items. However, over time, as they reflected on their consumption patterns, they came to realize that purchasing sustainable clothing did not necessarily address their concerns. It seemed that sustainable items provided them with the justification they needed in order to continue buying significant quantities of clothing, when in fact they knew they should be curbing their consumption.

As for subjective norms, whenever an individual takes action, it is likely that those within their social sphere will have an opinion on that behaviour or act. A fundamental aspect of an evaluation of action for my participants was assessing the perceived views of those close to them and, in some cases, requesting their participation in the evaluation process (i.e., instigating discourse). Chapter 8 discussed how both the negative and positive feedback received from friends, family, and coworkers, regarding the participant's new behaviours or actions, impacted their transformation and their engagement in further social action. Negative feedback included an aunt believing that it was embarrassing to wearing second-hand clothing, a friend encouraging unnecessary purchases, and a parent being concerned over what they deemed to be extreme behaviour. Positive feedback included a co-worker complimenting a new sustainable garment and a family member praising second-hand purchases.

My data also shows that an evaluation of one's actions may influence an individual's perception of the challenges to enacting a particular behaviour (i.e., shapes PCB). Or it may affect how they prepare for action, be it the skills developed, information sought out, or approach taken, which may trigger instrumental learning and shape a plan. Furthermore, if an individual encountered unknown challenges or had an

unsuccessful outcome, the results of their “action evaluation” could also lead to learning which influenced both their PBC (e.g., there are more barriers than originally anticipated) and plan (e.g., if performed again, changes to the plan will need to be made). For example, struggler 35F, as discussed earlier, had embarked upon and failed to maintain a one-year shopping hiatus. Upon reflection, she realized the barriers to action were more challenging than she had anticipated. When attempting to cease shopping for a second-time, she decided to do so for a shorter duration and took a number of steps to prepare herself for the strong psychological and normative pressures she now knew she would face.

Instrumental learning may also be involved in and inspired by the evaluation of the plan and its execution. Learning may be the result of answering questions such as: Were my skills and knowledge sufficient to the task? Do my skills need further development? Was more data necessary to effectively act again? What cause and effect relationships arose during my assessment of the plan and its consequences? For example, 11F and 34F both enjoyed redesigning clothing. They described continually learning from their construction projects, determining what worked and what did not, and consequently revising their methods and honing their skills. Even participants who had purchased sustainable apparel for years continued to draw on instrumental learning - researching companies’ practices and product lines – in order to help them to make better choices.

Not having set out to use the Shaw et al. model of planned behaviour, my limited understanding of this model and the configuration of the data does not allow for a full exploration of it. Nonetheless, I believe there are two important ideas that can be taken away from the application of this model to my data. First, it pulls together a number of

factors that have been previously addressed in my study, namely the participants' attitudes towards behaviours, the influence of those within their support network and their beliefs regarding the barriers to a particular behaviour. It introduces one possible explanation as to how these factors interact and direct the individual towards action, and it emphasizes the complexity of this process. It also demonstrates that learning plays a role throughout the entire process, for example, considering what your neighbour might think if you hung your clothes out to dry (subjective norms) or gathered data on the best sustainable raincoat on the market (plan). Consequently, as researchers continue to explore literature outside of transformative learning theory in an effort to better understand the relationship between learning and social action, this modified TPB model may prove useful and is worth further consideration. Even if one does not subscribe to the ordering of these factors or even questions the validity of these factors, I believe this model encourages researchers to recognize both the complexity of the learning-social action process and the reasons why many never continue their sustainability journey.

Socio-linguistic Codes

It is an accepted view that "... critical self reflection on basic sociocultural suppositions can lead to critical analysis of governing ideologies, development of sociopolitical consciousness, and active civic participation" (Diduck & Mitchell, 2003, p. 341). Although I agree with the assertion that social action is a potential outcome of a perspective transformation of one's socio-linguistic codes, my research findings indicate that social action may also be taken following a meaning scheme addition or modification. In other words, it can occur for some participants without a perspective

transformation. Many of the participants, in particular those interviewed for Phase One only, would not have undergone a meaning perspective transformation. Yet in terms of clothing, these individuals were taking action. For most, it centred around acts of individual behaviour change or maintenance, such as washing with an environmentally-sound detergent, hanging clothes to dry, buying second-hand clothing, participating in clothing swaps or donating clothing to a charity. These acts were informed, in that the participants were aware of the negative impacts of commonplace acts and/or the positive effects of alternative actions, and in part, they were motivated by a desire to reduce the negative impact of their practices. Thus, even though they had not undergone a perspective transformation, these participants were engaging in social action. The same was also true of the strugglers, who had not yet been able to find a balance between their sustainability values and fashion/clothing attitudes, but had certainly taken action to change their own behaviour and to discuss with others more sustainable clothing practices. Although, they had not been able to consistently maintain these behaviours, they had taken steps to remove themselves from a system they viewed as being problematic and had begun to support alternative acquisitions practices, all in spite of not yet experiencing a comprehensive meaning perspective transformation.

One possible explanation for this seeming disparity may be found in Mezirow's meaning perspective transformation process (Mezirow, 1991, 1994). Chapter 2 explains that perspective transformations occur in phases, some of which are centred on critical reflection, while others are more action-oriented (i.e., phases 5 through 9). In order to test the appropriateness of a collection of meaning schemes, individuals must experiment with new roles, responsibilities and relationships, which may involve exploring different

forms of social action in order to determine the reaction of the people in their lives and the challenges to adopting this new viewpoint. Thus, I propose these participants when engaging in social action were not acting on new perspectives; most were simply testing elements of such perspectives - examining new meaning schemes and behaviours - which would be associated with prospective worldviews. It should be noted that the participants trying out new meaning schemes may never experience a transformation. It is not uncommon for learners to revert to old patterns, to cease progression or even to decide not to pursue a particular path (Moore, 2005). For example, the data presented throughout my thesis shows how the strugglers experienced regressions, falling back into old patterns of consumption. Despite having changed many of their meaning schemes and further developing their cumulative knowledge, only time will tell if these individuals are able to maintain these new clothing meaning schemes and behaviours, let alone transform their meaning perspective.

I also assert that in order to engage in social action, some individuals may have to modify elements of their Psychological Codes. Evidence for such a conclusion can be found by examining those individuals who use shopping as coping mechanisms for stress and other difficult situations. To overcome their urges to shop and curb their consumption, these individuals must face some of their underlying psychological drivers. Although not explored in any depth in this study, a number of sustainable apparel studies have explored psychological factors believed to play a role in behaviour change, including locus of control, self-efficacy, self-esteem and self-perception (e.g., Hustvedt & Dickson, 2009; Shaw et al. 2000; Hyllegard, Paff Ogle & Dunbar, 2006); as have a number of TPB studies (e.g., Ajzen, 2002; Arvola, 2008; Shaw et al. 2000).

9.4 Other Sustainable Lifestyle Choices

The final objective in this study was to explore the extent to which an individual's clothing practices may affect, or otherwise be related to, other sustainable lifestyle choices. Drawing primarily on the findings discussed in Chapters 5, this section seeks to provide concluding thoughts on the range of other sustainable lifestyle activities participants engaged in and the connection between these activities (and the related values and attitudes) and clothing sustainability.

9.4.1 Social Action as Related to Other Forms of Sustainability

Other sustainable lifestyle activities were introduced in Chapter 5. Recycling, according to the survey, was the most frequently practiced activity, with almost every participants routinely recycling their waste. Although recycling was mentioned by nearly everyone during the interviews, it was activities related to food that were most often discussed, including purchasing local and/or organic, cooking from scratch, selecting fair trade, buying direct from farmers, hunting, raising chickens for consumption, practicing vegetarianism, and participating in a food co-op/buying club. Table 5.5 provides a summary of the most routinely practiced sustainable lifestyle activities as reported on the survey. It should be noted that while food sustainability was discussed by all participants and at greater length than any other sustainable activity, not one of the top ten activities listed in Table 5.5 is food-related.

Additional activities raised during interviews included minimizing plane travel, collecting and using rainwater and grey water, dumpster diving, and researching larger purchases, such as mattresses and bed frames, appliances, vehicles, and homes. Lastly, many of the participants interested in sustainability went beyond their personal practices by choosing to take a degree (13 participants) and/or pursue a career (16 participants) in the area of sustainability. Such a large number of participants employed in this field is likely, in part, due to the sampling technique. However, I assert it is also related to Lange's (2004) findings regarding modern-day pressures and civic engagement. She found that many of her participants were unable to participate in social action on a voluntary basis, but a number did chose to pursue sustainability-related careers, allowing them to contribute to the sustainability movement in a professional capacity. She explained that her participants had "projected their ethical identities and civic responsibilities onto their job. Most ... strongly believed that if they found the right job they would be able to make a difference in society and enact their professional and personal ethics" (p. 136).

9.4.2 Relationship between Clothing Sustainability and Other Forms of Sustainability

One of the assumptions made prior to the commencement of this study was that, for most participants, the choice to engage in social action related to clothing would follow a commitment to other sustainable lifestyle activities. This assumption was found to be true. Not a single participant's initial introduction to a sustainable lifestyle was through clothing. In most instances participants encountered other practices first, with food being discussed as one of the key entry points to a more sustainable lifestyle. Others were

simultaneously exposed to the entire spectrum of sustainable thought and practice. Such was the case for 16F, 34F and 35F, who were inducted into new sustainably-conscious friendship groups. These groups taught them about matters such as societal ills, environmental damage, and social injustices and shared with them alternatives to conventional practices. As a result, their ideas and behaviours regarding issues such as food, clothing, transportation, volunteerism and feminism began to form concurrently. Finally, some participants had long practiced different behaviours or acts that were deemed sustainable, but did so for personal, not sustainability, reasons. Later in life, they became familiar with sustainability ideals and added these as underlying reasons for continuing to engage in this behaviour. Second-hand clothing is the prime example of this form of behaviour. The original impetus for buying used apparel was rarely sustainability. It was generally financial constraints or style concerns which led to the adoption of this behaviour (e.g., 09F, 11F, 12F, 20M, 21M, and 24F). Adopting sustainably-oriented values and beliefs either supplemented or supplanted earlier motivations. For these participants, although sustainable clothing practices may have preceded other sustainable behaviours, it was not until their meaning schemes began to shift towards sustainability that these acts would have become part of their repertoire of sustainable practices.

9.5 Life-grid Framework

In order to both document and comprehend the participants' sustainability journeys, I traced the events and people who shaped their perspectives from childhood through to present day. To accurately collect such retrospective data, I used a life-grid, a tool used

to enhance recall. The last of the assumptions laid out in Chapter 3 was that the life-grid framework would be a useful tool for conducting retrospective transformative learning research. Researchers using the life-grid framework reported that in addition to improving the recollection of events from the past, it also directs and focuses the interview and allows for the collection of data that are both comprehensive and detailed (Bell, 2005; Parry et al., 1999). Another contention was that it encourages story-telling and allows participants to play a significant role in guiding the interview, deciding how to tell their story and, in some cases, assisting in interpreting and assessing their experiences (Parry et al, 1999; Wilson et al., 2007).

Overall, I found these points to be true and the life-grid to be a very effective data collection tool. A number of participants commented on how it helped them to recall memories they had forgotten. Also, the life-grid proved to be very valuable in encouraging participants to share their journeys and allowing them to play an integral role in the research. Its primary drawback was that it generated copious amounts of data, which was challenging to manage, not only due to its volume, but also because it yielded different types of data, both interview transcripts (thematic analysis) and the completed life-grids (timeline analysis). It proved to be extremely time consuming as the same data had to be analyzed twice, once using NVIVO and then again through the sketching of timelines. The two forms of data also increased the complexity of the analysis process, making relating and presenting the findings more challenging. Despite these barriers, I conclude that the life-grid can be a practical tool when exploring transformative learning in an informal learning context, in which one must follow a participant's journey throughout their life to more accurately determine how learning unfolded. Research

endeavours that would benefit the most from this tool would be those akin to McDonald et al.'s (1999) study of ethical vegans, Kovan and Dirkx's (2003) research on environmental career paths, Baumgartner's (2002) work with individuals living with HIV/AIDS, and Kerton and Sinclair's (2010) exploration of individuals purchasing organic foods.

9.6 Significance and Suggestions for Future Research

This thesis introduces a number of processes, models and categorization systems in an attempt to advance our understanding of transformative learning in relation to social action. Additional research is required to prove the validity and reliability of, and expand upon, many of the concepts introduced, including the instrumental learning process, the multi-layered frame of reference, and the barriers to social action model. Other areas of significance and concepts requiring further study are discussed in greater detail below.

Shaw et al.'s (2007) model introduced an expanded version of the Theory of Planned Behaviour, one which I believe provides insight into the complexity of adopting new practices and actions. When further developed, it offers a potential explanation of the relationship between learning and action. It demonstrates how transformative learning flows through the social action process and how action contributes back to learning. In attempting to bridge the transformative learning literature with the literature from fields directly exploring the progression of attitudes to action, this work begins to fill a gap essential to our understanding of an individual's progression towards sustainability. I recommend that research be continued on this model.

My work contributes to our understanding of catalysts for learning, namely identifying a set of more specific categories to describe triggers. As previously discussed, my research suggests, at least in relation to sustainability, that triggers might be broken down into narrower groupings – exposure to alternative ways of being, exposure to new knowledge, inspired by another person(s), and change in circumstances. Greater knowledge of the types of triggers that initiate learning for sustainability may provide practitioners with new ideas as to how they might facilitate a transformative learning experiences related to clothing sustainability or sustainability in general.

The majority of participants were exposed to a wide array of new ideas and practices during their transitional years. In many cases, they adopted these ideas and practices as their own. There is some debate as to whether learners of this age have the cognitive ability required to engage in critical reflection. Unfortunately, there were not enough data to properly explore this concept; thus, further research is required to better understand learning that occurs at this stage in life. However, no matter what type of learning is occurring, this is clearly a very influential stage in an individual's lifespan in terms of learning about and adopting sustainable lifestyles. At this stage in their lives, most individuals are particularly receptive to new ideas and alternative ways of being, and as such, it is a period that educators and other practitioners should be more fully exploring.

Further, my research reinforced and expanded, to some degree, our notions regarding the importance of support networks to TL and to social action. Most of the support networks established by participants were informal, made up of family, friends and co-workers. For those who were part of a sustainability community (e.g., sustainable

housing co-op, tree planting crew or extended friendship circle), the findings showed that when immersed within these groups, sustainable thought and behaviour came more easily. However, for several participants, once removed from that community, their ability to maintain their actions diminished. The question is then whether such groups can be established in a more formal manner. Can “trust, solidarity, security, and empathy”, the requisites to successful learning and social action, be attained in a formal group (Mezirow, 2000, p. 12). Supplementary research, exploring the role and potential of support groups in greater depth, could answer such questions.

Finally, others who may benefit from these findings are textiles and apparel researchers, and in the long-run, the apparel industry. My research demonstrated that individuals do not view sustainable apparel as the only means of attaining clothing sustainability. They are more concerned about the needless use of resources and unwarranted creation of pollution which accompanies the production of unnecessary clothing than about the “green” materials and processes being used to make garments, be it more sustainable or not. As such they avoid new clothing, choosing to extend the life of the clothing they have and buying second-hand. This is not to say that the apparel industry need not or cannot contribute to sustainability. It simply requires them to be more creative; finding unique ways to make garments last longer and designing garments that need not go to the landfill. Possible means for achieving these ends include developing clothing that is reusable, recyclable, easily repairable, upgradable and multi-functional (Fletcher, 2008). Another alternative would be to bring manufacturing back to North America, thereby supporting the local economy, increasing control of factory conditions, decreasing the distance a garment must travel and reducing likelihood of

environmental exploitation. Countless more opportunities undoubtedly exist for those companies willing to be imaginative.

9.7 Closing Remarks

The notion of clothing sustainability was of great interest to me as I initiated this study; apparel fascinated me and sustainability inspired me. Interestingly, while I anticipated learning a great deal during my research, I had not expected to embark upon my own transformative journey.

Clothing had always played a significant role in my life. In my youth, I loved fashion, sketching garments, sewing clothing, reading fashion magazine, and even creating my own fashion board game (“Long skirts are out of style this spring. Go back 3 spaces”). I dreamed of becoming a fashion designer and when it came to selecting a university program, there was no doubt that it would be Clothing and Textiles.

An “awakening” to environmental issues in my fourth year began to change my path. I conducted numerous projects on clothing production and the environment at the end of my undergraduate program and following graduation chose to pursue a Master’s degree in Natural Resources Management. Nonetheless, I did not connect the broader perspectives I held on clothing and sustainability with my personal practices until I started this project and began to delve into the literature on clothing sustainability. I recorded in my journal the trigger for my journey:

Several months ago, as I began to conduct research for this project, I read an article on people’s attitudes toward ethical fashion. Several of the folks interviewed mentioned that they did not tend to buy ethically-made clothes

because they were more expensive. They would rather buy several cheaper t-shirts rather than pay the higher cost for just one ethically-made shirt. I found it really disturbing to think that so many in our society place greater value on a t-shirt than on the people across the globe sewing the shirt. However, as I thought about it more, I came to realize that in fact I was practicing the very same behaviour I found so upsetting. I always look for good deals and give little thought to the manner in which the clothing is produced. While workers' rights, child labour and the health of the environment are definitely concerns for me, I have not married my concerns with my consuming behaviour. What I studied in school and tried to promote through my volunteer work seems to be completely separate from my clothing shopping habits. When I go out to buy clothing, I am concerned about the style, the fit, the fabric feel and, primarily, the price. Reading the views of those people mentioned above seemed to suddenly bring those two worlds together – and I realized I was certainly not practicing what I was preaching. It baffled me a little as to why I had not realized this years earlier.

This realization left me asking many questions, such as: What action could I take that would fit within my lifestyle? Could I overcome the barriers to my actions? Or even more specific questions such as what do I wear to my meetings with my thesis committee? Should I buy something new and sustainable for my committee meeting? Do I go shopping second-hand? Or do I piece together something I already have in my wardrobe?

I found myself entering Mezirow's meaning perspective transformation process (section 2.1.2). I began to engage in self-reflection in relation to my clothing and sustainability values and beliefs, as well as examining the assumptions underlying my clothing consumption practices. Doing so, led to me to the second stage, in which I felt tremendous guilt over the disparity in my sustainability values and my clothing practices.

But then I started the interviews, meeting with individuals from the entire spectrum of clothing sustainability, from those occasionally buying sustainable apparel and second

hand items to those cleaning raw wool and spinning it into yarn in order to knit garments. These interviews, and in particular the analysis process, served as a means of discourse. With each meeting I learned of the participants' inspirations and obstacles, their triumphs and failures, their allies and foes, and their opinions, beliefs, philosophies and attitudes. As I began to code the data, I found myself not only searching for themes and correlations to the theory, but also reflecting on the different experiences, perspectives and practices of my participants and comparing them to my own. I particularly identified with the strugglers and came to understand that I was not alone in my beliefs or my struggles.

Combining the thoughts of my participants, the notions from the literature, the input of my friends, family and students, and the feedback received from the many people who were interested in my thesis topic and wished to share their own experiences, I developed my own personal sustainable clothing criteria and practices. Namely, I have abstained from shopping, and when buying the occasional article of clothing, buying second-hand, sustainable apparel, or seconds.

As I near the end of my degree and plan to once again enter the workforce, I find myself contemplating my resolve. For the last several years, there have been no expectations regarding my appearance. Clothing consumption abstinence has left my clothes well-worn and out-of-style, and not likely appropriate for a new career. That, coupled with the anticipation of a higher income, as was mentioned by a couple strugglers, leads me to question whether I will be able to restrain my purchasing in the same manner as I have been able to as a student with limited means. Time will tell whether I have in fact undergone a transition or whether my struggle and guilt will be

renewed with a change in circumstances and a new set of challenges. My clothing sustainability journey continues...

APPENDICES

Appendix A

INITIAL INTERVIEW SCHEDULE

Researcher's Introduction

Thank you for agreeing to participate in this study.

I'll start by providing you with a brief overview of the study and then I will ask you to read over the consent form, which will provide you with a few more details. And then we can start into the actual interview, which takes about an hour.

The focus of this study is on people who are concerned about the sustainability of clothing and are committed to taking steps to reduce the environmental and social impacts of clothing. More specifically, I want to explore how these people learned about the clothing sustainability and how this learning then led to a change in their attitudes and behaviour related to clothing. So, questions will focus on your habits, attitudes and awareness about clothing.

This first phase of a three phased study, and in this phase I am asking interested individuals to participate in both an interview, as well as a survey, which I will give to you at the end of the interview to take-home and complete at your leisure.

(Hand consent form) This is the consent form. It explains a little more about the study. It asks for a signature at the end, this is simply to just to affirm that you have been informed as to the nature of the study and your participation – it in no way binds you to participation or waives any rights. After reading, if you have any further questions about the study or your role, please feel free to ask.

(After consent form signed and any questions answered) Before we start the interview, I just want to stress that all your responses will be kept confidential and that there are no right or wrong answers to these questions, I am simply interested in getting a true picture of your views, concerns and habits are in relation to clothing. Also, at any point in time if you think of something you would like to add to a previous answer, just let me know and we can skip back. You will also get a chance to review the transcript of our interview – and if there are things you would like to add or clarify, you can do so.

Social Action to Promoted Clothing Sustainability

As noted in the consent form, one of terms I will be referring to in this study is Sustainable Clothing Practices, which refers to any activity a consumer may engage in reduce the adverse environmental and social impacts of clothing consumption – with consumption referring broadly to clothing selection, purchase, use, maintenance, storage or disposal. SCP may include:

- purchasing sustainable apparel,
- reducing clothing consumption,
- maximizing garment lifespan, and
- cleaning and disposing of clothing in the most environmentally friendly way

1. Sustainable Clothing Practices

Based on this definition of sustainable clothing practices, could you describe the types of SCP you engage in?

- Why do you engage in these sustainable clothing practices?
- Looking at these various SCP, is there one of these activities that you would identify as your introduction to SCP, the one that started you on the path to being more committed to clothing sustainability?
- Looking at X practice (longest, most frequent, most important) – how did you learn about this practice?

If purchasing sustainable apparel is one of the activities the participant engages in...

- Tell me about your experiences with buying sustainable apparel.
- Are there any challenges to buying sustainable apparel in Winnipeg?
- What types of sustainable garments do you purchase?
- What retailers do you frequent or brands do you often purchase?
- When you are buying a new garment, how do you ensure it addresses your sustainability concerns? (*e.g. trust retailer, trust brand-name, check the label, conduct research*)

2. Barriers to Sustainable Clothing Practices

What challenges or barriers have you encountered in attempting to engage in these practices?

If purchasing sustainable apparel is NOT one of the activities the Consumer engages in.

- What would you say have been the barriers to your purchasing sustainable apparel?

Are there other practices (or actions) you are aware of, but have not engaged in? If so, why have you not engaged in these activities?

3. Collective Action

In addition to SCP, which tend to be more individual activities, some consumers may also participate in group efforts to influence the behaviour of other consumers, manufacturers' practices or government policies. Some of these activities might include letter writing campaigns, sustainable fashion show, protests or rallies, clothing swaps, collective boycott, discussions with friends/family/colleagues.

Have you participated in any collective activities related to clothing? If so, could you describe these activities?

- Why do you engage in these collective activities? Same as for individual or different (or additional motivations)?
- Looking at X practice (other than discussions) – how did you learn about this practice?

Environmental and Social Impacts of Clothing (Knowledge)

The next set of questions is about the environmental and social impacts of clothing. Through these questions, I hope to get a sense of the range of information people have about both the potential impacts of clothing and the action they can take, as well as how they came across this information (i.e. the source of this information).

4. What do you know about the impacts of clothing and how did you learn about this?
5. What do you know about how to reduce your clothing impact and how did you learn about this?
6. Do you actively seek out information on the impacts of clothing or how to reduce these impacts?
7. Have you shared your knowledge with others? Why or why not?

Transformative Experience

8. Reflecting on these various practices you engage in, the information you have come across and experiences you have had, is there one activity, piece of knowledge or experience that you would identify as your introduction to clothing sustainability, the one that started you on the path to being more committed to clothing sustainability?

General Clothing Attitudes & Habits

I would like to move away from our discussion of sustainable clothing now, and discuss clothing more broadly; in particular...what role does clothing play in your life? For many people, this is not a topic they have really given much thought to. So, the next series of questions are going to try to help identify your views and attitudes about clothing.

9. Does it play a minor or a pivotal role in your life (*or somewhere in between*)?
 - Is it simply a necessity or do you get pleasure out of choosing clothes?
 - Do you carefully consider what you put in the morning or simply grab anything and go? Or would it depend on the day/occasion?
 - Do you often notice what other people wear or talk to others about clothing?
 - Do you use clothing as a means of expressing yourself (to convey your personality)?
 - Would you consider yourself to be a unique dresser, or do you tend to dress similarly to your peers?
10. Can you tell me about your typically clothes shopping habits?
 - How often would you estimate that you shop for clothing? (*Used clothes? New clothes?*)
 - Do you typically shop by yourself or with others? (*i.e., is a social activity?*)
 - What typically motivates a shopping experience? (*Necessity? Enjoyment?*)
11. What are your thoughts/feelings regarding fashion?
 - Do you follow fashion trends (e.g. magazines, window shop, fashion TV programs)?
 - Do you like to wear the latest fashion?
 - Do you have concerns about the fashion industry?

Other Sustainable Lifestyle Choices

For this final set of questions, I would like to discuss other sustainable activities you might practice, perhaps activities related to food, household items and appliances, work or leisure, transportation, or house or yard maintenance.

12. What types of other sustainable lifestyle activities do you engage in? (e.g. *recycling, car pooling, buying locally grown foods*)

13. Is there any particular activity that you would identify as initiating your commitment to a more sustainable lifestyle (*i.e. marking the starting point of your commitment? Was this the way you were raised or were these activities you adopted in adulthood?*)

Appendix B SUSTAINABLE CLOTHING PRACTICES SURVEY

Sustainable Clothing Practices Survey

Thank you for taking the time to complete and submit this survey. This survey is one part of a multi-phase study of consumer engagement in sustainable clothing practices. Your experiences and insight are invaluable to understanding how sustainable clothing attitudes and behaviour are developed and maintained. Please note there are no right or wrong answers to these questions and all responses will remain confidential.

Survey Purpose:

The purpose of this survey is to gather information on your general apparel purchasing behaviour, your participation in sustainable clothing practices and your engagement in other sustainable lifestyle choices.

Instructions:

Please answer all questions as best as possible. If you would like to elaborate or explain a particular response or find a question unclear, please make a note beside the question, or in one of the blank spaces provided. You may also use the blank spaces provided to offer additional information about clothing issues or sustainable clothing practices that may not have been covered in the survey.

Once completed, please return using the stamped, addressed envelope provided by _____.

Researcher Contact Information:

If you have any comments, questions or concerns about the research project or the Consumer Survey, please feel free to contact me at:

Lisa Quinn (PhD Candidate)
Natural Resources Institute, University of Manitoba
303-70 Dysart Road
Winnipeg, Manitoba R3T 2N2

For references throughout this survey:

Environmental concerns relate to the adverse impacts the production, consumption and disposal of clothing can have on the natural environment, other species and human health. For example, environmental concerns related to production may include the way in which cotton is grown or the wastewater from dyeing process; environmental concerns related to consumption could be related to the amount of clothes consumed, the short life-span of many garments, or how clothing is cleaned; and concerns about disposal could be related to the amount of clothing being sent to landfill.

Social concerns relate to the adverse impacts the production, consumption and disposal of clothing can have on people. For example, social concerns related to production may include sweatshops and child labour, while social concerns related to consumption may include the impacts of over-consumption on society.

Sustainable apparel is the term used to collectively refer to both environmentally-improved apparel and socially-conscious apparel.

Environmentally-improved apparel is clothing manufactured using materials (e.g. organic cotton, hemp, bamboo, recycled polyester, etc.) and/or production processes (e.g. natural dyes, undyed fabrics, etc.) which have less of an environmental impact in comparison to conventionally manufactured clothing.

Socially-conscious apparel is clothing produced by manufacturers following fair labour practices and providing safe working conditions. Such practices include paying a living wage, providing paid overtime, ensuring reasonable shift length, prohibiting all forms of abuse, not employing children under the legal age, and allowing employees to partake in union activities.

Terms associated with this type of clothing may include: sweatshop free, no child-labour, union-made, and fair-trade.

Social Action for Clothing Sustainability

1. How often do you participate in the following activities?
 For each activity, please select the most appropriate number (1-5). If you engage in other sustainable clothing activities not listed, please add under 'Other' or in the blank space provided.

	Never	Have tried once or twice, but do not plan to do it again	Have tried once or twice and plan to do it more regularly	Occasionally	Routinely
Purchase sustainable apparel	1	2	3	4	5
Buy second-hand clothing	1	2	3	4	5
Refuse to purchase garments from a particular retailer or brand	1	2	3	4	5
Repair your clothing when it has suffered damage (e.g. missing button, tear, broken zipper)	1	2	3	4	5
Purchase garments that will last a long time	1	2	3	4	5
Purchase basic styles (i.e. not trendy clothing)	1	2	3	4	5
Make your own clothing (e.g. sew, knit, crochet)	1	2	3	4	5
Update a garment's style to enable you to continue wearing it (e.g. change the style of buttons, changed the length of the sleeves or skirt)	1	2	3	4	5
Purchase well-made garments	1	2	3	4	5
Wash clothing in cold water	1	2	3	4	5
Hang clothes to dry	1	2	3	4	5
Use environmentally-friendly detergents	1	2	3	4	5
Avoid using bleaches or fabric softeners	1	2	3	4	5
Use environmentally-friendly stain removal products or techniques	1	2	3	4	5
Give away clothing to someone you know	1	2	3	4	5
Donate clothing to charity	1	2	3	4	5
Sell clothing through consignment shop	1	2	3	4	5
Return clothing to retailer to be recycled	1	2	3	4	5
Use old clothing to make new garments	1	2	3	4	5
Use old clothing for other purposes (e.g. rags, crafts)	1	2	3	4	5
Compost old clothing	1	2	3	4	5
Throw old clothing in the garbage	1	2	3	4	5
Rent articles of clothing	1	2	3	4	5
Ask a retailer to carry sustainable apparel items	1	2	3	4	5
Research a retailer's or manufacturer's buying/production policies	1	2	3	4	5
Share knowledge of environmental or social impacts of clothing with others	1	2	3	4	5
Share knowledge of ways to reduce the impact of clothing	1	2	3	4	5
Encourage others to participate in sustainable clothing practices	1	2	3	4	5
Participate in a clothing swap	1	2	3	4	5
Participate in "Buy Nothing Day"	1	2	3	4	5
Participate in an organized boycott of a retailer or brand	1	2	3	4	5
Participate in a letter writing (or email) campaign to a manufacturer, retailer, institution or government in relation to clothing	1	2	3	4	5
Other:	1	2	3	4	5
Other	1	2	3	4	5

Comments or Questions:

2. How often do you shop for clothing (new or second-hand) for yourself? Choose one.

- | | |
|---|---|
| <input type="radio"/> Once a week | <input type="radio"/> 2-5 times per year |
| <input type="radio"/> 2-3 times per month | <input type="radio"/> Once a year |
| <input type="radio"/> Once a month | <input type="radio"/> Less than once a year |
| <input type="radio"/> 6-11 times a year | <input type="radio"/> Other: _____ |

3. Thinking of your recent clothing purchase, how important were the following factors in deciding which items you selected?

For each of the factors, please select the most appropriate number (1-5). If there are other factors you consider important, please add them under 'Other' or in the blank space provided.

	Not at all important	Not very important	Neutral	Important	Very important
(a) Price	1	2	3	4	5
(b) Suitable style	1	2	3	4	5
(c) Fit of garment	1	2	3	4	5
(d) Quality	1	2	3	4	5
(e) Comfort	1	2	3	4	5
(f) Fashion	1	2	3	4	5
(g) Colour	1	2	3	4	5
(h) Country-of-origin	1	2	3	4	5
(i) Uniqueness	1	2	3	4	5
(j) Fabric feel	1	2	3	4	5
(k) Durability	1	2	3	4	5
(l) Machine washable	1	2	3	4	5
(m) Popular brand name (e.g. Tommy Hilfiger)	1	2	3	4	5
(n) Brand name known for sustainability (e.g. Patagonia)	1	2	3	4	5
(o) Fair-trade	1	2	3	4	5
(p) Ethical production	1	2	3	4	5
(q) Union made	1	2	3	4	5
(r) Fabric made of organic cotton	1	2	3	4	5
(s) Fabric made from recycled polyester	1	2	3	4	5
(t) Fabric made of other sustainable fibres (e.g. hemp, bamboo, soy)	1	2	3	4	5
(u) Undyed fabric	1	2	3	4	5
(v) Fabric coloured with natural dyes	1	2	3	4	5
(w) Garment can be returned for recycling	1	2	3	4	5
(x) Other:	1	2	3	4	5
(y) Other:	1	2	3	4	5

4. Of all the factors listed in Question 3 (a-y), which 5 are the most essential to you when deciding whether to purchase an article of clothing. Please rank in order from most to least essential.

Please place the corresponding letter in the space provided below.

- (1) _____
- (2) _____
- (3) _____
- (4) _____
- (5) _____

Comments or Questions:

In order to answer Questions 5-10, please stand in front of your closets/dressers/wardrobes (including the front or back hall closet and any other place you store clothing) so you can provide your best estimate as to:

5. How many articles of clothing do you own?
Count should include items such as casual wear (e.g. t-shirts, jeans), work wear (e.g. blouses, dress pants, sweaters), formal wear (e.g. dresses, suits), workout wear (e.g. running shorts, yoga pants), outerwear (e.g. jackets, ski-pants) and lounge or sleepwear (e.g. pyjamas, sweatpants, t-shirts), whether worn regularly or infrequently. The count should exclude socks and underwear.

Total articles of clothing: _____

6. What percentage of your wardrobe do you wear on a regular basis? *Choose one.*
 Under 1% 2 - 9% 10 - 25% 26 - 50% 51 - 75% 76 - 100%
7. What percentage of your wardrobe is less than a year old? *Choose one.*
 Under 1% 2 - 9% 10 - 25% 26 - 50% 51 - 75% 76 - 100%
8. What percentage of your wardrobe is more than 5 years old? *Choose one.*
 Under 1% 2 - 9% 10 - 25% 26 - 50% 51 - 75% 76 - 100%

Sustainable apparel refers to both environmentally-improved (EI) apparel and socially-conscious (SC) apparel.
EI-apparel is clothing manufactured using materials (e.g. organic cotton, hemp, bamboo, recycled polyester, etc.) and/or production processes (e.g. natural dyes, undyed fabrics, etc.) which have less of an environmental impact in comparison to conventionally manufactured clothing.
SC-apparel is clothing produced by manufacturers following fair labour practices and providing safe working conditions. Such practices include paying a living wage, providing paid overtime, ensuring reasonable shift length, prohibiting all forms of abuse, not employing children under the legal age, and allowing employees to partake in union activities. Terms associated with this type of clothing may include: sweatshop free, no child-labour, union-made, and fair-trade.

9. Using the above definition, what percentage of your wardrobe is sustainable apparel? *Choose one.*
 Under 1% 2 - 9% 10 - 25% 26 - 50% 51 - 75% 76 - 100%
10. What percentage of your wardrobe is second-hand clothing? *Choose one.*
 Under 1% 2 - 9% 10 - 25% 26 - 50% 51 - 75% 76 - 100%

11. Please select the number (1-5) which best describes your agreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am well-informed about the social issues related to clothing production.	1	2	3	4	5
I think of myself as someone who is concerned with social issues.	1	2	3	4	5
I consider myself to be a socially-responsible consumer.	1	2	3	4	5
I am well-informed about the environmental impacts of clothing production.	1	2	3	4	5
I am well-informed about the environmental impacts of cleaning clothing.	1	2	3	4	5
I am aware of how to properly dispose of clothing which is still usable.	1	2	3	4	5
I am aware of the options for extending the life-span of my clothes.	1	2	3	4	5
I think of myself as someone who is concerned with environmental issues.	1	2	3	4	5
I consider myself to be an environmental consumer.	1	2	3	4	5
I believe by engaging in sustainable activities I can make a difference.	1	2	3	4	5

Comments or Questions:

12. How concerned are you about the following clothing issues?

For each issue, please select the most appropriate number (1-5). If you have additional concerns not listed, please add them under 'Other' or in the blank space below. Please select NA (not applicable), if you were not aware of this being an issue associated with clothing.

	Not concerned	Not very concerned	Neutral	Concerned	Very Concerned	Not applicable
(a) The chemicals used to dye and finish fabric.	1	2	3	4	5	NA
(b) Conventional agricultural practices used to produce cotton.	1	2	3	4	5	NA
(c) The use of genetically modified cotton.	1	2	3	4	5	NA
(d) Working conditions for garment workers.	1	2	3	4	5	NA
(e) The use of child labour.	1	2	3	4	5	NA
(f) Supporting communities in developing countries.	1	2	3	4	5	NA
(g) Buying domestically produced clothing.	1	2	3	4	5	NA
(h) Untreated waste-water from textile dyeing and finishing being released into waterways.	1	2	3	4	5	NA
(i) The amount of clothing being sent to landfills.	1	2	3	4	5	NA
(j) The energy and chemicals used to produce synthetic fibres.	1	2	3	4	5	NA
(k) Non-unionized manufacturing facilities.	1	2	3	4	5	NA
(l) The amount of energy and chemicals used to clean clothing.	1	2	3	4	5	NA
(m) The amount of clothing being consumed.	1	2	3	4	5	NA
(n) The quantity of natural resources being used to produce low-quality, short-term use garments.	1	2	3	4	5	NA
(o) The wages paid to garment workers.	1	2	3	4	5	NA
(p) Other:	1	2	3	4	5	NA
(q) Other:	1	2	3	4	5	NA

13. Of the issues listed in #12 (a-q), please identify which, if any, have been the most influential in shaping your clothing views and habits. If none have been influential, please leave blank. Rank in order from the most to the least influential. Place the corresponding letter in the space below.

- (1) _____
- (2) _____
- (3) _____
- (4) _____
- (5) _____

14. How did you learn about clothing related issues or sustainable activities related to clothing?

Check applicable ones.

- Discussions with family, friends or colleagues
- Labels on garments
- Public information sessions or meetings
- Volunteer or extracurricular activities
- High school, university or college course(s)
- Manufacturer or retailer publications (e.g. websites, pamphlets, annual reports, etc)
- Retailer staff or management
- Books or articles
- Non-government organization publications (e.g. websites, pamphlets, etc)
- Other: _____

Comments or Questions:

Social Action for Clothing Sustainability

15. How often do you actively engage in the following sustainable activities?

For each activity, please select the most appropriate number (1-5). If you live in an apartment or do not own a vehicle, some of the activities may not be applicable, in which case please check NA. If you engage in any activities not listed, please add them under 'Other' or in the blank space below.

	Never	Have tried once or twice, but do not plan to do it again	Have tried once or twice and plan to do it more regularly	Occasionally	Routinely	Not applicable
Recycle	1	2	3	4	5	NA
Compost	1	2	3	4	5	NA
Purchase organic foods	1	2	3	4	5	NA
Purchase available fair-trade certified food items (e.g. coffee, tea, chocolate)	1	2	3	4	5	NA
Follow a vegetarian or vegan diet	1	2	3	4	5	NA
Purchase locally grown foods	1	2	3	4	5	NA
Follow a 100-mile diet	1	2	3	4	5	NA
Grow your own fruits, vegetable and/or herbs	1	2	3	4	5	NA
Avoid the use of pesticides, herbicides and synthetic fertilizers in yard and/or garden	1	2	3	4	5	NA
Purchase environmentally-safe cleaning products	1	2	3	4	5	NA
Use natural cleaning methods (i.e. home remedies)	1	2	3	4	5	NA
Use reusable shopping bags	1	2	3	4	5	NA
Purchase reusable items rather than disposable goods	1	2	3	4	5	NA
Repair items (other than clothing) rather than replacing with new items	1	2	3	4	5	NA
Purchase second-hand items (other than clothing) rather than purchase new items	1	2	3	4	5	NA
Borrow items (other than clothing) rather than purchase new items	1	2	3	4	5	NA
Use energy-efficient light-bulbs	1	2	3	4	5	NA
Use a reusable drink container at work, school or other activities	1	2	3	4	5	NA
Drink tap water or use water filter, rather than bottled water	1	2	3	4	5	NA
Ride the bus	1	2	3	4	5	NA
Avoid idling your vehicle	1	2	3	4	5	NA
Car pool	1	2	3	4	5	NA
Use active modes of transportation (e.g. biking, walking)	1	2	3	4	5	NA
Belong to an environmental or social organization	1	2	3	4	5	NA
Contribute money to environmental or social organizations	1	2	3	4	5	NA
Other:	1	2	3	4	5	NA
Other:	1	2	3	4	5	NA

16. Have you ever, or do you currently, actively participate in any community or environment organizations, whether related to clothing or not?

Yes No

If yes, please provide list of organizations:

Comments or Questions:

17. Sex

- Male Female Prefer not to answer

18. Age

- Under 18
 18 - 25
 26 - 35
 36 - 45
 46 - 55
 56 - 65
 66 - 75
 76 - 85
 Over 85
 Prefer not to answer

17. Household Income

- Under \$9,999
 \$ 10,000 – 19,999
 \$ 20,000 – 29,999
 \$ 30,000 – 39,999
 \$ 40,000 – 49,999
 \$ 50,000 – 59,999
 \$ 60,000 – 69,999
 \$ 70,000 – 79,999
 Over \$80,000
 Prefer not to answer

18. Marriage Status

- Single
 Married/Common Law
 Prefer not to answer

19. Children

- Children
 No children
 Prefer not to answer

20. Employment Status

- Not currently working
 Part-time employment
 Full-time employment
 Prefer not to answer

21. Education Level (highest level attained)

- Elementary
 Some high school
 High school
 Some university or college
 Bachelor degree or diploma
 Graduate degree
 Prefer not to answer

22. Are you currently a student?

- Yes No Prefer not to answer

23. Phase Two of this study involves an in-depth exploration of how consumers learned about the issues surrounding clothing and how this process then led to a shift in their attitudes and behaviour related to clothing. It is anticipated that these interviews will take up to 2 hours to complete. A small honorarium (gift certificate or donation) will be provided to these participants.

Would you be interested in participating in Phase Two of this research project?

- Yes No

24. Do you have any additional comments regarding this survey or clothing sustainability?

Appendix C LIFE-GRID TEMPLATE

Timeline (age, date, or major event)						
	Family/Housing	School/Work	Leisure/Volunteer	Clothing Learning	Clothing Action	Other Sustainable Lifestyle Choices

Appendix D

ENVIRONMENTAL AND SOCIAL IMPACTS OF APPAREL

Appendix D explores the adverse impacts arising from the production and consumption of apparel. It is divided into three sections. Section one introduces the key negative environmental effects apparel has throughout its lifecycle. Section two looks at the environmental impacts of clothing production from the perspective of the two most popular fibres, cotton and polyester, addressing both the problems associated with them and the potential solutions. The final section addresses the appalling effects garment production can have on those working in sweatshops.

D.1 Environmental Impacts of Apparel

Production processes require energy and raw materials, which are drawn from the planet's pool of natural resources, and generate by-products, which when unwanted and disposed of in the environment are classified as pollution. Most modern-day production processes also involve a wide variety of chemicals which may damage or put at risk the health of workers and potentially the product users. Once in the hands of the final user, product maintenance requirements continue to put a strain on resources and produce pollutants, while the final disposal often adds to our growing landfills. Apparel is no exception, with the primary environmental impacts of its production, use and disposal being the depletion of natural resources, the release of pollution and the effects on human health (Donnell, 1995; Slater, 2003).

D.1.1 Depletion of Natural Resources

A range of natural resources are required to support fibre, yarn and fabric production, textile dyeing and finishing, packaging manufacturing, transportation, and garment maintenance. Natural resources can be divided into two general categories – non-renewable and renewable. Non-renewable resources are finite; once used, they are gone. Primary examples are fossil fuels and minerals, both of which are essential to the textile and apparel industries. Fossil fuels provide the energy to power equipment and transportation vehicles and the raw materials for petrochemicals, which are used to generate synthetic fibres, finishes and dyes, fertilizers and pesticides to promote cotton growth, detergents for cleaning garments, and the plastics used for packaging, hangers, zippers and buttons. Minerals are the basis for the metals used to produce the manufacturing equipment and the heavy metals needed for synthetic fibre production, finishing and dyeing (Donnell, 1995; Slater, 2003).

Renewable resources, on the other hand, can be replenished. The most essential renewable resource for textile production and apparel maintenance is water. Water is needed for the growth of cotton (irrigation), the production of manufactured fibres, the pretreatment of natural fibres, the finishing and dyeing of textile materials, and garment laundering. Other important renewable resources include trees (e.g. wood pulp for rayon production and cardboard boxes for shipping) and soil (e.g. growing cotton and cultivating grass for wool-producing animals). It should be noted that while renewable resources can replenish themselves, this is dependent on humans not depleting them more rapidly than they can naturally regenerate and not disrupting the natural cycles necessary for them to replenish themselves. For example, improper agricultural management

practices, such as the over-use of pesticides and fertilizers, can permanently destroy the productivity of soil, creating conditions where little to no vegetation can grow (Dearden & Mitchell, 1998).

D.1.2 Pollution

The production, use and disposal of any product pollutes the air, water and land. In the case of textiles and apparel, the main source of air pollution is the demand for energy, which is primarily met by burning fossil fuels. The combustion of oil and gas releases a variety of pollutants, including carbon dioxide, sulphur dioxide, nitrogen oxides, carbon monoxide and particulate matter. These pollutants contribute to climate change, acid rain, smog and ground level ozone, and can lead to severe respiratory and heart conditions in humans (Environment Canada, 2004a). Energy is required to operate the wide range of equipment used in both the textile and apparel industries, to heat water for various processes, to transport textile components between manufacturing facilities and to the final retailer, and to run the machines and heat the water for home laundering.

The textile industry is one of the largest polluters of water in the world, discharging roughly four trillion liters of effluent a day, or several million liters per second (Thiry, 2006). From the growth and manufacture of fibres through to the final finishing stages, each phase generates a wide range of pollutants, with the most concerning components being dyes, salts, detergents, sizing agents, acids and alkalis, heavy metals (chromium, copper, cobalt, lead, zinc), high oxygen demanding materials, nutrients, heat, suspended solids, oils and greases, soil and plant debris (Parekh, 2003 – as cited in Clay 2004; Hessel et al., 2007; Roche & Baskaran, 2003). Some of this waste may disrupt natural

ecological processes, some may be toxic and/or carcinogenic, some may speed up eutrophication, some may suffocate fish or inhibit photosynthesis, and some may render water undrinkable. Some of the negative impacts arising from this pollution include the following:

- **Eutrophication.** Fertilizers applied to cotton fields to promote growth often run-off into surrounding water systems, where they provide nutrients to aquatic plants and algae within those ecosystems, resulting in a significant population expansion. When these organic materials die and decompose they deplete the dissolved oxygen, thereby depriving other species. The symptoms of eutrophication include a rapid increase in the growth of algae, the death of many aquatic organisms, including fish, and a decline in the biodiversity and productivity of the aquatic system (Dearden & Mitchell, 1998). A number of the chemicals released during dyeing and finishing also have a similar effect to fertilizers, acting as nutrients (e.g. the starches applied to warp yarns during weaving) (Manickam & Prasad, 2005).
- **Acidification.** Acidification occurs when air pollutants such as sulphur dioxide and nitrogen oxides make their way into a water body, either through acid rain or dry deposition. The effluent from dyeing and finishing procedures may also be acidic in nature. Many aquatic species are sensitive to pH levels, and low levels can disrupt ecological processes, lead to reproductive problems in many aquatic organisms and may even be lethal for some species. If acidification is severe enough, the water body will no longer be safe for drinking and recreational

purposes or useful for agricultural and industrial activities (Environment Canada, 2004b).

- **Temperature Changes.** Water used in finishing and dyeing is often heated or cooled, depending on the procedure. If this wastewater is released into a water body it can cause temperature changes, which can reduce the oxygen available for fish respiration, hasten eutrophication, impact certain ecological processes, and alter fish migratory patterns (Dorcey, nd).
- **Water Quality.** Numerous chemicals used in dyeing and finishing are toxic and/or carcinogenic, and when released untreated into waterways can have a devastating impact on aquatic organisms, potentially causing reproductive problems, genetic abnormalities, immune system deficiency, tumours and death (Environment Canada, 2004b). These impacts are not limited to fish and wildlife; humans who drink the water and eat the fish are also at risk.

In the case of textile production, use and disposal, land pollution refers to the release of pollutants into the soil, which can have a detrimental impact on the productivity of the soil and on the groundwater as well. For example, in the case of fibre production, the soil can be contaminated if a spill occurs during oil extraction or if an excessive amount of fertilizer is used leading to acidification of the soil. Land pollution also includes solid waste, which is generally dumped on the land (i.e. landfills). Textile and apparel waste can be divided into two categories - production (or pre-consumer) waste and post-consumer waste. *Production waste* is the unwanted by-products of fibre, yarn, fabric and apparel production. The waste generated often includes fibres, threads, fabric scraps and whole garments, as well as packaging (cardboard, plastics, wood

pallets, etc), plant debris and dirt from processing natural fibres, and sludge from various chemical processes (Domina & Koch, 1997; Grasso, 1995; Slater, 2003). Although production waste makes up the majority of the fibrous waste generated from apparel, roughly 75 percent is recycled into new products, such as stuffing for furniture, carpet backing, rags and wipes, automotive components, building insulation, concrete reinforcements, and paper products (Domina & Koch, 1997; Chang, Chen & Francis, 1999; Chen & Davis, 2006; Claudio, 2007). *Post-consumer waste* is any garment that the owner chooses to discard because it is worn out, damaged, fits poorly or is out-of-fashion. Consumers have an array of options for disposing of unwanted apparel other than landfilling. They may donate clothing to charity organizations, pass it along to family or friends, trade it in a clothing swap, sell it on the internet or to a consignment shop, or reuse it in another form (e.g. redesign into a new garment, use as rags, use it as scraps for repairing another garment). In the United States, an estimated 2.5 billion pounds (about 30%) of textile waste is diverted from landfills annually (Hawley, 2006). Unfortunately, the remainder is tossed in the garbage, with textile waste making up approximately five percent of the total municipal solid waste stream (Koch et al, 2000; Hawley, 2006; Wang, 2006). Table D.1 summarizes the green alternatives to landfilling textile and apparel items.

Table D.1: Waste Management Hierarchy for Textiles and Apparel

Reduce

- Reducing inputs (or raw materials) is the ideal way to decrease outputs (or waste) – i.e. less consumed, less thrown away.
- Waste can be significantly reduced through proper design. An optimally designed garment can minimize the amount of raw materials needed (e.g. fibres, water, energy, chemicals) and the amount of waste produced (Koch et al., 2000).
- Reductions in the volume of apparel consumed will also reduce the demand for raw materials and the amount of waste produced.

Reuse

- Reuse requires an item be used again in its original form without treatment or transformation (Koch et al, 2000).
- Reuse extends the lifespan of a textile product, ensuring it is used to its full potential.
- Examples of garment reuse include: leasing and second-hand clothing.

Recycle

- Recycling involves recovering the material from a textile product and using it to create a new product, be it a similar type of product (i.e. another garment) or a completely different product (e.g. carpet underlay) (Koch et al., 2000).
- Fibres may be recovered from a product mechanically (i.e. tearing and shredding) or chemically. These processes often degrade the original fibres, reducing their length and strength (Koch et al., 2000).
- Parts of a garment may also be used to form the basis of a new garment (remanufacturing).

D.1.3 Human Health

Human health can be directly impacted by apparel production and use. Textile and apparel workers may suffer a wide-range of health problems, such as eye and throat irritation, nausea, diarrhea, high blood pressure, permanent deafness, increased risk of miscarriage, and cancer, as a result of exposure to toxic substances, dust and noise (Haque, Rahman & Khan, 2006; Kane, 2001; Slater, 2003). The users of textile products may also experience skin irritations, allergic reactions or more severe conditions as a result of exposure to residual finish and dye chemicals (Hatch, 1998).

D.2 Environmental Impacts of Cotton and Polyester Apparel Production

The following section traces the environmental impacts of apparel production from fibre to finished garment, emphasizing the impacts of the two most commonly used apparel fibres – cotton and polyester. It also introduces various greener alternatives to conventional production, presenting, whenever possible, both the benefits and drawbacks of these more benign substitutes.

While the original intent of this section was to compare the environmental impacts of polyester and cotton in an effort to conclude which has a larger ecological footprint, it became readily apparent that such an endeavour would be not be feasible. First, it would require making a significant number of assumptions, which would be highly subjective. For example, which is of greater environmental concern - the draining of our freshwater resources or the steady release of greenhouse gases? The heavy-use of pesticides or the rapid depletion of our fossil fuel reserves? Different people would have different positions on these questions. Second, while the debate over which is better – natural or synthetic – is poignant, it is only theoretical, since one could never replace the other. The two fibres have unique performance properties, which make them best suited for different end uses. Furthermore, their annual production levels are so significant that there would never be enough arable land for cotton to replace polyester nor could enough petroleum be diverted to the production of polyester for it to take over from cotton (Kalliala & Nousiainen, 1999). Consequently, the purpose of this appendix is not to demonstrate that one fibre, production technique or dyestuff is more benign than another. Through these two examples, it is hoped the reader will gain a greater understanding of the pressing need to reduce the environmental impact of apparel production and an appreciation for

the complexities manufacturers and consumers will face when including environmental considerations in their design and purchasing decision-making processes.

D.2.1 Fibre Production

“Natural is greener” has been a long-time public misconception, promoted by the marketing councils for producers of cotton and wool, and backed by the mainstream and fashion media (Mckenzie, 1994). However, the production of *all* fibres has a significant ecological footprint. Cotton is an agricultural commodity and as such its environmental impacts are linked to the use of water, pesticides and land. The production of polyester, on the other hand, is an industrial-based process, with significant impacts being related to the depletion of fossil fuels; the extraction, production and transportation of oil and gas; and the energy demands to convert these petroleum products to a synthetic polymer.

Cotton Cultivation

Cotton is regarded as one of the largest sources of agricultural pollution due to its significant reliance on agro-chemicals (Clay, 2004). Highly susceptible to attack by a wide-range of insects, cotton plants depend heavily on insecticides to thrive (Ryder, 1997; Achwal, 1998; Chen & Davis Burns, 2006; Fisher, 2007). Successful yields also depend on the use of an array of fungicides and herbicides to combat disease and competing weeds (Fisher, 2007). Eleven percent of the pesticides²⁵ used worldwide on an annual-basis are applied to cotton fields. If the focus is narrowed to only insecticides,

²⁵ The term pesticide includes insecticides, herbicides, fungicides and rodenticides.

a subset of pesticides, Clay (2004) estimates that 25 percent of the global insecticides are used to preserve cotton plants each year. In the developing nations producing cotton, the figures are even higher, with nearly half of the all pesticides being directed to the production of cotton (Clay, 2004). In addition to using pesticides to promote growth, most cotton farmers also employ chemical defoliant to remove the leaves from the cotton plants prior to mechanical harvesting, and fungicides, and rodenticides to protect cotton during storage (Donnell, 1995; Achwal, 1998; Kadolph & Langford, 2002).

The primary environmental concerns related to the use of pesticides include that they are:

- *Indiscriminate.* Many pesticides are broad-spectrum poisons which eliminate a wide variety of species, including beneficial insects that can help naturally keep the pest population in check. Their use also poses a risk to aquatic life, migratory species, agricultural workers and people living in surrounding communities (Clay, 2004). One study estimated that as many as 20,000 people die and three million are poisoned every year as a result of exposure to pesticides applied to cotton (IISD/WWF, 1997 – as cited in Clay, 2004). Another study discovered high concentrations of pesticides in the breast milk of women living in the vicinity of agricultural lands heavily doused with pesticides (Kalliala & Nousiainen, 1999). Pesticides pose a further threat to the soil by killing vital microorganisms which are the key to the maintenance of healthy, productive soil (Banuri, 1999 – as cited in Clay 2004). The total area devoted to cotton production has remained relatively constant since the 1930s. However, where this production is taking place has changed, in part

due to irrevocable damage to the soil in some areas, thereby requiring producers to relocate (Clay, 2004).

- *Resistance Inducing.* When pesticides are applied to a crop, not all pests are killed by the poison - the hardier individuals will survive. With less competition, the surviving members of the species will thrive and propagate, passing along their resistance to the chemicals. Subsequent applications will continue this cycle, eliminating the weaker members and strengthening the resistance of the remaining population. Since the introduction of pesticides, over 500 insect species, more than half the common weed species and more than ten rodent species have developed poison resistance (Dearden & Mitchell, 1998). Therefore, in order to continue to control the pest population producers must use higher doses, increase the frequency of applications, or use a more lethal chemical, all of which are detrimental to the environment and human health.
- *Extremely mobile.* The impact area of pesticides is generally far wider spread than the field to which they have been applied, sometimes spanning hundreds of kilometers. Excess rainfall, improper irrigation practices, or wind during aerial application can transport these chemicals into the water system, atmosphere and surrounding soil, where they may pose a significant threat to vegetation, beneficial insect species, humans and other animals (Kadolph & Langford, 2002). According to the U.S. Department of Agriculture, when applied by aerial spray, less than two percent of the insecticides and less than

five percent of herbicides reach the crops they are intended to protect (as cited in Dearden & Mitchell, 1998).

- *Synergistic.* Pesticides are tested for their negative environmental and health impacts prior to being approved for use. When analyzed in the laboratory, pesticides are tested individually under controlled conditions, but in practice they are applied in conjunction with countless other chemicals and interact with a variety of ecosystem elements (Dearden & Mitchell, 1998). One pesticide alone can be comprised of upwards of 2,000 chemicals, which as they breakdown may interact with other chemicals to create new, potentially harmful materials with unknown environmental and health ramifications (Dearden & Mitchell, 1998). Additional complications may also arise in processing, when these compounds, if still present on the fibres, interact with the chemicals used to pre-treat, dye or finish the cotton. Processes employing highly reactive chemicals, such as chlorine bleach, may interact with these agro-chemicals and generate new molecules in the effluent stream with unpredictable environmental consequences (Donnell, 1995).
- *Fossil Fuel Depleting.* Synthetic pesticides and fertilizers are produced from fossil fuels. Similar to polyester (to be discussed below), their production is energy-intensive, depletes a valuable non-renewable resource, generates harmful air emissions, and threatens water resources and wildlife habitats.

While these agricultural chemicals are extensively used in both developed and developing countries, the more toxic forms of these chemicals are generally banned or strictly controlled in North America and Western Europe. However, in the developing

world where environmental regulations are non-existent or poorly enforced, the economic benefits of using the more polluting forms, which tend to be cheaper than the environmental-friendly alternatives, are strong (Donnell, 1995).

To meet high yield and quality demands, conventional cotton growth also relies strongly on chemical fertilizers and, in many areas, artificial irrigation practices, both of which, if not managed properly, can have devastating environmental impacts (Donnell, 1995; Achwal, 1998; Kadolph & Langford, 2002). Nitrogen and phosphorus found in chemical fertilizers have been associated with human-induced eutrophication of water bodies, soil acidification (which can decrease crop yields and deplete the nutrient content of the soil), and the accumulation of heavy metals in the soil, such as cadmium (Kalliala & Nousiainen, 1999; Dearden & Mitchell, 1998). Irrigation can intensify soil erosion, contribute to the leaching of fertilizers and pesticides into the soil and water-system, and lead to salinization, which if severe enough can leave the land unusable for crop production (Dearden & Mitchell, 1998; Slater, 2003; Clay, 2004). If not properly timed, irrigation may wash away agro-chemicals before they have fulfilled their purpose, requiring additional applications (Slater, 2003). The most extreme example of the potentially detrimental impacts of irrigation is that of the Aral Sea in Central Asia. Once the world's fourth largest inland sea, as a direct result of water diversion for cotton irrigation the Aral Sea is now only a quarter of its original size. As the lake has shrunk, the salinity of the water has increased and the water table in the area has dropped (Black, 2004; Donnell, 1995). The devastating impacts have included the decimation of the fish population, the displacement of wildlife, dramatic changes in the climate, and severe health problems for the local population as a consequence of toxic dust storms. A vivid

picture of region is painted by author Maggie Black, “The Aral Sea continues to shrink...and the pollution remains as severe, with white toxic dust for miles in every direction. Ecological tourists come to stare in horrified fascination at ships disintegrated in the landscape and the bleached bones of poisoned livestock protruding nearby. Some believe there is less than 10 years before the whole area becomes a desert.” (Black, 2004, p. 20).

Arable land, of which there is a limited supply, is highly desirable for the cultivation of a crops targeted for an assortment of end products, including food, textiles, building supplies and fuel. Cotton occupies approximately 2.5 percent of the planet’s arable land, with roughly two-thirds of production occurring in developing nations (Clay, 2004). With an estimated 20 million people dying annually from starvation or related diseases (Dearden & Mitchell, 1998), and an emerging global food crisis which will undoubtedly drive up this already staggering figure, some argue that the growth of crops for purposes other than food, in particular in developing nations, is irresponsible (Fisher, 2007; Goodspeed, 2008; Mckenzie, 1994; Ryder, 1997). Others contend that the growth of cash crops such as cotton should be encouraged in order to increase the overall standard of living (Ryder, 1997). Cotton, as the world’s most lucrative nonfood crop, supports or supplements the income of over 250 million people globally and employs nearly seven percent of the population in the developing world (Clay, 2004). However, in the last year, food prices have risen 22 percent, meaning millions of people worldwide can no longer afford even the basics. Panic over these rapidly increasing prices and a shortage in food supplies recently led to food riots in Mexico, Morroco, Senegal, Uzbekistan, Guinea, Mauritania, and Yemen (Goodspeed, 2008; McMullen, 2008). Five

of these seven countries are cotton producing nations, together generating roughly six percent of the global supply (Foreign Agricultural Service - USDA, 2006). If fewer and fewer farmers are growing food, and choose instead to grow crops to be used for fibre or biofuels, food supplies will continue to diminish and prices will continue to rise. As already noted, clothing is a basic necessity and cotton is one of the primary apparel fibres; thus, arable land will undoubtedly continue to be dedicated to its production. However, if the global food crisis continues for the next decade, as some are predicting (Goodspeed, 2008), the use of this valuable land for the growth of cotton for the manufacture of purely fashion-related items is immoral and inhuman.

The question then is: What are the alternatives to conventional cotton cultivation? In “greening” cotton production, the focus has been on reducing dependence on agricultural chemicals and decreasing the need for irrigation. Two of the primary alternatives are organic cotton and bioengineered cotton.

Organic Cotton. Organic cotton refers to cotton that is cultivated using non-genetically modified seed without the use of synthetic fertilizers and pesticides. The goal of organic farming is to increase the quality and productivity of the soil, which in turn improves water retention and reduces the need for chemical inputs. Organic farmers integrate a variety of cultural practices, natural fertilizers and biological tools in order to nurture the soil, manage weeds and insects, and ward off disease (Guerena & Sullivan, 2003; Rudie, 1994). Organic cotton is also harvested without the use of chemical defoliants and stored without the use of fungicides and rodenticides (Rudie, 1994).

An assortment of certification programs have emerged for organic cotton. While all programs must meet the minimum standards established by the federal government, there are still significant differences among the programs, which can be confusing to both apparel manufacturers sourcing materials and the final consumer. One of the universal conditions necessary for certification is that cotton must be grown for a minimum of three seasons without chemical fertilizers and pesticides (Chavan, 1999; Kadolph & Langford, 2002). Cotton being grown without the use of agricultural chemicals, but not yet for three seasons, is referred to as transitional cotton (Kadolph & Langford, 2002). For a cotton fabric to be considered truly organic, not only should the cotton be grown organically, the fibre should also be processed organically, i.e. use natural processes and materials for preparing, dyeing and finishing. However, to date, no certification program for the organic processing of fibres has been launched in Canada or the United States (Druchunas, 2002).

While the interest in organic cotton from a demand-perspective is on the rise, growing at a rate of 22 percent annually in the United States, available supply is still very limited (Gueren & Sullivan, 2003). Without the assistance of synthetic chemicals, organic yields are significantly lower than conventional yields. Global production of organic cotton is 6,000 tons annually, which only comprises roughly 0.03 percent of the world's supply (Guerena & Sullivan, 2003). As a result of these lower yields and the increased risks and challenges associated with cultivating organic cotton, the costs are greater, with prices ranging anywhere from 50 to 100-percent higher than that of conventionally grown fibre (Cotton Inc., 2006).

Bioengineering. Another approach to reducing cotton's dependence on agro-chemicals has been to alter the cotton plant itself through the use of biotechnology. Biotechnology refers to the use of living organisms to produce novel products and processes. It often involves genetic engineering, which entails manipulating DNA in order to alter the genetic structure of microbes, animals and/or plant-life (Hamlyn, 1995; Rogers, 2000). It differs from natural breeding processes, where only closely related species (e.g. conventional cotton and wild cotton) are combined in order to enhance properties, in that genetic engineering involves combining the genes of two completely different species (e.g. conventional cotton and bacterium)(CSIP, nd). In the case of textiles, biotechnology has been used to modify fibre properties, develop more benign finishing processes, enhance quality control, improve waste-water treatment processes, and create completely new fibres (Rogers, 2000).

Cotton biotechnology efforts have focused primarily on improving the plant's resistance to insects, disease and herbicides (Cantrell, 2006; Chen & Davis Burns, 2006; Hamlyn, 1995). This has included the development of transgenic cotton, in which the genetic material of bacterium has been incorporated into the cotton genome, producing a breed of cotton that emits low levels of insecticides (Clay, 2004; Dearden & Mitchell, 1998; Hamlyn, 1999). The first commercial biotech crops were introduced 12 years ago, and since then cotton producers have embraced this new technology at a far greater pace than any other group of producers. In 2006, 37 percent of the cotton bales produced worldwide were genetically modified, and when focusing on the U.S., it is estimated that 83 percent of the acres planted were transgenic cotton (Cantrell, 2006). It is estimated that between 1995, just before the introduction of modified cotton, and 1999, there was a

14-percent reduction in the amount of insecticides used in the United States (Cantrell, 2006).

Research is also being undertaken to enhance the properties of the cotton fibre, including improvements to its length, strength, dye-ability and water absorption (Cantrell, 2006; Hamlyn, 1999; Roger, 2000). It has also been suggested that genetic engineering could be used to expand the colour palette of naturally-coloured cottons to include blues and reds (Hamlyn, 1999; Slater, 2003) and one research study has actually successfully grown polyester polymers in the lumen (hollow center) of the cotton fibre (Moore, 1997; Roger, 2000)

Proponents of bioengineering argue that through genetic manipulation more resilient strains of cotton can be developed, strains which will allow producers to generate higher yields on the same amount of land and use less pesticides, fertilizers and water (Hamilton, 2007). Opponents, on the other hand, have expressed reservations over the unknown and potentially devastating environmental and health implications of large-scale production of genetically modified cotton. They point to the example of the negative impact some bioengineered crops have already had on beneficial insect species, such as the monarch butterfly (Kadolph & Langford, 2002). They have also put forward concerns over the potential development of pesticide-resistant species and the possible contamination of wild crop species (Clay 2004; Dearden & Mitchell, 1998; Kadolph & Langford, 2002). Finally, some critics worry that biotechnology is biased towards corporations and large-scale production operations, and may be economically detrimental to smaller, rural farms, in particular those in developing countries (Thompson, n.d.).

Polyester Production

Polyester is the generic name for a class of widely-used synthetic fibres. The most common class is polyethylene terephthalate (PET), which comprise approximately 95 percent of the polyester on the textile market (Hatch, 1993). Over the last 15 years, while the demand for natural fibres has remained relatively constant, the demand for polyester has nearly doubled (Claudio, 2007; Alwood et al., 2006), which only increases concern over the environmental impacts of this synthetic fibre.

Polyester is derived from petroleum, a non-renewable resource. Synthetic fibres, which include not only polyester but nylon, acrylic, olefin and others, as a whole, consume approximately three percent of the total oil and gas produced annually (Fisher, 2007). While this may seem like an insignificant amount, one must consider that petroleum is our primary source of energy, as well as a base material for a wide-range of petrochemicals used in a diverse array of products. These include plastics, synthetic rubbers, solvents, paints, cleaning fluids, wax-based products, cosmetics, fertilizers and insecticides. With an increasing global population, a growing demand for both energy and consumer products from emerging economies in the developing world, and rapidly depleting oil and gas reserves, some are beginning to question the use of such a valuable and finite resource for fashion apparel.

The activities of the oil and gas industry have a significant impact on the natural environment (Table D.2). Often found in pristine lands, the exploration, extraction, production and transportation of petroleum products, requires the construction of infrastructure, such as base camps, roads and pipelines. This infrastructure divides up the landscape, removes vegetation, often erodes or compacts soil, and increases human

access (Severson-Baker, 2006a, 2006b). All of these actions, while problematic in and of themselves, also have a significant impact on wildlife, effecting population size, herd location and migratory patterns (Severson-Baker, 2006b, 2006c; Caswell, 1993).

Deemed the “fastest growing and largest source of greenhouse gas emissions in Canada” (Taylor, Bramley, & Winfield, 2005, p. 2), the oil and gas industry - through its array of emissions, which include carbon dioxides, sulphur dioxide, nitrogen oxides, methane, hydrocarbons, volatile organic compounds, and particulate matter - is not only contributing to climate change, but also to acid rain and human health problems (Severson-Baker, 2006a, 2006b, 2006c). The sources of emissions at the drilling site include drilling equipment, fugitive hydrocarbons, support vehicles, and diesel engines, although the single largest source is from flare tests²⁶ (Severson-Baker, 2006b; Caswell, 1993). In a four-day period, a successful flare test can generate more emissions than a large gas plant would in a month (Severson-Baker, 2006b). The primary sources of emissions from both the transportation of oil and gas and the processing plants are the combustion of fuel to power equipment, leaks and purging pipelines, and flaring when there is a mishap (Severson-Baker, 2006a, 2006c).

²⁶ A flare test is used to assess the production capacity of a natural gas well. The gas will be directed towards a flame and allowed to burn for one to four days, allowing developers to measure the rate and pressure of gas in the reservoir (Severson-Baker, 2006b).

Table D.2: Environmental Impacts of Oil and Gas Production

	Activities	Environmental Impact
Extraction	Removing oil and natural gas from the ground with the use of drilling equipment.	<ul style="list-style-type: none"> • Requires fuel to operate the machinery • Requires water for aid drilling • Requires drilling mud to aid drilling • Releases air pollutants • Requires development of base camp, roads, drilling platforms, and other infrastructure, which divides landscape, disrupts wildlife habitat, increases human access, and may cause soil erosion or compaction
Processing	Removing impurities from oil and gas. Some of the processing occurs at the extraction site and the remainder at centralized oil batteries and gas plants.	<ul style="list-style-type: none"> • Requires fuel to operate the machinery • Requires water to cool processing equipment • Generates produced water • Releases air pollutants
Transportation	Transportation to refinement facilities or to end-market via pipeline, ship or truck.	<ul style="list-style-type: none"> • Requires fuel to operate machinery, vehicles and ships • Risk of spills or leaks into the water or soil • Releases air pollutants • Requires development of pipeline infrastructure, which divides landscape, severely disrupts wildlife habitat, increases human access, and may cause soil erosion or compaction

(Severson-Baker, 2006a, 2006b, 2006c).

Water and soil contamination are also concerns in both the extraction and production phases. Two of the principal contaminants which must be properly managed are drilling mud and produced water (Caswell, 1993). Drilling mud, or fluids used to aid the drilling process, must be stored, handled and disposed of properly to avoid water and soil contamination. The majority of drilling muds used in North America today are water-based, but oil-based muds, which can pose environmental risks, are still in use. In addition, a variety of additives are often combined with the muds to improve lubricity and other performance features, including bactericides, corrosion inhibitors, defoamers, lubricants, flocculants, and agents to improve circulation and control pH levels (Severson-Baker, 2006b). Many of these compounds are toxic and persistent (i.e. they do not readily degrade), and may build-up in the environment. Furthermore, during use these muds may also become contaminated with hydrocarbons and salts dredged up during drilling. If disposed of directly in the water or improperly constructed storage pits, these muds can contaminate the marine environment (offshore drilling) or the soil, surface water, and groundwater (on-shore drilling sites) (Severson-Baker, 2006b). The other contaminant, which is the most significant by-product of oil and gas production, is produced water. Produced water is water trapped in underground reservoirs and brought to the surface along with oil and gas during the extraction process. This water generally has a very high salt content, and will often contain dispersed oils, grease, metals and bacteria, as well as small amounts of the aforementioned chemical additives used during drilling (Veil, Puder, Elcock & Redweik, 2004). If improperly

disposed of, produced water can pose a risk to water quality, the health of the soil, and wildlife and aquatic habitats (Caswell, 1993).

In the transportation of oil and gas, the primary source of water and soil contamination is spills. In the case of off-shore drilling and transportation by waterway (i.e. tankers or barges), spills can endanger the aquatic habitat and marine life. Roughly six million tonnes of oil products, from all sources, enters the ocean on an annual basis (Caswell, 1993). On shore, spills and pipeline leaks may contaminate groundwater, pollute the soil and expose vegetation and wildlife to petroleum and produced water (which is often transported via pipeline to facilities for processing). In Alberta, approximately 675 pipeline leaks or spills are reported annually (average based on figures accumulated from 1980 to 1997) (Severson-Baker, 2006a).

Converting oil and gas to polyester fibres involves multiple steps and demands vast quantities of energy (Fisher, 2007; Ryder, 1997). One lifecycle study of polyester estimates that the energy required to manufacture polyester is 63 percent greater than the energy requirements for cotton (Kalliala & Nousiainen, 1999). Over a dozen chemical reactions are needed to move from natural gas and oil to ethylene and xylene to ethylene glycol and terephthalic acid and finally to the extrusion of the polyester fibre (see Kalliala & Nousiainen, 1999 or Smith & Barker, 1995 for a diagram of the process). The process is extremely energy-intensive, with each step requiring power to produce heat, steam and/or pressure to drive the process. Most of the reactions require a variety of additives and catalysts (including acids, salts and heavy metals, such as antimony) and each generates an array of by-products – including air emissions (e.g. volatile organic compounds, particulate matter and acidic gases), and wastewater and sludge containing

residual solvents, salts, acids, metals and volatile monomers (Achwal, 1998; Burdick & Leffler, 2001; Claudio, 2007; Matar & Hatch, 2001; UNEP, 1994).

The oil and gas industry can engage in a variety of activities to reduce the environmental impact of their operations – such as using the most energy-efficient processes and technologies, ensuring proper waste management, implementing an environmental management system, and taking actions to reduce impacts on wildlife and the surrounding habitat. Unfortunately, even though a significant portion of the environmental impacts of polyester arise during this phase of production, since textile fibres comprise less than five percent of the market for fossil fuels, textile mills and apparel manufacturers will have minimal ability to influence the ‘greenness’ of oil and gas production.

An array of activities may also be undertaken to reduce the environmental impacts of polyester production, including:

- Reducing consumption of inputs, such as energy, water and chemicals, through the use of highly efficient technologies and the recovery and reuse of waste energy and water;
- Reducing pollution through the proper treatment and management of effluent, emissions and solid waste;
- Exploring the use of environmentally friendly energy sources; and
- Using environmentally sound additives and catalysts (Fisher, 2007; UNEP, 1994).

However, the best way to lower environmental impacts is to reduce the use of natural resources and polluting activities. In the case of polyester production, this can be achieved by recycling the polyester found in existing products such as PET bottles and garments. For fibres with energy-intensive production processes, such as polyester, recycling is of significant importance (Allwood, et al., 2006). Oil and gas extraction, processing and transportation and the majority of the steps involved in polyester production can all be avoided through recycling. This eliminates the need for virgin oil and gas resources, reduces the need for energy, water and chemicals, and decreases air, water and land pollution. It also reduces the amount of finished polyester products going to landfill. According to Patagonia, a leading supplier of recycled polyester apparel products, their company has diverted over 86 million PET bottles from landfill since they began using recycled fleece in the early 1990s (Patagonia, 2006).

D.2.2. Yarn Production

The overall impact of yarn production is relatively minor in comparison to other phase of the textile production process; however, there are still a number of environmental concerns worth mentioning, including the use of energy and water, effluent and solid waste production, dust and noise.

Energy Use

The textile industry is a capital-intensive industry, relying heavily on the use of advanced machinery to produce yarns, fabrics and apply finishes and dyes. The use of

this machinery requires energy. The primary source of energy is fossil fuels, which when combusted generate an array of pollutants, including carbon dioxide, sulphur dioxide, nitrogen oxides, carbon monoxide, hydrocarbons, and particulate matter. The release of these pollutants contributes to climate change, acid rain, smog and ground level ozone, and a host of human health problems (e.g. respiratory and heart ailments).

Water Usage & Effluent Production

When delivered to a mill, cotton bales will be littered with plant debris (leaves, husks, stalks, seeds), soil, insect remains, and natural waxes. The cotton must be washed and scoured prior to the yarn production process commencing. Fibre preparation involves the use of energy, water and a variety of chemicals – such as detergents, sodium hydroxide, and bleaches – and generates effluent²⁷. Furthermore, in order to reduce fibre loss and breakage during the various stages of yarn production, many facilities will apply a lubricant to the fibres (Slater, 2003). While this action decreases waste and dust, the lubricant must be removed prior to subsequent production stages (Slater, 2003), which, again, requires the use of water, chemicals and energy, and generates effluent.

Researchers and industry representatives are exploring a variety of friendlier alternatives to conventional preparation and cleaning methods. One example is a closed-wash system in which the water is cleaned and reused and the replacement of chemicals with enzymes, ozone or lasers (Slater, 2003).

²⁷ Fibre preparation activities are only required for natural fibres, as synthetic fibres are free of such contamination having been shipped directly from the fibre manufacturer and never coming in contact with animals, vegetation or soil (Slater, 2003).

Solid Waste Production

Yarn production creates significant quantities of waste, including plant debris, soil, and waste fibres and yarn. In some mills, waste fibres and yarns are disposed of in the landfill, but other factories are now selling this waste to reprocessors for use in the production of coarse yarns, non-wovens fabrics and other textile products for the automotive, aeronautic, home furnishings, paper and construction industries (Chang, Chen & Francis, 1999; Chen & Davis, 2006; Claudio, 2007; Kadolph, 2007).

Noise & Dust

Finally, yarn production poses a risk to human health in the form of noise and dust. Noise, resulting from the operation of the spinning machinery, can lead to hearing impairment, permanent deafness, increased blood pressure and heart rates, elevated stress levels and even brain damage (Haque et al., 2006; Kadolph, 2007; Slater, 2003). Concerns related to noise can often be solved by ensuring workers wear appropriate hearing protection (Kadolph, 2007). Unfortunately, in many developing nations there are no regulations in place to protect workers from noise damage, nor is there the recognition that noise pollution can lead to acute health problems (Haque et al., 2006). Dust is primarily an issue with the natural fibres, specifically cotton. As cotton is unpacked and processed, fibre fragments, plant debris, lint, seeds and soil remaining after harvesting are released into the air. Due to their light weight, these contaminants may hang in the air and/or be transported throughout a facility. In some facilities, dust problems are severe enough to create a haze. Dust can irritate worker's eyes and noses, induce allergies, and can lead to a respiratory disease referred to as Byssinosis (or 'brown lung'), which in the

most severe cases can result in chronic lung disease (Kane, 2001; Kadolph & Langford, 2003). The problems with dust are generally isolated to the plant, and can be controlled through improvements to machinery design, proper equipment maintenance regimes, careful humidity control, frequent cleaning and air filtration units (Kane, 2001; Kadolph, 2007). Once again, in most developing countries, few, if any, regulations exist to protect workers from dust in textile mills (Haque et al., 2006).

D.2.3 Fabric Production

As in the case of yarn production, the environmental impacts of fabric production tend to be minor, with energy and water use, effluent production, dust and noise, being the primary concerns. These issues tend to be more severe for woven fabric production than knits, with knitting machines generating less noise and dust, and requiring less energy to operate than shuttle looms (Kadolph, 2007). In order to reduce abrasion, friction and yarn loss in production, the warp yarns in woven fabrics must be treated with a sizing. This may be natural or synthetic, and may also contain lubricants, preservatives and defoamers (Slater, 2003). Prior to the fabric being finished or dyed, the sizing must be removed. This removal requires energy, water and chemicals, and generates effluent. Some of the green alternatives being explored to reduce the impact of sizing and de-sizing processes, include using biodegradable corn-based sizing; using enzymes, oxidation or plasma to remove sizing; and recycling sizing (Slater, 2003). Similar in function to sizing, lubricants are often used in knitting, which must also be removed (Slater, 2003).

Pretreatment, Dyeing & Finishing

Few, if any, fabrics used in apparel production ever go directly from the loom (or knitting machine) to the cutting table. To enhance their appeal to customers, finishes are applied to make a fabric more suitable for a particular end use, and colour is added to augment its appearance. But before fabrics can be finished or dyed, they must typically undergo a series of pre-treatment steps to clean and prepare the material.

Pre-treatment. Most fabrics must undergo some form of cleaning in order to remove sizing, lubricants and other chemicals applied during yarn and fabric production (Hatch, 1993). However, in the case of cotton, a number of other preparatory steps are required. Raw cotton must be scoured, mercerized and bleached - prior to its conversion into yarn or the commencement of finishing procedures. In the scouring process, plant debris, soil and natural waxes are dissolved in a bath of sodium hydroxide. To improve dye-ability and other fibre properties, the raw cotton then undergoes mercerization, which also involves exposing the fibre to aqueous sodium hydroxide. Finally, in order to allow the dyes to properly penetrate the fibre, it is bleached, generally with chlorine bleach (Chen & Davis Burns, 2006; Kadolph & Langford, 2002). These steps require a substantial amount of chemicals, water for application and rinsing and energy (to heat the solvents), and generate effluent in the process (Clay, 2004; Kadolph & Langford, 2002).

Finishing. Finishes are designed to improve the comfort, performance, maintenance and aesthetic features of textiles. There are two general categories of finishes – mechanical/thermal and chemical. *Mechanical or thermal finishes* alter the geometry of the yarns or fibres within the textile through the application of heat, pressure, tension or

agitation (Hatch, 1993). These processes tend to be energy intensive. *Chemical finishes*, on the other hand, alter textile properties through exposure to chemicals, such as softeners, resins, gums, water-repellant compounds, ammonia and sodium hydroxide (Hatch, 1993). Chemical finishing requires the use of a variety of solvents, additives, and other chemicals, as well as water and heat, and generates significant quantities of waste water. The majority of finishes are applied to fabrics comprised of natural fibres, as most synthetic fibres can be engineered to provide the aforementioned features. For instance, the fabric for the cotton garment would likely be treated with an array of finishes including pre-shrinkage, perhaps a stiffening or softening agent (depending on the look the manufacturer wished to achieve) and possibly some sort of treatment for easy fabric care, such as a soil release or repellent finish and a wrinkle-resistant treatment. These require the use of water, energy and chemicals. In the case of a wrinkle-resistant finish, formaldehyde - which is allergenic, toxic and carcinogenic – is used (Hatch, 1993; Slater, 2003). Polyester fabric would likely undergo only a few mechanical or thermal treatments to improve performance properties, such as hand and pill resistance. It requires the energy use but not the water and chemicals needed for the cotton treatments.

Dyeing. Very few fabrics are sold in the greige, or undyed state. The vast majority are dyed to enhance their aesthetic appeal. Dyeing typically involves the use of synthetic dyes, which are produced from petrochemicals, and thus their production has similar impacts to those described for polyester. Dyeing also requires a significant amount of water and energy.

Finishing and dyeing is often viewed as the most environmentally destructive stage of textile and apparel production, with water usage and the generation of effluent being the primary concerns.

Water Use. The textile industry uses massive quantities of water everyday. Water acts as a solvent to aid pretreatment, finishing and dyeing procedures. It is also used for rinsing and washing, and serves as a cooling medium for some equipment (Thiry, 2006; Hessel, Allegre, Maisseu, Charbit & Moulin, 2007). It is estimated that producing, dyeing and finishing one kilogram of fabric requires anywhere from 10 to 300 liters of water, depending on the fibre type and procedures used (Lal, 1998).

Since clean water is quite inexpensive in most parts of the world, controlling water use has not been seen as a top priority for many facilities, nor has the recycling of water, which involves an investment in equipment and additional procedures. However, a rapidly growing population, particularly in the developing world, will increase the demand for clean, good-quality water. In the not too distant future, mills may face water restrictions that will lead to a reduced water dependence and/or lower cost techniques for recycling water (Thiry, 2006).

Water Pollution. The textile industry is a significant contributor to water pollution – releasing an estimated four trillion litres of effluent everyday (Thiry, 2006). The water released contains a wide range of chemicals and dyestuff. These include nutrients, precursors to acid rain, oxygen-demanding compounds, warm and cold water discharges, colourants and toxic materials, all of which can negatively impact the delicate ecological balance of a water body. Some of this waste may disrupt natural

ecological processes, some may be toxic and/or carcinogenic, some may speed up eutrophication, some may suffocate fish or inhibit photosynthesis, and some may render the water undrinkable.

The effluent generated by textile production is often very difficult and costly to treat. There are numerous technical barriers to treatment, with the primary one being the complexity of the effluent. There can be large variation in the chemical composition of the wastewater produced by a plant depending on the type of fibre being dyed or finished, the procedure employed, the type and amount of dyestuff or other chemical applied, additives or catalysts used, and the number of batches processed (Roche & Baskaran, 2003). Treatment procedures and technologies are not universal and cannot handle all types of effluent; therefore, daily changes in the chemical composition of the effluent can make investing in the appropriate technologies complex and costly. Certain dyes are more difficult to extract and some chemical additives intended to assist the finishing or dyeing process can actually hinder treatment and prevent water reuse, further complicating the treatment process (Roche & Baskaran, 2003). Regulation is the primary driver pushing wastewater treatment. Without regulation, many mills would not voluntarily assume responsibility for the cleaning their effluent. Stricter regulations for wastewater treatment in North America and Europe have been cited by some as the reason many textile mills have relocated to the developing world (Clay, 2004).

An array of possibilities exists for “greening” the finishing and dyeing stage of production. Five will be addressed here: means of eliminating or reducing the need for

finishing, improving efficiency, treating or recycling wastewater, using friendlier chemicals, and employing alternative dyeing and finishing techniques.

Eliminate or Reduce Need for Finishing. Whenever working to diminish environmental impacts, the best option is always to eliminate or reduce the problematic activity. In the case of finishing and dyeing, the best way to realize lower levels of water use and pollution is to eliminate or reduce the need for these procedures. Examples of this include green cotton, naturally coloured cotton and engineered manufactured fibres.

Green Cotton. Cotton that has not been chemically pretreated, dyed or finished is termed green cotton. A mild natural-based soap is used to remove plant debris, soil and natural waxes before converting it to yarn. Green cotton fabrics may be dyed with natural dyes or may be sold in their greige state (Kadolph & Langford, 2002).

Naturally-Coloured Cotton. Although naturally-coloured cottons have been known to exist for over 5,000 years, until the last decade their use in garment production has been extremely limited. The low-cost and wide colour-palette provided by synthetic dyestuff, coupled with the fact that naturally-coloured cotton fibres were weaker and shorter (which made them ill-suited for spinning garment quality yarns), left coloured cotton unable to compete with conventional white varieties (Chavan, 1999). However, in the early 1980s, an American by the name of Sally Fox began a breeding program to improve the quality and features of coloured cottons. Through selectively breeding wild coloured cotton with commercial white cotton, new varieties of cotton plants which generate stronger and longer fibres in a variety of pastel shades (including

green, brown, tan, yellow, and even pink) are now available (Chavan, 1999; Fox, 1997).

Environmentally, this fibre has a great deal to offer. Naturally coloured cottons are inherently more resistant to diseases and pests, reducing or eliminating the need for chemical fungicides and insecticides (Chen & Davis Burns, 2006; Fox, 1997). Their natural shades eliminate the need for dyeing, reducing the use of potential toxic chemicals, water and energy in the production process (Fox, 1997; Chavan, 1999; Chen & Davis Burns, 2006). However, despite the quality improvements and ecological benefits, naturally-coloured cottons remain a niche market. Yields are still low, in part due to concerns about cross-contamination with conventional white cotton fields, and costs remain high (Achwal, 1998; Chavan 1999).

Engineering Manufactured Fibres. The characteristics of manufactured fibres can be tailored to meet the intended end-use of the fibre. For example, the comfort properties of polyester intended for a blouse would differ from the polyester to be used in a high-performance running shirt (Hatch, 1993). All the necessary additives - e.g. delustrants, anti-static agents, stabilizers to improve UV resistance, and dye-accepting compounds to improve dye affinity - can be incorporated to the dope-mixture (Kadolph & Langford, 2002). Fibre manufacturers can also engineer the cross-sectional shape, surface contours, crimp, degree of polymerization, and degree of polymer orientation and crystallinity (Hatch, 1993). Dye can even be added to the polymer solution prior to extrusion (referred to as solution dyeing), although in the

case of apparel, due to the high-costs of solution dyeing and short fashion cycle, this is rarely done (Hatch, 1993).

Improving Efficiency. Manufacturers are continually seeking ways to improve efficiency in an effort to reduce costs. Improved technologies and processes can reduce demands for energy, water and chemicals, thereby reducing pollution resulting from the manufacturing process. For example, one way for improving the efficiency of dyeing is to improve dye fixation. One technique being researched is a cationic treatment of cotton to enhance its dye up-take, thereby reducing energy requirements (by an average of 30 percent), effluent production (by an average of 22 percent) and dyestuff requirements (by an average of 25 percent) (Hauser, 2000). A means of improving pre-treatment is to combine processes, for example, a single-stage scouring and bleaching procedure has been found to reduce energy and water demands by 40 percent (Hilden, 1996).

Wastewater Treatment and/or Recycling. Manufacturers can clean the wastewater prior to releasing it into a common waterway. They may also choose to reuse the water, and some of the chemicals remaining in the effluent, after it is cleaned. Conventional water treatment methods include chemical coagulation/flocculation, oxidation, floatation, adsorption and biological treatments. Numerous techniques are currently being explored to improve upon these processes, including the use of hydrogen peroxide, ultraviolet radiation, ozonation, fungi, enzymes, membrane filtration and electrochemical methods (Hardin, Cao, Wilson & Akin, 2000; Kos, Perkowski & Ledakowicz, 2004; Sharma, 2005

Roche & Baskaran, 2003). Unfortunately, as noted above, due to the low cost of fresh water and high costs of water treatment, few companies opt to reuse wastewater.

Use of Friendlier Chemicals. Another means for 'greening' this phase of production is to use 'friendlier', or non-toxic, non-carcinogenic, and non-persistent, chemicals. However, it should be noted that the quest for more benign substitutes is not simple. Many of the alternative chemicals have their own environmental concerns and many are not as effective as their 'unfriendly' predecessors. For example, a commonly used bleaching agent is chlorine, which can cause skin irritations, produce harmful by-products when mixed with other chemicals in the wastewater and may pose a threat to the safety of drinking water (Haque et al., 2006; Slater, 2003). Hydrogen peroxide is viewed by many as a friendly alternative. However, despite on-going research, hydrogen peroxide bleaching is more costly, requires greater energy inputs and time, degrades cellulosic chains (decreasing the durability and shortening the lifespan of the resulting fabric), and in the end cannot produce the brilliant whites generated by chlorine-based bleaches (Haque et al, 2006). Another example of a friendlier chemical would be dyes free of heavy metal. One such dye is sulphur dye, which is affordable and an extremely effective dye in cases where colour depth and fastness are priorities. However, the wastewater generated from the use of sulphur dye is highly polluting and may include oxygen-depleting substances, highly acidic compounds, and hydrogen sulphides, which are corrosive and life-threatening. Existing technology cannot treat the effluent produced by sulphur dyeing to a level deemed safe by a number of governments, including

Germany, and as a result this dyeing process has been banned in these nations (Haque et al, 2006).

Alternative Dyeing and Finishing Techniques. There is a wide array of alternatives being investigated by textile manufactures, equipment suppliers and universities to reduce the environmental impacts of conventional dyeing and finishing. Some are being used on a small-scale basis, but at this point most of these techniques are not yet in commercial use. See Table D.4 for a summary of some of the alternatives.

Table D.3: Alternative Finishing and Dyeing Techniques

	Description	Benefits	Drawbacks
Natural Dyes	Dyes extracted from plants, insects or minerals. These dyes have been primarily used by craft dyers and printers, but there is now a growing interest in using them for commercial purposes (Chavan, 1995).	<ul style="list-style-type: none"> • Renewable • Biodegradable • Reactions are mild and do not require the addition of harmful chemicals • Synthetic dyestuff is generated from petrochemicals, and therefore the use of natural dyes avoids many of the environmental problems listed 	<ul style="list-style-type: none"> • Shades are duller, less brilliant and not as colourfast as synthetic dyes • Not effective on most synthetic fibres • Require a mordant (heavy metal) to help fix the dye to the fibre • Little data is available on the toxic, carcinogenic and allergenic properties of many natural dyes • Typically less than 5% of a dye plant

		<p>under polyester production (Chavan, 1995)</p>	<p>yields colourant, therefore large quantities of plant matter is needed, which requires significant hectares of arable land</p> <ul style="list-style-type: none"> • Lack of standardization • No quality guarantees <p>(Chavan, 1995; Doraisamy & Janakiraman, 1999; Singh & Parmar, 1998;)</p>
<p>Lasers</p>	<p>Digitally controlled lasers are being used to etch graphics and patterns onto a variety of textile fabrics. The use of lasers can replace batch screen printing, sandblasting, continuous screen printing, embossing or chemical etching (“Is it Sci-Fi”, 2006).</p>	<ul style="list-style-type: none"> • Eliminates the need for the chemicals and water used in traditional printing, embossing and etching processes • Digital programming gives designers and manufacturers greater flexibility to change and update designs with ease (“Is it Sci-Fi”, 2006) 	<ul style="list-style-type: none"> • Graphics and patterns are monochromatic. Lasers can only remove colour, not add colour (“Is it Sci-Fi”, 2006)
<p>Enzymes</p>	<p>Enzymes are protein molecules that can initiate or speed up complex chemical</p>	<ul style="list-style-type: none"> • Use significantly less water, energy and fewer chemicals than 	<ul style="list-style-type: none"> • Very expensive • Enzymes have slow reaction rate

	<p>reactions. They have longed been used to remove the sizing from warp yarns, but are now being studied for use in scouring, bleaching, biofinishing and biostoning (Li & Jin-jin, 2003).</p>	<p>conventional finishing methods</p> <ul style="list-style-type: none"> Wastewater from enzyme processes is biodegradable (Li & Jin-jin, 2003; Spillman, 2003) 	<ul style="list-style-type: none"> Enzymes may cause skin and eye irritation or respiratory allergies if not properly handled (Atlas & Pamuk, 2007; Enzyme Technical Association, 2000)
<p>Ultrasonic Energy</p>	<p>Ultrasonic energy is high intensity, high frequency sound waves. Ultrasound is being explored in conjunction with enzyme treatments. It is also being looked at as a means of improving washing, bleaching, and dyeing procedures (Atlas & Pamuk, 2007; Spillman, 2003).</p>	<ul style="list-style-type: none"> Used in combination with enzymes, studies show shorter processing times, reduced enzyme consumption, less fibre damage and better uniformity of treatment Speeds up and improves washing and bleaching processes When used in dyeing, although varying with dye and fibre type, findings include a reduction in energy and water consumption, increased depth of colour, enhanced dye uptake, improved dye rate, and 	<ul style="list-style-type: none"> Not commercially available – still in the exploratory phases Ultrasound equipment is small in-scale, designed primarily for medical and research purposes. To be used in a textile facility, large industrial-grade units will be required. (Spillman, 2003)

		<p>reductions in dye temperature, times and concentrations (Atlas & Pamuk, 2007; Spillman, 2003)</p>	
<p>Supercritical Fluid Dyeing</p>	<p>Liquid carbon dioxide can be used as the carrier, rather than water, for dyeing polyester and high performance fibres (Kadolph & Langford, 2002).</p>	<ul style="list-style-type: none"> • Eliminates need for water and drying, as well as the associated effluent and energy requirements • Increased dye fixation • Eliminates need for salts and other chemical additives • Minimal emissions and waste • Carbon dioxide is readily available, non-toxic, economical, and recyclable (Bach & Schollmeyer, 2007; Kadolph & Langford, 2002) 	<ul style="list-style-type: none"> • Not yet available for commercial production • Costs and many other factors are yet unknown (Bach & Schollmeyer, 2007)

D.2.4 Garment Assembly

The environmental impacts of garment assembly are relatively insignificant and include the generation of solid waste, the use of energy and the use of packaging. The

solid waste generated during garment assembly is comprised of fabric scraps, as well as bits of thread and yarn. Ideally, materials will be used again within the facility or sent to a reprocessor. Most fabric is physically recycled by shredding or other techniques. As this tends to damage the fibres, reprocessing typically yields lower-value products such as fibre-fill, insulation, paper products, carpet backing and reinforcements for composites (Chang, Chen & Francis, 1999; Chen & Davis, 2006; Kadolph & Langford, 2002). Unfortunately, the majority of waste from garment manufacturing is bound for the landfill. As noted earlier, most of the fibrous waste from yarn production phase is recovered and recycled. However, this phase is prior to the addition of any finishing chemicals or colourants, which increase the complexity and cost of recycling (Kadolph & Langford, 2002).

Energy is required to power a wide-range of machines – including sewing machines, cutting devices, embroidery equipment and pressing apparatuses. To reduce energy consumption, a garment manufacturer may invest in energy-efficient equipment, institute an energy-efficiency program, or choose to use an energy source which produces fewer emissions than fossil fuels (e.g. hydro, wind or solar power).

Another issue often overlooked, is that of the packaging (e.g. boxes, plastic bags and wrap, hangers and hangtags) used to prepare the apparel for shipment to retailers. Packaging requires significant resources to produce and is often only used once prior to disposal. Options for reducing the environmental impacts of packaging may include, instituting a cardboard box recycling program, eliminating the use of plastic bags or wrap, ensuring the reuse of hangers, or using recycled paper and environmentally friendly inks for hangtags (“Retail Update”, 2007).

D.3 Direct Social Impacts of Apparel Production

The study of social concerns related to clothing production is a vast and complex subject. As this is not the primary focus of this thesis, this section will simply provide an overview of the direct social problems related to clothing production, namely sweatshops and the use of child labour.

The majority of authors writing on the topic of sweatshops cite the official US General Accounting Office (1994) definition, which describes a sweatshop as “an employer that violates more than one federal or state labor, industrial homework, occupational safety and health, workers’ compensation, or industrial registration law” (as cited in Cheek & Easterling Moore, 2003; Firoz & Ammaturo, 2002; Weadick, 2002). Sweatshops were rampant in the United States in the late 19th century/early 20th century. However, by the end of World War II, as a result of government intervention and the increased strength of the labour movement, they were effectively eradicated (Firoz & Ammutoro, 2002). Unfortunately, in recent years, the convergence of several political, economic and social factors has resulted in a revival of the sweatshop. A disturbing number of manufacturers in both the United States and throughout the developing world have been found to be in gross negligence of workers’ rights (Cheek & Easterling Moore, 2003; Firoz & Ammaturo, 2003). Common sweatshop practices include, “sub-minimum wages, no benefits, non-payment of wages, forced overtime, sexual harassment, verbal abuse, corporal punishment and illegal firings” (Given, 1997, para 2). Sweatshop wages are typically below what is considered reasonable to feed and house a family, with some Latvian sweatshop workers revealing that they had to forge for food in

the local forest (Weadick, 2002). Many workers have reported being forced to work 12-hour shifts, seven days a week, with only two to four days off in a month (Firazo & Ammaturo, 2002; Weadick, 2002). In order to avoid providing maternity leave, pregnant women are often fired, and in some factories it has been told that women have been forced to take birth control measures or even abort pregnancies (Given, 1997). During work hours, some manufacturers restrict bathroom access and forbid workers from talking to one another, with fines for conversing with another employee running as high as \$20 per offence. For some, this is nearly three weeks wages. Furthermore, as a result of dust, glue fumes, excessive heat, noise and congestion, the conditions within many of these factories are dangerous to workers' health (Firoz & Ammaturo, 2002).

It should be noted that not everyone views sweatshops as being detrimental, with some contending that they are an inevitability in a global economy. Others purport that sweatshops provide economic benefits, finding that "labour intensive apparel factories overseas are helping raise the standard of living by providing thousands of jobs in impoverished countries that would not be available otherwise" (Goldberg, 2001, as cited in Cheek & Easterling Moore, 2003, p. 14). Similarly, it has been suggested that the proliferation of labour-intensive manufacturing facilities such as apparel factories is a vital stage in the industrial progression of a nation, and that once the country has achieved economic prosperity, sweatshop practices will be abolished (Cheek & Moore, 2003; Schrank, 2004). "Thus, on the economic development ladder, labour-intensive industries in an impoverished country provide a starting point that will eventually lead to the emergence of other industry that demands more skilled labour" (Weidenbaum, 1999 as cited in Cheek & Easterling Moore, 2003, p. 14). This perspective maintains that the

social ills caused by sweatshops are outweighed by the economic gains, and subsequent increased standard of living resulting from such conditions and practices. However, critics of this viewpoint “decry the worldwide oversupply of low-cost, unskilled labor and therefore anticipate the “downward harmonization” of wages and working conditions in the developing world (Schrank, 2004, p. 125).

Child labour is another social concern related to the production of apparel. Over 60 nations world-wide have ratified the International Labour Organization’s Convention 138, which defines a child, for the purposes of employment, as an individual under the age of 15²⁸. However, in many developing nations children far below this stipulated age are often required to work to survive, to help support their families, to repay family debts, to gain skills (for often they have no access to schooling or training), and, in some extreme cases, because they have been kidnapped and forced into labour (Cheek & Easterling Moore, 2003; U.S. DOL, 1994). Not only are these children been deprived of an education and an opportunity to improve their lifestyle, they are often forced to work in the sweatshop conditions described above, toiling long hours in hazardous and abusive conditions. In many cases, not only are children exploited by their employer, but often by their adult co-workers, who may force them to perform some of their duties (U.S. DOL, 1994).

Those seeking to justify the use of child labour “frequently point to traditional patterns of economic life and maintain that child labour is a time-honored and inevitable

²⁸ International Labor Organization Convention 138 (1973) stipulates that the minimum age for employment “...should be no less than the age of compulsory schooling and, in any case, shall not be less than 15 years. Convention 138 allows countries whose economic and educational facilities are insufficiently developed to initially specify a minimum age of 14 years...” (as cited in U.S. DOL, 1994, p. 1).

fact of life” (U.S. DOL., 1994, p. 2). These individuals cite extreme poverty as the root cause of child labour, and believe only with rapid industrialization and economic growth will this practice be abolished. Children’s rights advocates and other experts disagree with this simplistic interpretation of the problem. While deeming poverty a major contributor to this complex issue, they also consider factory-owner greed, public indifference, inadequate enforcement of labour laws, government corruption, and prejudice against less privileged societal groups to be other pertinent factors (U.S. DOL, 1994). They also contend that children’s wages are relatively insignificant, contributing in only a minor way to the family’s overall income, and that “although children work because they are victims of poverty, by working instead of being educated they tend to perpetuate the cycle of poverty” (U.S. DOL, 1994, p. 3). However, there is a divide amongst those advocating for these children as to the best approach for coping with the issues of child labour. One group favours the complete and immediate abolishment of sweatshops, citing “that in the long run, developing countries would benefit both economically and socially from the public policy of strict enforcement of both compulsory education and minimum wage laws. They maintain that many countries actually have the resources for greater investment in education but lack the necessary political will” (U.S. DOL, 1994, p. 4). The other group argues for a more gradual approach, declaring that:

... the immediate abolition of all child labor is unrealistic and, in many cases, contrary to the interests of the children themselves. They recommend first abolishing the most abusive forms of child labor, and, in order to avoid a situation in which a reduction of child labor in one sector of the economy will simply lead to an increase in another, governments then should strictly regulate remaining forms of child labor to provide appropriate protections and benefits for those who must work to survive (U.S. DOL, 1994, p. 4)

In response to consumer concerns about sweatshops and child labour, a number of leading brands and retailers have instituted codes of conduct which establish minimum standards for working conditions and practices. Issues typically addressed in such codes include minimum wages, work hours, health and safety, child labour, freedom from abuse and freedom of association (Cheek & Easterling Moore, 2003; Iwanow et al. 2005; Weadick, 2002). However, the effectiveness of such standards is questionable. These codes are voluntary policies developed and implemented by the corporation, and typically lack objective, third-party validation and monitoring. As such, many consumers question the companies' motives and doubt the sincerity of their commitments (Iwanow et al., 2005; Shaw & Tomolillo, 2001). Moreover, critics of this approach raise concerns regarding the weak, ambiguous language of many of the codes and the lack of uniformity between the standards and measures (Iwanow et al., 2005). In practice, many of the codes fail, with workers being unaware of their existence, manufacturers deceiving auditors and remedial action for code breaches often being too slow (Ross, 2006). For example, the Gap first instituted a code of conduct in 1990, and yet this leading retailer has been the subject of several sweatshop scandals over the last two decades. The most recent incident involved a contracted factory operating in India being exposed for the use of child-slave labour. In the Observer's expose, Amitosh (10 years old), and Jivaj (12 year old) told their stories to reporter Dan Mc Dougall (2007):

Sold into bonded labour by his family this summer, Amitosh works 16 hours a day hand-sewing clothing. Beside him on a wooden stool are his only belongings: a tattered comic, a penknife, a plastic comb and a torn blanket with an elephant motif.

'I was bought from my parents' village in [the northern state of] Bihar and taken to New Delhi by train,' he says. 'The men came looking for us in July. They had loudspeakers in the back of a car and told my parents that, if they

sent me to work in the city, they won't have to work in the farms. My father was paid a fee for me and I was brought down with 40 other children. The journey took 30 hours and we weren't fed. I've been told I have to work off the fee the owner paid for me so I can go home, but I am working for free. I am a shaagird [a pupil]. The supervisor has told me because I am learning I don't get paid. It has been like this for four months.'

The derelict industrial unit in which Amitosh and half a dozen other children are working is smeared in filth, the corridors flowing with excrement from a flooded toilet.

Jivaj, who is from West Bengal and looks around 12, told The Observer that some of the boys in the sweatshop had been badly beaten. 'Our hours are hard and violence is used against us if we don't work hard enough. This is a big order for abroad, they keep telling us that.'

'Last week, we spent four days working from dawn until about one o'clock in the morning the following day. I was so tired I felt sick,' he whispers, tears streaming down his face. 'If any of us cried we were hit with a rubber pipe. Some of the boys had oily cloths stuffed in our mouths as punishment.'

Appendix E

SUPPORTER INTERVIEW SCHEDULES

Researcher's General Introduction

Thank you for agreeing to participate in this study.

I'll start by providing you with a brief overview of the study and then I will ask you to read over the consent form, which will provide you with a few more details. And then we can start into the actual interview, which takes about [10 – 30] minutes.

The focus of this study is on people who are concerned about the sustainability of clothing and are committed to taking steps to reduce the environmental and social impacts of clothing. More specifically, I want to examine how these people learned about clothing sustainability, and how this learning then led to a change in their attitudes and behaviour related to clothing.

As part of this exploration, I am interviewing what I am referring to as Supporters – or organizations that help consumers participate in more sustainable clothing practices either through education and awareness or by helping them to take action. Therefore, the questions in this interview will primarily focus on the role your [business or NGO] may play in helping consumers lead more sustainable lives.

[Hand consent form] This is the consent form. It explains a little more about the study. It asks for a signature at the end, this is simply to just to affirm that you have been informed as to the nature of the study and your participation – it in no way binds you to participation or waives any rights. After reading, if you have any further questions about the study or your role, please feel free to ask.

Second-hand or Consignment Stores

This is a general guide for the second-hand retailer interviews designed to gather background information on organizations supporting clothing sustainability in Winnipeg. [*italics represent prompts*]

1. Can you tell me about your businesses?
 - What motivated you to open this shop? (*Personal motivation? Broader societal goals?*)
 - How long have you been in business?
 - Confirm full range of products
 - Confirm range of clothing products do (*e.g. Men's, women's, children's? Casual, work/business, formal?*)
 - What do you do with the clothing you are unable to sell?

2. Can you tell me about your customers?
 - What is your target audience? (*e.g. gender, age, etc.*)
 - Have consumers ever shared with you their motivations for buying used clothing?
 - Has anyone ever expressed environmental concern as one of the motivators? [If yes, does this seem to be a growing segment of your customer base?]

3. Have you ever thought of your business as being a way consumers could be more sustainable (or environmentally-friendly)?
If yes...
 - Have you ever promoted your business from the perspective of being more sustainable?
 - Or have you ever communicated to your customers the benefits of your services from an environmental perspective?
 - Do you engage in any green business practices? (*e.g. recycling? eco-friendly cleaning products? 'green' printing practices?*)

4. Do you have any questions about this study? Or any other comments about sustainable clothing practices or related activities?

5. Could you suggest any other businesses or organizations that I should be contacting?

6. Do you know if any of your customers might be a good candidate for the consumer side of this research (i.e. someone who is dedicated to clothing sustainability)? [If yes, I will leave contact information for them to pass along to specific consumers they may think would be interested or a poster inviting their consumers to participate in the project]

Non-Government Organizations

Note: These questions are a guideline for the NGO interviews. Each interview was specifically tailored to the specific organization.

Background on Organization

The first set of questions I hoped to discuss is intended to gain an understanding of your organization. I have reviewed your website and a number of the [documents, reports, press releases] available on the site. So, I have a general sense of your organization – most of these questions are intended to affirm my knowledge, or seek elaboration. *[italics represent prompts]*

1. Purpose of Organization:
 - Based on my background research, it would seem the purpose of your organization is to [organization's purpose]. Would you add or modify that in any way?

2. Key Activities/Projects/Programs
 - From your website, it appears your organization's primary activities are [activities/projects/programs]. Again, would you add or modify this list in any way?

3. Who would you define as your target audience?

4. How long has the organization been in operation?

Sustainable Clothing Practices or related Social Action

The next set of questions focuses on any work you may have performed in relation to clothing sustainability.

5. Has any of your organization's work ever concentrated on anything related to clothing (*e.g. social or environmental production issues? Purchases? Maintenance? Disposal?*)
 - *Consumer education or awareness activities?*
 - *Any activities to encourage consumers to buy sustainable apparel or engage in other sustainable clothing practices?*
 - *Any activities to encourage manufacturers to produce clothing in a more sustainable manner?*
 - *Any collective action with other NGOs, retailers, and/or consumers to encourage more sustainable activities in relation to apparel?*

- *Have member, or others, directly contacted you with questions about purchasing, reusing, recycling, or disposing of clothing?*

Other

6. Do you have any questions about this study? Or any other comments about sustainable apparel or related activities?
7. Could you suggest any other businesses or organizations that I should be contacting?
8. Could you suggest anyone who might be interested in participating in the consumer side of this research project? [If the organization is agreeable, I will leave contact information for them to pass along to specific consumers they may think would be interested or a poster inviting their consumers to participate in the project]

Appendix F RETAILER SURVEY

Sustainable Apparel Retailers Survey

Thank you for taking the time to complete this survey. This survey is one part of a multi-phase study of consumer engagement in sustainable clothing practices. The information you provide regarding your products and practices will be important in understanding how sustainable clothing attitudes and behaviour are developed and maintained. Please note there are no right or wrong answers to these questions and all responses will remain confidential.

Survey Purpose:

The purpose of this survey is to gather information on the range of sustainable apparel (see definitions below) available to consumers in Winnipeg and the role retailers may play in increasing consumer awareness regarding clothing sustainability.

Instructions:

Please answer all the questions as best as possible. If you would like to elaborate or explain a particular response or find a question unclear, please make a note beside the question, or in one of the blank spaces provided.

Once completed, please email or mail your responses, by Friday, November 6, 2009, to the address below.

Researcher Contact Information:

If you have any comments, questions or concerns about the research project or this survey, please feel free to contact me at:

Lisa Quinn (PhD Candidate)
Natural Resource Institute
University of Manitoba
303-70 Dysart Road
Winnipeg, MB R3T 2N2

For the purposes of this study:

Sustainable apparel is the term used to collectively refer to both environmentally-improved apparel and socially-conscious apparel.

Environmentally-improved-apparel is clothing manufactured using materials (e.g. organic cotton, hemp, recycled polyester) and/or production processes (e.g. natural dyes, bleach-free) which have less of an environmental impact in comparison to conventionally manufactured clothing. The term also encompasses clothing which has been intentionally designed to facilitate repair, remanufacturing, recycling or composting.

Socially-conscious-apparel is clothing produced by manufacturers following fair labour practices and providing safe working conditions. Such practices include paying a living wage, providing paid overtime, ensuring shifts are a reasonable length and adequate downtime is given, prohibiting all forms of abuse, not employing children under the legal age, and allowing employees to partake in union activities. Terms associated with this type of clothing may include: sweatshop free, child-labour free, union-made, and fair-trade.

Environmentally-improved apparel is clothing manufactured using materials (e.g. organic cotton, hemp, recycled polyester) and/or production processes (e.g. natural dyes, bleach-free) which have less of an environmental impact in comparison to conventionally manufactured clothing. The term also encompasses clothing which has been intentionally designed to facilitate repair, remanufacturing, recycling or composting.

Socially-conscious apparel is clothing produced by manufacturers following fair labour practices and providing safe working conditions. Such practices include paying a living wage, providing paid overtime, ensuring shifts are a reasonable length and adequate downtime is given, prohibiting all forms of abuse, not employing children under the legal age, and allowing employees to partake in union activities. Terms associated with this type of clothing may include: sweatshop free, child-labour free, union-made, and fair-trade.

1. Based on the above definitions, what percentage of the apparel offered in your store(s) is...?

Environment-improved apparel _____ %
 Socially-conscious apparel _____ %

2. What types of sustainable apparel do you offer in your store(s) on a regular basis?

(Please check all applicable responses)

<input type="checkbox"/>	Casual Wear (e.g. jeans, t-shirts)	<input type="checkbox"/>	Work Wear (e.g. blouses, dress pants, suits)
<input type="checkbox"/>	Active Wear (e.g. yoga tops, running shorts)	<input type="checkbox"/>	Ethnic Wear
<input type="checkbox"/>	Outerwear	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Hi-tech Sportswear	<input type="checkbox"/>	Other: _____

Men's Apparel

<input type="checkbox"/>	Pants	<input type="checkbox"/>	Polo shirts	<input type="checkbox"/>	Underwear	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Shorts	<input type="checkbox"/>	Sweaters	<input type="checkbox"/>	Pyjamas	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	T-shirts	<input type="checkbox"/>	Jackets	<input type="checkbox"/>	Other:	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Button-up shirts	<input type="checkbox"/>	Socks	<input type="checkbox"/>	Other:	<input type="checkbox"/>	Other: _____

Women's Apparel

<input type="checkbox"/>	Pants	<input type="checkbox"/>	T-shirts	<input type="checkbox"/>	Sweaters	<input type="checkbox"/>	Pyjamas
<input type="checkbox"/>	Shorts	<input type="checkbox"/>	Blouses	<input type="checkbox"/>	Underwear	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Skirts	<input type="checkbox"/>	Tank tops	<input type="checkbox"/>	Jackets	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Dresses	<input type="checkbox"/>	Polo shirts	<input type="checkbox"/>	Socks	<input type="checkbox"/>	Other: _____

Children's Apparel

<input type="checkbox"/>	Pants	<input type="checkbox"/>	T-shirts	<input type="checkbox"/>	Sweaters	<input type="checkbox"/>	Pyjamas
<input type="checkbox"/>	Shorts	<input type="checkbox"/>	Sweaters	<input type="checkbox"/>	Underwear	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Skirts	<input type="checkbox"/>	Button-up shirts	<input type="checkbox"/>	Onesies	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Dresses	<input type="checkbox"/>	Jackets	<input type="checkbox"/>	Socks	<input type="checkbox"/>	Other: _____

Please use the space below to include any additional information, comments or questions.

3. For the sustainable apparel you offer, do you...? (Please check all applicable responses)

<input type="checkbox"/>	Design and produce the clothing offered in your store
<input type="checkbox"/>	Design the clothing and contract out the production
<input type="checkbox"/>	Purchase ready-made clothing lines from a wholesaler
<input type="checkbox"/>	Purchase branded ready-made clothing (e.g. Patagonia) directly from the clothing company
<input type="checkbox"/>	Other: _____

4. For the sustainable apparel you sell on a regular basis, what makes it sustainable?
(Please check all applicable responses)

<input type="checkbox"/>	Organic cotton	<input type="checkbox"/>	Naturally-coloured fibres	<input type="checkbox"/>	Union-made
<input type="checkbox"/>	Organic wool	<input type="checkbox"/>	Chemical-free fibre processing	<input type="checkbox"/>	Fair trade
<input type="checkbox"/>	Organic linen	<input type="checkbox"/>	Bleach-free processing	<input type="checkbox"/>	Direct trade
<input type="checkbox"/>	Peace or vegetarian silk	<input type="checkbox"/>	Natural dyes	<input type="checkbox"/>	Locally produced
<input type="checkbox"/>	Recycled polyester	<input type="checkbox"/>	Low impact dyes	<input type="checkbox"/>	Produced by workers coop
<input type="checkbox"/>	Corn-based fibres	<input type="checkbox"/>	Child-labor free	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Soy-protein fibres	<input type="checkbox"/>	Sweatshop free	<input type="checkbox"/>	Other: _____

Please use the space below to include any additional information, comments or questions.

5. For the sustainable clothing you offer, you know it is sustainable because your organization...
(Please check all applicable responses)

<input type="checkbox"/>	Trusts the reputation of your suppliers and/or producers.
<input type="checkbox"/>	Sends representatives to visit production facilities on a regular basis (or only conducts business with apparel companies which do this)
<input type="checkbox"/>	Sends representatives to visit production facilities on a regular basis to conduct formal audits (or only conducts business with apparel companies which do this)
<input type="checkbox"/>	Has developed a sustainable code of conduct or sustainable purchasing policy***
<input type="checkbox"/>	Requires some sort of documentation to support sustainable claims (or only conducts business with apparel companies which do this)
<input type="checkbox"/>	Only deals with suppliers or production facilities with 3 rd party certification(s)
<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Other: _____

Please use the space below to include any additional information, comments or questions.

6. If you do use a code of conduct or purchasing policy, would it be possible to obtain a copy?

If you do not have a formal code of conduct or sustainable purchasing policy, what criteria do you use when selecting (or developing) sustainable apparel for your store(s)?

7. Do you operate a recycling program for the garments purchased at your store?

Yes

No

8. Do any of your suppliers operate a recycling program for the garments they produce?

Yes

No

9. Could you describe some of the characteristics of the typical consumer purchasing your apparel?

Female

Male

Age Range:

Motivations for Buying:

Other Personal Characteristics:

10. What type of feedback have you received from consumers regarding your sustainable apparel?
(e.g. the types of positive comments, concerns, questions, or complaints)

11. Do you communicate information to your consumers about clothing sustainability?

Yes No (please skip to question #12)

a. If yes to #11, what type of information do you communicate to consumers?

(Please check all applicable responses)

<input type="checkbox"/>	Sustainable features of specific clothing items (e.g. identify a garment as organic cotton)
<input type="checkbox"/>	Benefits of the sustainable features of a specific clothing item
<input type="checkbox"/>	Your store's sustainable purchasing policy, code of conduct or sustainable apparel criteria
<input type="checkbox"/>	Adverse environmental impacts of fibre production and processing.
<input type="checkbox"/>	Adverse environmental impacts of fabric production and finishing/dyeing.
<input type="checkbox"/>	Adverse environmental impacts of cleaning clothing.
<input type="checkbox"/>	Adverse environmental impacts of clothing disposal.
<input type="checkbox"/>	Adverse social impacts of garment production.
<input type="checkbox"/>	Greener alternatives to conventionally produced clothing.
<input type="checkbox"/>	Socially-responsible alternatives to conventionally produced clothing.
<input type="checkbox"/>	Greener alternatives to conventional clothing cleaning methods.
<input type="checkbox"/>	Options for extending the life-span of clothing.
<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Other: _____

Please use the space below to include any additional information, comments or questions.

b. If yes to #11, what media do you use to communicate information to your consumers?

(Please check all applicable responses)

<input type="checkbox"/>	Fiber content / "Made in" label	<input type="checkbox"/>	Well-informed staff
<input type="checkbox"/>	Manufacturer's hangtag	<input type="checkbox"/>	Store website
<input type="checkbox"/>	Your own store hangtag	<input type="checkbox"/>	Annual report
<input type="checkbox"/>	Placard above specific clothing items	<input type="checkbox"/>	Newsletter
<input type="checkbox"/>	In-store display	<input type="checkbox"/>	Other: _____
<input type="checkbox"/>	Pamphlets provided at point-of-sale	<input type="checkbox"/>	Other: _____

Please use the space below to include any additional information, comments or questions.

12. How do you ensure you are well-informed about sustainable clothing?

(Please check all applicable responses)

<input type="checkbox"/>	Review information provided by suppliers or producers.
<input type="checkbox"/>	Formally request information from suppliers or producers.
<input type="checkbox"/>	Casual discussions with suppliers or producers.
<input type="checkbox"/>	Attend trade shows.
<input type="checkbox"/>	Review non-government organizations publications (e.g. websites, annual reports, etc).
<input type="checkbox"/>	Read articles or books on the impacts of clothing or clothing sustainability.
<input type="checkbox"/>	Discussions with family, friends, or colleagues.
<input type="checkbox"/>	Popular media (e.g. newspapers, magazines, televisions programs).
<input type="checkbox"/>	Direct questions to staff at a university or other research institute.
<input type="checkbox"/>	High school, university or college course(s).
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Other:

Could you provide one or two specific examples of materials used or questions asked?

13. Do you try to ensure staff are able to describe the benefits of your sustainable apparel products and answer consumer questions?

Yes No (please skip to question #14)

a. If yes to #13, what methods do you use to ensure staff are well-informed?

(Please check all applicable responses)

<input type="checkbox"/>	Provide formal training sessions.
<input type="checkbox"/>	Make relevant literature accessible to staff members.
<input type="checkbox"/>	Casual discussions with staff members.
<input type="checkbox"/>	Encourage staff members to conduct their own research.
<input type="checkbox"/>	Other:

Please use the space below to include any additional information, comments or questions.

14. Aside from purchasing sustainable apparel, are you involved in any other activities to encourage manufacturers to produce more sustainable clothing? If so, please describe.

15. Are you involved in any activities with other retailers, NGOs, and/or consumers to encourage more sustainable activities in relation to apparel? If so, please describe.

16. How long has your store(s) been in operation?

(For national retailers, how long was the chain founded and when was the first store opened in Winnipeg?)

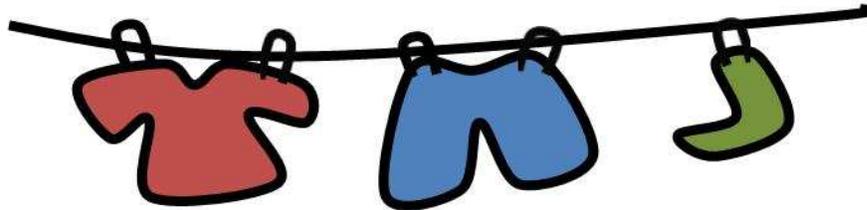
17. In addition to clothing are there other sustainable product categories your store(s) carries?

18. Could you describe the business philosophy of your organization?

19. Do you have any additional comments or questions regarding sustainable apparel or this study?

Appendix G RECRUITMENT POSTER

Sustainable Clothing Study



Are you concerned about the environmental and social impacts related to the production, cleaning and disposal of your clothing? Have you taken steps to reduce your impact by engaging in several of the following activities:

- Learning about the impacts of clothing and what you can do?
- Buying sweatshop-free, fair trade or “green” clothes?
- Reducing the amount of clothing you buy?
- Buying clothing that will last?
- Repairing, altering or updating clothes to extend their life?
- Making your own clothing?
- Washing your clothes in a more environmentally friendly manner?
- Reusing or recycling used clothing?
- Encouraging others to be more sustainable with their clothing?

I am looking for individuals who are committed to sustainable clothing practices to participate in a study being conducted through the Natural Resource Institute (University of Manitoba).

If you would be interested in being a participant, please contact:

Lisa Quinn at (204) 784-8100 or lisa.quinn@umanitoba.ca

Appendix H

JOURNAL WRITING GUIDELINES

Thank you for agreeing to participate in Phase 2 of this research project. You have been selected for this journaling exercise because, following our initial interview, I believe you may be in the *midst* of a transformative experience as related to your clothing attitudes and behaviour. As such you are in a unique position to provide us with a glimpse into the learning, reflection and struggles which are involved in such a transition.

Please feel free to write whatever you want in this journal - however, I am most interested in:

- your thoughts, feelings, attitudes, concerns, struggles, and knowledge related to clothing sustainability (past or present);
- your experiences with sustainable clothing practices, in particular any recent activities you have engaged in (i.e. those initiated during this journaling period); and
- where you hope to be in the future and/or activities you would like to try related to clothing sustainability.

Please do not feel the need to discuss and reflect upon all new topic areas, you may also elaborate on anything we discussed in our initial interview during this journaling period. Some possible topic areas may include, but are certainly not limited to:

- Your previously held attitudes, beliefs and values related to clothing
- Information you have come across regarding the environmental or social impacts of clothing
- The internal struggle you may face with conflicting attitudes, values and beliefs, and how you may (or may not) have overcome these struggles
- The challenges you have faced in changing your behaviour, and how you may (or may not) have been able to overcome these
- Your support network (or lack thereof) for engaging in more sustainable activities

Please see below for some examples from my own journal.

For each entry, please note the date. A journal entry may be a paragraph or several pages. I am requesting that each participant try to submit a minimum of 10 journal entries over the 6 month period (March 1, 2010 – August 31, 2010), but please feel free to write more often if you are able to do so. I will periodically send you email reminders throughout the next 6 months.

The preferred option for submitting your journal entries would be to do so electronically and to email it to me directly once the entry is complete. However, you can also maintain an electronic journal, and send it to me several entries at a time or in its entirety at the conclusion of this exercise. Or you can maintain a hand-written journal which I will collect at the conclusion of this exercise. Please select whichever option is most convenient and comfortable for you.

In order to develop a sound understanding of the transition process and the struggles individuals face, I encourage you to write freely in this journal. Your name will never be directly associated with the information you share – you will simply be identified by an alpha-numerical code. The full contents of the diary will only be viewed by me, my thesis supervisor, and, possibly, a transcriber (in the case of handwritten journals). You should be aware that I will likely use selected portions of your journal in the final thesis, but again, these will be referenced by your alpha-numeric code, not your name.

If you have any questions at any point during the next 6 months, please feel free to call (7) or email (.....).

Once again, my sincerest appreciation for agreeing to share your experiences with me.

Lisa

Example Diary Entry:

Like you, I also find myself in the midst of a transition with regards to my attitudes and behaviour related to clothing. The idea for this journal came from my own struggles with my previous concepts of clothing, fashion and consumption and my new found ideals of sustainability. A few months into this research project I began to keep a journal of my reflections of this transition process. To aid you as you begin writing your own journal, I have pasted below a few excerpts from my own entries.

September 1, 2009 (*excerpt*)

“Several months ago, as I began to conduct research for this project, I read an article on people’s attitudes toward ethical fashion. Several of the folks interviewed mentioned that they did not tend to buy ethically-made clothes because they were more expensive. They would rather buy several cheaper t-shirts rather than pay the higher cost for just one ethically-made shirt. I found it really disturbing to think that so many in our society place greater value on

a t-shirt than on the people across the globe sewing the shirt. However, as I thought about it more, I came to realize that in fact I was practicing the very same behaviour I found so upsetting. I always looked for good deals and gave little thought to the manner in which the clothing was produced. While the treatment of workers, child labour and the health of the environment are definitely concerns for me, I was not marrying my concerns with my consuming behaviour. What I studied in school and tried to promote through my volunteer work seemed to be completely separate from my clothing shopping habits. When I went looking for clothes I was concerned about the style, the fit, the fabric feel and, primarily, the price. Reading the views of those people mentioned above seemed to suddenly bring those two worlds together – and I realized I was certainly not practicing what I was preaching. It baffled me a little as to why I had not realized this years earlier. And then I began to ponder how I would change my behaviour. I began to try to develop my own personal sustainable shopping criteria. Unfortunately, I still have not figured out how exactly to meet my sustainability ideals and my clothing needs. So, for now, I have been primarily practicing “shopping abstinence”. The more I speak with various participants, the more ideas I get, and also the more confused I become, and find myself often sitting back and rethinking what I will adopt as my sustainable clothing practices.”

September 30, 2009 (*excerpt*)

“My girlfriend asked me to go shopping at the mall with her this summer. This was not long after I had decided to try to make a valiant effort to only buy sustainable clothing. I also needed a few new summer items – I was still unable to fit into a lot of my pre-pregnancy clothes – but, I had not yet managed to go to any of the “sustainable retailers” I had hoped to go check out. So, I went along with her to keep her company, with no intentions of shopping myself. I was very good for the first 5 or 6 stores – I managed to resist buying anything. But, then we went into a store which had capris on for a really good price, and I only had a few bottoms for the summer, so I broke down and tried a pair on - and ended up buying them. Over the course of the summer, I think I wore them three times. They wrinkled horribly when I washed them, and I did not have the patience to iron casual pants. So, a double guilt whammy – I bought another article of clothing which was unsustainably produced and I will not end up wearing them. Nice work. Well, hopefully, I have at least learned from the experience”

December 8, 2010

“Although my husband and I certainly do not approach attempting to curb our consumerism from the same perspective (me from a concern over consumerism and its environmental and social impacts, and him from a financial perspective and annoyance over household clutter) – we have both come to recognize our consumption patterns as being very negative. And while we are far from having them under control, acknowledging this is a problem has at least made us pay a lot closer attention to what, when and how we buy. Last January, we decided to “Buy Nothing” for the entire month – with the exception of food and medicine. I digressed once to buy a baby bottle – but otherwise we managed to stick to it. It was great – it really made us stop and think about our purchases. For most items, after several weeks of going without it, we had either come up with an alternative or decided we did not need it. This January we are once again going to attempt to “Buy Nothing”. We’d both really like to add a few additional months this year as well.”

December 12, 2010 (*excerpt*)

“I was invited to a Clothing Swap on Friday. I was a little nervous to go – it was with a group of women I did not know and there seems to be a whole culture attached to this swap thing. I felt pressure trying to decide what to bring – you want to bring good items so that someone else may actually enjoy them (and so people won’t think you have really bad taste in clothes), but you also don’t want to give away something you’re not quite ready to part with. I was also a little concerned I would end-up with a whole lot of stuff that was okay, in mediocre shape, which I wouldn’t wear all that often and would just end up taking up space in my closet.”

January 23, 2010 (*excerpt*)

“A colleague raised some interesting questions related to second-hand clothing today, which got my brain going. Specifically, he was probing around the higher-end thrift shops that seem to be popping up everywhere. He was concerned over their practices of obtaining some of their product from picking through places like the Sally Ann, MCC, etc and buying good pieces for cheap and then reselling them for much higher prices. He believed, and I tend to agree, that this raises ethical issues. As buying second-hand becomes trendy, this is good because less people are buying new (increasing reuse), but then

you are also “gentrifying” clothing. Those who can only afford to shop in second-hand shops may no longer be able to afford it, as the demand and therefore prices increase, or good quality items which meet their needs may be no longer available. Not sure if I have any response or solution for this. The debate rages on in my head.”

Appendix I CONSENT LETTERS

Supporter Interview Consent Letter



UNIVERSITY
OF MANITOBA

Natural Resources Institute
Clayton H. Riddell Faculty of
Environment, Earth, and Resources

303-70 Dysart Road
Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 474
Fax (204) 261-0038

Research Project: Consumer Engagement in Social Action to Promote Clothing Sustainability

Researcher: Lisa Quinn

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Project Description

The focus of this research project is consumers who are committed to clothing sustainability. In particular, the study will concentrate on learning – i.e. how did consumers learn about clothing sustainability and how did this learning then lead them to take action to promote the sustainability of clothing.

Action related to clothing sustainability may be undertaken by individuals, referred to as sustainable clothing practices (SCP). SCP describe consumer activities related to clothing consumption (i.e. selection, purchase, use, maintenance, storage and disposal) that are carried out in a way that reduces the adverse environmental and social impact of these activities for the present, as well as future generations. SCP includes:

- Buying sustainable apparel (includes both “green” and “sweat-shop free” apparel)
- Extending the life of a garment (e.g. purchasing high quality and/or durable garments, reusing, leasing, repairing, and remanufacturing)
- Reducing clothing consumption

- Maintaining clothing in an environmentally friendly way (e.g. washing in cold, hanging to dry, using eco-friendly cleaning agents)
- Disposing of clothing in an environmentally friendly way (e.g. composting, recycling)

Action may also be undertaken by a group. For example, a letter (or email) writing campaign, a protest, a clothing swap, a sustainable apparel fashion show, or an organized boycott of a particular retailer.

Participant Involvement

While the primary focus of this research will be on consumers, I will also be interviewing “supporters” (e.g. sustainable apparel retailers, second-hand and consignment shops, tailors, and NGOs). As a supporter, your involvement, should you choose to participate in this project, would require you partaking in a 10 to 30 minute interview about the role your organization plays in promoting or facilitating consumer participation in sustainable clothing practices.

Confidentiality

With your permission, I will be recording this interview using a digital recorder to allow for a verbatim transcript of our discussion. The digital recording of the interview will be transferred to my computer, to which only I have access. It will only be used to provide supporting data for this project; it will not be used for any other purposes and will be deleted at the conclusion of the research project (on or before December 2011). I will also be taking notes during our interview, which will be shredded at the conclusion of the research project.

Your name (or that of your organization) will not be directly associated with the data you provide. Each participant will be assigned an alpha-numeric code that will be used to identify the notes, digital recording and transcript associated with their interview. Only the researcher will have access to the list which cross-references participant name with their alpha-numerical code.

Feedback

Within two weeks following this interview, I will be providing you with a copy of the transcript of the interview to allow you the opportunity to review your responses to ensure accuracy and to clarify or elaborate any of your responses.

If you would be interested in receiving feedback on the results of this study, there are two opportunities to do so:

- (1) All participants will be invited to a workshop to review and provide feedback on the findings and my conclusions. The workshop will also involve a discussion about how to improve access to information, enhance consumers’ learning experiences, and increase consumer engagement in sustainable clothing practices and collective action for clothing sustainability.

- (2) All interested participants will receive an electronic copy of the final document.
-

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researcher from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Lisa Quinn (Principal Researcher)
(204) .
@hotmail.com

John Sinclair (Advisor)
(204) 474-8374
jsincla@cc.umanitoba.ca

This research has been approved by the Joint Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons of the Human Ethics Secretariat at 474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and references.

_____ Participant's Name (please print)	_____ Participant's Signature	_____ Date (d/m/y)
_____ Researcher's Name (please print)	_____ Researcher's Signature	_____ Date (d/m/y)

Participant Consent Form – Initial Interview



Natural Resources Institute
Clayton H. Riddell Faculty of
Environment, Earth, and Resources

303-70 Dysart Road
Winnipeg, Manitoba
Canada R3T 2N2
Telephone (204) 474
Fax (204) 261-0038

Research Project:

Consumer Engagement in Social Action to Promote Clothing Sustainability

Researcher:

Lisa Quinn

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Project Description

The focus of this research project is consumers who are committed to clothing sustainability. In particular, the study will concentrate on learning – i.e. how did consumers learn about clothing sustainability and how did this learning then lead them to take action to promote the sustainability of clothing.

Action related to clothing sustainability may be undertaken by individuals, referred to as sustainable clothing practices (SCP). SCP describe consumer activities related to clothing consumption (i.e. selection, purchase, use, maintenance, storage and disposal) that are carried out in a way that reduces the adverse environmental and social impact of these activities for the present, as well as future generations. SCP includes:

- Buying sustainable apparel (includes both “green” and “sweat-shop free” apparel)
- Extending the life of a garment (e.g. purchasing high quality and/or durable garments, reusing, leasing, repairing, and remanufacturing)
- Reducing clothing consumption
- Maintaining clothing in an environmentally friendly way (e.g. washing in cold, hanging to dry, using eco-friendly cleaning agents)
- Disposing of clothing in an environmentally friendly way (e.g. composting, recycling)

Action may also be undertaken by a group. For example, a letter (or email) writing campaign, a protest, a clothing swap, a sustainable apparel fashion show, or an organized boycott of a particular retailer.

Participant Involvement

Your involvement, should you choose to participate in the first phase of this study, would include:

- (1) Partaking in a 30 to 45 minute interview, and
- (2) Completing and returning a self-administered survey (which will take about 20 minutes).

Confidentiality

With your permission, I will be recording this interview using a digital recorder to allow for a verbatim transcript of our discussion. The digital recording of the interview will be transferred to my computer, to which only I have access. It will only be used to provide supporting data for this project; it will not be used for any other purposes and will be deleted at the conclusion of the research project. I will also be taking notes during our interview, which will be shredded at the conclusion of the research project.

Your name will not be directly associated with the data you provide. Each participant will be assigned an alpha-numeric code that will be used to identify the notes, digital recording and transcript associated with his or her interview. Only the researcher will have access to the list which cross-references participant name with their alpha-numerical code.

Feedback

Within two weeks following this interview, I will be providing you with a copy of the transcript of the interview to allow you the opportunity to review your responses to ensure accuracy and to clarify or elaborate any of your responses.

If you would be interested in receiving feedback on the results of this study, there are two opportunities to do so:

- (1) All participants will be invited to a workshop to review and provide feedback on the findings and my conclusions. The workshop will also involve a discussion about how to improve access to information, enhance consumers' learning experiences, and increase consumer engagement in sustainable clothing practices and collective action for clothing sustainability.
- (2) All interested participants will receive an electronic copy of the final document.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researcher from their legal and professional responsibilities. You are free to withdraw from the study at

any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Lisa Quinn (Principal Researcher)
(204) ·
@hotmail.com

John Sinclair (Advisor)
(204) 474-8374
jsincla@cc.umanitoba.ca

This research has been approved by the University of Manitoba's Joint Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons of the Human Ethics Secretariat at 474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and references.

_____ Participant's Name (please print)	_____ Participant's Signature	_____ Date (d/m/y)
_____ Researcher's Name (please print)	_____ Researcher's Signature	_____ Date (d/m/y)

Participants Consent Letter – Phase Two – Group A (Life-grid Interview only)



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Telephone (204) 474
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Research Project:

Consumer Engagement in Social Action to Promote Clothing Sustainability – Phase Two

Researcher:

Lisa Quinn, PhD Candidate, Natural Resources Institute, University of Manitoba

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Project Description

As you may recall from Phase One, this research concentrates on individuals who are committed to clothing sustainability. It seeks to explore how participants came to adopt more sustainable attitudes and behaviour related to apparel – specifically, focusing on the experiences and knowledge which led to an increased awareness, concern and engagement in actions related to clothing sustainability.

Phase One concentrated on identifying the types of sustainable clothing practices participants were engaged in, as well as their knowledge, attitudes, motivations, and barriers. In Phase Two, I will be exploring in greater depth participants path to adopting more sustainable clothing attitudes and practices. Building upon the discussions we had in Phase One, together, we will delve into the experiences and knowledge which inspired you to begin examining your attitudes, beliefs and practices around clothing and informed you as you embarked upon a transition in your perspective and behaviour.

Participant Involvement

Your involvement, should you choose to participate in the second phase of this study, would involve partaking in an in-depth interview (~90-120 minutes) in which you and I would record your journey towards clothing sustainability on a chart called a Life-Grid.

Confidentiality

With your permission, I will be recording this interview using a digital recorder to allow for a verbatim transcript of our discussion. It will only be used to provide supporting data for this project; it will not be used for any other purposes and will be deleted at the conclusion of the research project (on or before December 31, 2012). I will also be taking notes during our interview, which will be shredded at the conclusion of the research project.

Your name will not be directly associated with the data you provide. Each participant will be assigned an alpha-numeric code that will be used to identify the notes, life-grid, digital recording and transcript associated with his or her interview. I will be using the services of a professional transcriber; however, all materials sent for transcription will be identified by participants' alpha-numerical codes only. Only the researcher will have access to the list which cross-references participant name with their alpha-numerical code.

Compensation

Participants engaging in the Life-Grid interview will receive a \$25 honorarium in the form of either a gift certificate for a retailer offering more sustainable products or second-hand goods of their choice or a donation to a charity of their choice.

Feedback

If you would be interested in receiving feedback on the results of this study, there are two opportunities to do so:

- (1) All participants will be invited to a workshop to review and provide feedback on the findings and my conclusions. The workshop will also involve a discussion about how to improve access to information, enhance consumers' learning experiences, and increase consumer engagement in sustainable clothing practices and collective action for clothing sustainability.
- (2) All interested participants will receive an electronic copy of the final document.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researcher from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Lisa Quinn (Principal Researcher)
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This research has been approved by the University of Manitoba's Joint Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons of the Human Ethics Secretariat at 474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and references.

_____ Participant's Name (please print)	_____ Participant's Signature	_____ Date (d/m/y)
_____ Researcher's Name (please print)	_____ Researcher's Signature	_____ Date (d/m/y)

Participants Consent Letter – Phase Two – Group B (Life-grid Interview and Journal)



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Clayton H. Riddell Faculty of
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Telephone (204) 474
Fax (204) 261-0038

Research Project:

Consumer Engagement in Social Action to Promote Clothing Sustainability – Phase Two

Researcher:

Lisa Quinn, PhD Candidate, Natural Resources Institute, University of Manitoba

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Project Description

As you may recall from Phase One, this research concentrates on individuals who are committed to clothing sustainability. It seeks to explore how participants came to adopt more sustainable attitudes and behaviour related to apparel – specifically, focusing on the experiences and knowledge which led to an increased awareness, concern and engagement in actions related to clothing sustainability.

Phase One concentrated on identifying the types of sustainable clothing practices participants were engaged in, as well as their knowledge, attitudes, motivations, and barriers. In Phase Two, I will be exploring in greater depth participants path to adopting more sustainable clothing attitudes and practices. Building upon the discussions we had in Phase One, together, we will delve into the experiences and knowledge which inspired you to begin examining your attitudes, beliefs and practices around clothing and informed you as you embarked upon a transition in your perspective and behaviour.

Participant Involvement

Your involvement, should you choose to participate in this second phase of this study, would be:

- (1) To complete a minimum of 10 journal entries regarding your attitudes and behaviour related to clothing over the next 6 months (March 1, 2010 to August 31, 2010)
- (2) To partake in an in-depth interview (~90-120 minutes) in which you and I would record your journey towards clothing sustainability on a chart called a Life-Grid (September, 2010)

Confidentiality

Your name will not be directly associated with the data you provide. Each participant will be assigned an alpha-numeric code that will be used to identify his or her journal entries and the notes, life-grid, digital recording and transcript associated with his or her and interview. I will be using the services of a professional transcriber to transcribe the digital recording and any handwritten journals; however, all materials sent for transcription will be identified by the participant's alpha-numerical code only. Only the researcher will have access to the list which cross-references participant names with the alpha-numerical codes.

Journal

Your names will not be associated with the journal materials you provide. If you send forward your journal entries in the body of an email, I will cut and paste the relevant sections into a document identified only by your alpha-numeric code and delete the original email. Similarly, for any text-based documents forwarded via email. These documents will be saved under your alpha-numerical code, not your name, and the original text-document will be deleted. All electronic journal entries will be deleted at the conclusion of this study (on or before December 31, 2012). For any hand-written journals, please do not include your name on the journal, I will identify your journal by your alpha-numerical code when it is collected from you. All hand-written journals will either be returned to participants (if this is your preferences) or shredded at the conclusion of the study and the electronic transcription will be deleted.

Life-Grid Interview

With your permission, I will be recording the Life-Grid interview using a digital recorder to allow for a verbatim transcript of our discussion. It will only be used to provide supporting data for this project; it will not be used for any other purposes and will be deleted at the conclusion of the research project (on or before December 31, 2012). I will also be taking notes during our interview, which will be shredded at the conclusion of the research project.

Compensation

Participants engaging in the journaling exercise and the Life-Grid interview will receive a \$50 honorarium in the form of either a gift certificate for a retailer offering more

sustainable products or second-hand goods of their choice or a donation to a charity of their choice.

Feedback

If you would be interested in receiving feedback on the results of this study, there are two opportunities to do so:

- (1) All participants will be invited to a workshop to review and provide feedback on the findings and my conclusions. The workshop will also involve a discussion about how to improve access to information, enhance consumers' learning experiences, and increase consumer engagement in sustainable clothing practices and collective action for clothing sustainability.
 - (2) All interested participants will receive an electronic copy of the final document.
-

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researcher from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

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This research has been approved by the University of Manitoba's Joint Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons of the Human Ethics Secretariat at 474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and references.

_____ Participant's Name (please print)	_____ Participant's Signature	_____ Date (d/m/y)
_____ Researcher's Name (please print)	_____ Researcher's Signature	_____ Date (d/m/y)

Retailer Survey Consent Form



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Research Project: Consumer Engagement in Social Action to Promote Clothing Sustainability

Researcher: Lisa Quinn

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Project Description

The focus of this research project is consumers who are committed to more sustainable practices in relation to clothing – which I have termed sustainable clothing practices (SCP), and define as “consumer activities related to clothing consumption (i.e. selection, purchase, use, storage, maintenance and disposal) that are carried out in a manner which reduces their environmental and social impact on the present and future generations”. In particular, the study will focus on learning – how did consumers learn about the environmental and social impacts of clothing and how they can reduce these impacts, and how did this learning then lead to a change in their attitudes and behaviour towards clothing. By developing an understanding of how learning may transform behaviour, I hope to gain insight into how best to encourage others to adopt more sustainable clothing practices.

Participant Involvement

While the primary focus of this research will be on consumers, I will also be interviewing “supporters”, or businesses and non-government organizations which promote or facilitate learning and action to advance the sustainability of clothing, such as sustainable apparel retailers, second-hand and consignment shops, tailors, and NGOs. As a supporter, your involvement, should you choose to participate in this project, would

require you completing a survey regarding the sustainable apparel you supply and the role your organization may play in increasing consumer awareness and participation in sustainable clothing practices. It is anticipated that completing the survey will take approximately 20 minutes.

Confidentiality

Your name (and/or that of your organization) will not be directly associated with the data you provide. Each participant will be assigned an alpha-numeric code that will be used to identify their survey responses. Only the researcher will have access to the list which cross-references participant name with their alpha-numerical code.

Survey responses and any supplementary documentation (e.g. educational or promotional materials, codes of conduct or purchasing policies, etc) provided by retailers will serve as raw data for this project only; it will not be used for any other purposes. All surveys and supplementary documents supplied by retailers will be shredded (or deleted) at the conclusion of the research project (on or before December 2011).

Feedback

If you would be interested in receiving feedback on the results of this study, there are two opportunities to do so:

- (1) All participants will be invited to a workshop to review and provide feedback on the findings and my conclusions. The workshop will also involve a discussion about how to improve access to information, enhance consumers' learning experiences, and increase consumer engagement in sustainable clothing practices and collective action for clothing sustainability.
- (2) All interested participants will receive an electronic copy of the final document.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researcher from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Lisa Quinn (Principal Researcher)
(204) ;
[@hotmail.com](mailto:;@hotmail.com)

John Sinclair (Advisor)
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jsincla@cc.umanitoba.ca

This research has been approved by the Joint Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122, or email margaret_bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

_____ Participant's Name (please print)	_____ Participant's Signature	_____ Date (d/m/y)
_____ Researcher's Name (please print)	_____ Researcher's Signature	_____ Date (d/m/y)

Appendix J ETHICS APPROVALS

Ethics Approval – Phase One



UNIVERSITY
OF MANITOBA

OFFICE OF RESEARCH
SERVICES
Office of the Vice-President (Research)

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www.umanitoba.ca/research

APPROVAL CERTIFICATE

August 19, 2009

TO: Lisa Quinn (Advisor – J. Sinclair)
Principal Investigator

FROM: Wayne Taylor, Chair
Joint-Faculty Research Ethics Board (JFREB)

Re: Protocol #J2009:100
“Consumer Engagement in Social Action to Promote the Sustainability of Clothing: The Role of transformative Learning in the transition towards Sustainability”

Please be advised that your above-referenced protocol has received human ethics approval by the **Joint-Faculty Research Ethics Board**, which is organized and operates according to the Tri-Council Policy Statement. This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

Please note:

- if you have funds pending human ethics approval, the auditor requires that you submit a copy of this Approval Certificate to Eveline Saurette in the Office of Research Services, (e-mail eveline_saurette@umanitoba.ca, or fax 261-0325), including the Sponsor name, before your account can be opened.
- if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.

The Research Ethics Board requests a final report for your study (available at: http://umanitoba.ca/research/ors/ethics/ors_ethics_human_REB_forms_guidelines.html) in order to be in compliance with Tri-Council Guidelines.

Ethics Approval – Phase Two



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AMENDMENT APPROVAL

March 8, 2010

TO: Lisa Quinn
Principal Investigator

FROM: Wayne Taylor, Chair
Joint-Faculty Research Ethics Board (JFREB)

Re: Protocol #J2009:100
**"Consumer Engagement in Social Action to Promote the
Sustainability of Clothing: The Role of Transformative learning in
the Transition towards Sustainability"**

This will acknowledge your request dated February 22, 2010 requesting amendment to your above-noted protocol.

Approval is given for this amendment. Any further changes to the protocol must be reported to the Human Ethics Secretariat in advance of implementation.

Bringing Research to Life

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