

Information and Communication Technology Use and Practices of Survival by Homeless Youth in Winnipeg

By

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ABSTRACT

This thesis explores how and why homeless youth in Winnipeg are using information and communication technologies (ICT), as well as the various impacts of this usage on their ability to cope with the realities of being homeless. Further, the study seeks to identify program and policy related recommendations which may be used to inform the development of ICT based programming and service delivery for homeless youth in Canada. Despite perceptions of ICTs as distractions or mere forms of recreation which prevent youth from engaging in productive or meaningful activity, this study provides preliminary evidence to suggest that homeless youth populations in Manitoba have appropriated ICTs into their everyday practices of survival and are increasingly reliant upon internet access in order to meet their basic needs.

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INTRODUCTION

The use of information and communication technologies (ICTs) among young people has become nearly ubiquitous in North America, leading to an ever expanding body of theoretical and empirical literature examining the ways in which the use of these technologies impacts their health and social lives (Lenhart, Purcell, Smith & Zickuhr, 2010; Maczewski, 2002; Pascoe, 2009). There is however a lack of research exploring the ways in which homeless youth utilize ICTs, even though a number of recent studies have demonstrated that levels of ICT use within these populations are beginning to rival those of their housed counterparts (Eyrich-Garg, 2011; Guadagno, 2013; Pollio, 2013).

Research examining the impact of ICT usage on homeless youth populations has tended to focus on relationships between ICT usage and specific health related outcomes, and only one study was found to have undertaken a broad based examination of ICT usage by homeless youth (Karabanow & Naylor, 2010).

As the gap in intensity of internet usage between housed and unhoused populations continues to shrink, it is increasingly important to understand the ways in which technological access, or lack thereof, may impact the lives of young people experiencing homelessness, especially given recent evidence that access to ICTs may improve health and social outcomes for these populations (Rice, 2010; Young & Rice, 2011; Rice, Milburn, & Munro, 2011). Still, evidence remains inconclusive and little is known about the ways in which these populations utilize or leverage ICTs for their own benefit. This thesis seeks to contribute to a greater understanding of how and why homeless youth are using ICTs, to further understand the impacts of their ICT use, and to use this information towards the development of program and policy recommendations

which could be used by social organizations and governments seeking to improve outcomes for homeless youth populations.

Chapter One of this thesis explores core literature relating to this study, beginning with a broad based examination of homelessness and youth homelessness in Canada. Youth homelessness within the Manitoban context is explored, with a focus placed on the unique relationship between Aboriginal youth and issues of homelessness. Social Construction of Technology (SCOT) theory, which serves as the main theoretical framework for this thesis, is then described. Through the lens of SCOT theory, technologies do not present ready-made solutions to youth homelessness but are instead adopted, shaped, and defined by these populations in response to their unique social and economic needs (Bure, 2005). The use of this theoretical framework has ensured a focus on the ingenuity of homeless youth themselves, as opposed to the technologies, and has driven analysis in this study towards understanding the everyday ICT based practices of homeless youth and how these are responsive to the realities of the street. A secondary theoretical framework, Multi-Level Perspective, is then described. This theory helps to underscore that socio-technical transitions (changes to the ways in which particular groups use a technology or set of technologies), are driven not only by social forces, but also by a multi-dimensional array of factors which include limitations inherent in technologies themselves. A summary of the known literature examining ICT usage by homeless youth is then provided, beginning with an examination of intensity of internet use data from previous studies. While many consider homeless youth to be generally disconnected from technologies, studies have demonstrated a steady increase in intensity of use levels among homeless populations since 2006, though much of this data is

derived from studies conducted in the United States (Bender, Ferguson, Pollio, Thompson, and McClendon, 2009; Eyrich-Garg, 2011). Literature examining the purposes for which homeless youth are known to be using ICTs is then summarized, including a review of their use of ICTs for social connectedness, accessing resources, and identity management.

Chapter Two describes the methodology used in this research. This study is based on a set of 13 in-depth, semi-structured interviews with homeless youth using the services of Siloam Mission, as well as 2 interviews with support staff working within Siloam Mission's youth homelessness program. Of the homeless youth respondents, approximately half were transitionally housed while the remainder were street entrenched and heavily reliant upon the emergency shelter services provided by Siloam. Respondents were asked a variety of questions which encouraged them to reflect on the ways in which they were using ICTs, the impact of this usage on their lives, and ways in which ICTs could be leveraged by social organizations to improve the lives of homeless youth in Manitoba.

Chapter Three outlines study findings and starts by identifying that while society may view homeless youth as being largely disconnected from technologies, they are in fact connected at levels similar to those of the general Canadian population. The findings then go on to organize ICT based practices of homeless youth into three main categories of use: 'connecting to resources', 'connecting outwards', and 'developing the self'. The categories of 'connecting to resources' and 'connecting outward' represent those uses of ICT which were seen to help homeless youth make connections to the resources they require, to strengthen relationships, and to increase their overall levels of social inclusion.

‘Developing the self’ represents ICT based practices that allow homeless youth to deepen their understanding of self, to develop themselves intellectually and emotionally, and to wrestle with their presentation of self to the world. Core barriers to ICT access are described, highlighting that while homeless youth are indeed accessing ICTs at near ubiquitous rates, access is often a byproduct of their ingenuity and a willingness to go great distances in order to obtain connectivity.

Chapter Four discusses the study findings, beginning with an outline of the purpose of the research. Study significance is then briefly examined, highlighting the fact that this thesis is only the second identifiable study in Canada to have examined any aspect of ICT usage by homeless youth. Research findings are then contrasted with existing literature and similarities explored. As with previous studies, this study identified that ICTs play an important role in facilitating connectivity between homeless youth and their families, and that this connectivity is associated with improved decision-making (Rice, Lee, & Taitt, 2011, Eyrich-Garg, 2011). Intensity of internet usage levels from the study are then compared to data from previous studies. Every single interviewee reported using ICTs multiple times per day and this was in keeping with recent studies examining ICT usage by homeless youth populations. Overall, study findings provide preliminary evidence that homeless youth have adopted the use of ICTs into their everyday practices of survival, and that the various ICT based practices which they have adopted reflect an appropriation and shaping of technologies to meet a specific set of needs unique to their circumstances. Interviewees were found to be generally reliant on ICTs for accessing health, social, and economic resources. Policy and program related recommendations targeting homeless youth serving organizations, their funders, and policy makers are then

described. These include, reducing barriers to ICT access for homeless youth, integrating ICTs into service delivery models of homeless youth serving organizations, and developing targeted ICT based programming which builds on the ways in which homeless youth are already leveraging ICTs, with a particular focus on ICT based employment programming.

1.0 CHAPTER ONE: LITERATURE REVIEW

1.1 Homelessness in Canada

The assertion that homelessness is not only a housing problem, but at the same time is *always* a housing problem, is one which has often been made by scholars examining the issue of homelessness. The recent success of a number of large-scale “housing first” projects, such as the At-Home/Chez-Soi project, have clearly demonstrated that the provision of housing to individuals who are homeless can strongly reduce the likelihood of these individuals returning to life on the street. While it is increasingly clear that the provision of housing to homeless individuals can potentially reduce the overall social and health related costs of managing homelessness within Canadian society, governmental ability to turn these linkages into policy is resisted by a number of popular myths. The first and most prevalent of these myths is that people who are homeless have made a choice to be homeless. A recent national survey conducted by the Salvation Army found that while 87% of Canadians believe housing should be a right, 40% believe that people on the streets choose to be homeless and are not interested in housing (Salvation Army, 2011). Research has consistently demonstrated that the vast majority of people who are homeless do not choose to be, but have instead been thrust into a position of homelessness due to circumstances beyond their control, with very few options or supports available to help them off the streets (Gaetz, Gulliver, Richter, 2014). The success of the recent At-home/Chez-soi project has clearly demonstrated that even the most street entrenched homeless people, when offered housing with proper levels of

support, will generally stay housed and show improvements in their health and well-being (Goering, Veldhuizen, Watson, Adair, Kopp, Latimer, Nelson, MacNaughton, Streiner, Aubry, 2014).

A second myth, which correlates strongly with the first, is that homelessness is fundamentally the result of poor personal choices and individual failures. While individual factors undoubtedly play a role in contributing to crises which may lead to homelessness, research clearly demonstrates that structural factors play a much more predominant role in fostering homelessness (Gaetz et al., 2014). These structural factors include a lack of social and affordable housing within Canada, a lack of income necessary to retain housing, and discrimination in obtaining housing, especially as it relates to Aboriginal communities (State of Homelessness in Canada, 2014). Systems failures play a significant role in contributing to homelessness in Canada. When individuals are discharged from hospitals or prisons into homelessness, their chances of recovery are significantly lessened. Youth who are discharged from the care of child and family services without sufficient levels of support and planning are at high risk of becoming homeless. Lastly, when individuals do not receive adequate levels of support for their addictions or mental health struggles, they are also at a much greater risk of becoming homeless. From this perspective, homelessness is understood as a societal failure to respond to the needs of marginalized populations, and not as a phenomenon which occurs in response to individual failings or poor choices.

According to the Canadian Homelessness Research Network, homelessness describes the situation of an individual or family “without stable, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it” (Gaetz, Donaldson,

Richter, Gulliver, 2013). The definition states that homelessness is the result of “systemic or social barriers, a lack of affordable and appropriate housing, the individual/household’s financial, mental, cognitive, behavioural, or physical challenges, and/or racism and discrimination” (Gaetz, Donaldson, Richter, Gulliver, 2013). There are many typologies of homelessness and a broad range of circumstances in which homeless people may find themselves. Though a substantial portion of homeless individuals are unsheltered or living in homeless shelters, others are not. Some individuals stay provisionally with family or friends, with no prospect of being housed permanently. One important distinction when attempting to differentiate between homeless populations is to consider the length and severity of an individual’s experience. The term ‘chronically homeless’ is used to describe those who have been homeless for a year or more, while the term ‘episodically homeless’ is used to refer to those who move in and out of homelessness over an extended period of time (Gaetz, Donaldson, Richter, Gulliver, 2013). Those who are homeless for shorter periods of time, usually less than a month, are referred to as ‘transitionally homeless’. In Canada, the transitionally homeless make up 88-94% of our homeless populations, while the chronically homeless only make up 2-4% (State of Homelessness in Canada, 2014). While homelessness in all its forms can be life altering and incredibly difficult to endure, these distinctions are important as the struggles faced by the chronically and episodically homeless tend to be much more severe than those faced by the transitionally homeless. Chronically and episodically homeless individuals tend to suffer from greater levels of mental health issues, addictions issues, as well as legal and justice related issues, and as such face much greater barriers to escaping life on the street. Despite their smaller numbers, research has demonstrated that these

sub-groups consume more than half of the resources in the homelessness system, due to their higher likelihood of experiencing catastrophic health crises and run-ins with the justice system (State of Homelessness in Canada, 2014). In 2014, the Canadian Homelessness Research Network estimated that 235,000 individuals were considered to be homeless in Canada, and that 90% of these individuals were experiencing homelessness as a result of poverty and a lack of affordable housing (Gaetz, Donaldson, Richter, Gulliver, 2013). Existing data suggests there are approximately 7,600 hidden homeless in Winnipeg, 1,900 who are short term or crisis sheltered, and approximately 350 who are sleeping “rough” on the streets (Gessler, Maes, Skelton, 2011).

1.2 Youth Homelessness in Canada

Defining youth homelessness is complicated and has resulted in the creation of multiple definitions and subgroupings. Terms such as ‘runaways’, ‘curbsiders’, and ‘squeegee kids’ have all been applied in attempts to categorize and distinguish youth homelessness in its various forms (Karabanow, 2004). The transitional nature of youth homelessness, and the tendency for these populations to shift between absolute and relative forms of homelessness, complicates the development of a stable definition (Gaetz, Gulliver, Richter, 2014). Homeless youth can be chronically homeless in the strictest sense of the term, while others may be “couch surfing” with friends, living in emergency shelters, or co-habiting with peers who have pooled their resources to access housing (Kelly, Caputo, 2007). For the purposes of this study, homeless youth are defined as, “those under twenty-five whose lives are characterized by the inadequacy of housing, income, health

care supports and importantly, social supports that are typically deemed necessary for the successful transition from childhood to adulthood” (Kulik, Gaetz, Crowe, Ford-Jones, 2011: p.43). This definition subverts the troublesome issue of narrowly defining a social category which is inherently unstable and continually shifting. It broadens the scope of conversation, extending the categorization of youth homelessness beyond the extent to which individuals lack a physical space in which to inhabit, to one which instead reflects the extent to which individuals are suffering from a deficit of structural and social supports.

Beyond the challenge of finding an agreed upon definition of youth homelessness, there are many challenges in accurately determining the scope of the problem. Methodological issues encountered in counting such an ill-defined population, as well as issues relating to the accuracy of point-prevalence samples taken from homelessness resource centres, make reliable estimates of homeless youth populations hard to obtain (Phelan, Link, 1999). A further consideration is that an unknown number of homeless youth actively avoid resource centres and government contact altogether, making reliable estimates of this population hard to gauge. As a result of these challenges, estimating the size of the homeless youth population in Canada has proven difficult and resulted in a wide range of figures. A recent study suggests there are between 65,000 to 150,000 homeless youth in Canada (Gaetz, Gulliver, Richter, 2014), while another study from 1999 suggests the number is closer to 50,000 (Begin, Casavant, Miller-Chenier, Dupuis, 1999). No peer reviewed studies were found to provide current data on the number of homeless youth living in Winnipeg, Manitoba.

The phenomenon of youth homelessness is distinct from broader conceptualizations of homelessness. Once understood as being a result of pathologies such as “runaway reaction disorders” (Stierlin, 1973) or “depressed withdrawn delinquencies” (Edelbrock, 1980), researchers now generally agree that homeless youth are usually fleeing from, or have been “kicked out” of, households where they had been dependent upon adult caregivers (Gaetz, O’Grady, Buccieri, Karabanow, Marsolais, 2013). A range of specific factors are known to be strongly correlated with youth homelessness in Canada. These include difficult family situations, histories of physical and sexual abuse, parental addictions, psychiatric disorders, and previous involvement with the child welfare system (Karabanow, Naylor, 2004; Gaetz et al., 2014). While most street youth are likely to have been affected by some or all of these factors, studies have demonstrated that above all else, the key deterministic experience is having been raised in a home with a high prevalence of “interpersonal conflict, physical or sexual abuse, neglect, parental drug abuse, domestic violence and family breakdown” (Kelly, Caputo, 2007: p.730). As a result, youth reared in these environments “experience low self-esteem, an impaired ability to form affective and trusting relationships with adults, and higher rates of depression and suicide attempts” (Gaetz, 2009:p.2). While all homeless youth experience unique circumstances and come from diverse backgrounds, the seeds of homelessness are most often sewn through family breakdown and the resulting emotional and psychological response. In Manitoba, Aboriginal youth are widely overrepresented among the homeless youth population for this very reason (Higgitt, Wingert, Ristock, 2003). Intergenerational post-traumatic stress disorder, and the innumerable psychological and emotional traumas inflicted upon First Nations peoples through the

residential school experience has led to the dissolution of countless families, sending generations of Aboriginal children onto the streets of Winnipeg and into the care of child welfare systems (Baskin, 2007). Aboriginal or non-Aboriginal, individuals who “run-away” from home are most often escaping an abusive or destructive home environment with the aim of gaining some element of control over their lives (Raising the Roof, 2009). Many end up in the care of child welfare systems, while an unknown number of youth spend the remainder of their adolescence evading apprehension. In a recent study by Raising the Roof, a Canadian based youth homelessness advocacy organization, 68% of 700 homeless youth who were interviewed disclosed previous involvement with child welfare (Raising the Roof, 2009). Research has suggested that involvement in these systems might actually increase the likelihood of youth ending up on the street, as agencies routinely fail to implement appropriate levels of support to individuals who “age-out” of the system (Kulik et al., 2011; Serge, Eberle, Goldberg, Sullivan & Dudding, 2002). Arguments put forward to explain the correlation between youth homelessness and the child welfare system include the effects of mistreatment during care, incompatible placements, and the inflexibility of the care system (Serge et al., 2002). Further, youth exiting care are likely to suffer educational deficits and to have a minimum of work experience or job potential, and are therefore unlikely to be able to afford the high costs of rent in Canadian urban settings (Krusi, Fast, Small, Wood & Kerr, 2010).

Research has revealed a number of structural barriers faced by homeless youth in their pursuit of stability once they become adults at the age of eighteen. Core challenges include a lack of available social housing, barriers to obtaining gainful employment, social assistance rates which barely facilitate survival, a lack of mental health supports,

and the difficulties inherent in applying for social assistance without a permanent address or phone number. Further to these issues, there are few age appropriate supports for homeless individuals aged 18-25 (Karabanow, Naylor, 2004). For these reasons, street youth are often given little choice but to consider quasi-legal ways of meeting their physical needs, such as panhandling and squeegeeing, or in some cases, selling their bodies to make ends meet. One Canadian study showed that “while 10% of street youth identified sex work as their primary means of earning money, nearly one-third reported exchanging sex for survival needs” (Gaetz, O’Grady, 2002; p.3). While research clearly demonstrates that participation in these types of activities is a consequence of situational factors associated with poverty and homelessness, rather than an inherent tendency towards criminality, justice systems continue to treat homeless youth as though they are simply making “bad choices” (Kulik et al., 2011). This systemic failure to recognize why street youth commit survival “crimes” only feeds into a cycle of further criminalization and entrenchment on the street.

1.3 Youth Homelessness in Winnipeg: Contextualizing the Issue

Very little is known about the health and social needs of homeless youth in Winnipeg. The reasons for this knowledge gap are multiple and can be traced to the exclusion of homeless people from government health and census surveys, the slow implementation of databases to track local homeless populations, and a lack of local academic health and social science research on the health needs of homeless people in Winnipeg (Gessler, Maes, Skelton, 2011). Aside from anecdotal counts provided by local youth homelessness

serving agencies, no hard data could be found on the number of homeless youth presently living in Winnipeg.

Due to the high concentration of Aboriginal populations living in Manitoba, the overrepresentation of Aboriginals among Canadian homeless populations merits special consideration when seeking to describe the etiologies of youth homelessness in Winnipeg. With a recent study finding that Aboriginals are eight times more likely than other Canadians to experience homelessness at some point during their lifetime, it must be recognized that Aboriginal youth homelessness is an issue which is distinct from generalized youth homelessness (Belanger, Awosoga, Weasel Head, 2013). As a direct result of our colonial past, Aboriginal youth are at an even greater risk of physical and sexual abuse, dealing with trauma related to parental addictions, and experiencing involvement with the child welfare system. Aboriginal overrepresentation among homeless populations therefore reflects a distinctive relationship to homelessness which is directly linked to a legacy of subordination, the destructive effects of colonialism, systemic cultural oppression, racist governmental policy, and a legacy of trauma resulting from the residential school experience (Berman, Alvernaz-Mulcahy, Forchuk, Edmunds, Haldenby, Lopez, 2009) For Aboriginal peoples in Canada, homelessness represents only one of many interconnected ills which have manifested in response to this colonial past. Consequently, when examining youth homelessness in Winnipeg, it is important to be mindful of these relationships, especially when considering responses to the health and social needs of these populations.

1.4 The Digital Divide in Canada

In the majority of literature examining the use of ICTs by homeless youth, the concept of the digital divide acts as a foundation upon which many studies are constructed. At its broadest level, the digital divide refers to social inequities which may result from differentials in levels of access to ICTs (Deane & Sullivan, 2005). More recently, the digital divide has begun to be used as means of describing differences in internet usage patterns between differing groups (Haight, Quan-Hasse, Corbett, 2014). Though recent evidence suggests that levels of internet utilization have increased for nearly every segment of North American society, the rate at which some are lagging behind has been identified as a cause for concern (Epstein, Nisbet, & Gillespie, 2011). As internet usage has become normalized and incorporated into everyday practices in North America, an ability to access and effectively utilize the internet has become increasingly integral to normative social and economic participation in society (Chen, 2013; Witte & Mannon, 2009; Karabanow, 2004). In Canada, studies have identified the existence of a digital divide between Aboriginal and non-Aboriginal communities, as well as rural and urban communities (Haight et al., 2014; Looker & Thiessen, 2003). Challenges inherent in providing internet access to remote regions of Canada, as well as the overall affordability of internet access, are cited as key reasons for the continued existence of digital divides in Canada (Haight et al., 2014). As only a handful of studies have examined notions of the digital divide in Canada, very little is known about its potential impact on health or social outcomes. No Canadian studies to date have sought to explore the digital divide between homeless youth and their housed counterparts.

1.5 Theoretical Frameworks

The Social Shaping of Technology (SST) perspective is a constructivist approach which views technology as something which is neither merely technical or social, but instead as something which emerges through interactions between “a seamless web or network combining artifacts, people, organizations, cultural meanings and knowledge (Wajcman, 2004; p.106). As opposed to viewing technologies as autonomous agents of social change, the social shaping of technology perspective identifies that technologies are embedded in the social, suggesting that technologies do not develop according to an inner logic, but are instead patterned by the socio-economic, cultural, and political conditions within which they are utilized (Hynes, Richardson, 2009). The SST approach to understanding technologies began to emerge in the mid-1980’s in studies which crossed multiple disciplines, including media studies, cultural studies, and anthropological treatments of objects in everyday life. These studies shared a common rejection of “technological imperatives on the emergence, use, and transformative effects of technology in society” (Hynes, Richardson, 2009; p.484). With a rooting in this paradigm, the Social Construction of Technology (SCOT) theory was developed as a means of facilitating sociological analysis not just of the ways in which technologies were used but also to assist in examining their design and technical content (Wajcman, 2000). SCOT theory advances the concept of “interpretive flexibility”, which refers to the ways in which different groups of people involved in using similar technologies can have very different understandings of their technological meanings (McKenzie & Wajcman, 1999). This theory posits that through “interpretive flexibility”, different groups of users can radically

alter the meaning and deployment of technologies. From this perspective, the appropriation of ICTs occurs in a manner which reinforces the lifestyle patterns and practices of the user (Bure, 2005). In relation to the proposed study, this theoretical lens offers a useful framework for helping to understand the ways in which technologies are adopted and domesticated by homeless youth. It rejects the notion that ICTs represent a ready made “solution” to the deep social and economic inequalities faced by homeless youth, and instead offers a framework for understanding how ICTs and their meanings are given shape by homeless youth and are altered or utilized to fit the patterns in their lives as they already exist. It is important to note that the processes of adoption described within SCOT theory are the product of communities sharing a common cultural or social bond working together to facilitate a socio-technical transition, and not the work of single individuals working in isolation.

The Multi-Level Perspective (MLP) provides a conceptual framework for understanding the multi-dimensional forces which lead to socio-technical transitions (Genus & Coles, 2008). The theory applies a multi-level approach to the analysis of change within socio-technical systems, arguing that technological transitions are the result of interplay within and between socio-technical ‘landscapes’ at the macro level, socio-technical ‘regimes’ at the meso-level, and ‘niches’ at the micro-level (Geels, 2010). Within this framework, socio-technical ‘regimes’ represent the ways in which differing groups use a given technology. Use patterns of differing social groups, or regimes, are argued to be change resistant and to constitute the ‘deep-structure’ of socio-technical systems (Genus & Coles, 2008). Deviations or changes to these regimes are then fostered

through the interplay of landscape pressures at the macro level, such as a transformational change in the availability and affordability of a better quality technology, and through innovations which occur at the niche level through the work of individual actors which sometimes create ‘fissures’ in the existing regime (Geels, 2010). Importantly, MLP offers the researcher a framework for understanding how technologies themselves can play a role in socio-technical transitions while accounting for the role of the social. Deviations to regimes are then understood as multi-dimensional processes which incorporate social, political, cultural, and technological dimensions. The use of MLP provides a counterbalance to the use of SCOT, which has been criticized for overly emphasizing the role of individuals in driving socio-technical transitions. While the aim of this research was not to specifically examine the ways in which homeless youth have adopted ICTs using an MLP or SCOT lens, these theoretical frameworks provide a constructivist ontological underpinning to the research which was conducted.

1.6 ICT Usage and Homelessness

Recent studies have suggested that digital technologies are becoming an increasingly ubiquitous element in the lives of individuals experiencing homelessness, and that ICT use is becoming increasingly vital in allowing homeless youth access to critical support infrastructures and employment opportunities (LeDantec & Edwards, 2008; Eyrich-Garg, 2010; Rice, Lee, & Taitt, 2011; Eyrich-Garg, 2011; Yost, 2012). Other research has underlined the potential for social media, mobile phones, and the internet in general to improve mental health, addiction issues, and sexual health outcomes of individuals experiencing homelessness (Freedman, Lester, McNamara, Milby, & Schumacher, 2006;

Rice, Kurzban, & Ray, 2012). Furthermore, digital technologies seem to promise new frontiers for HIV prevention, as well as opportunities for intervention among individuals grappling with debilitating mental health and addictions issues (Rice, 2010; Rice, Milburn, & Monro, 2011; Rice, Munro, Barman-Adhikari, & Young, 2010; Young & Rice, 2011). While these studies are promising, the evidence remains inconclusive and little is known about the ways in which these populations utilize or leverage ICTs for their own benefit (Hwang et al., 2009).

1.7 Intensity of ICT Use Levels Among Homeless Youth

A number of recent studies have suggested that levels of ICT use among homeless youth are beginning to rival those of their housed counterparts (Eyrich-Garg, 2011; Guadagno et al., 2013; Pollio et al., 2013). As homeless youth are no different than their housed counterparts in their desire to participate in modern culture, play games online, and remain connected to friends and family through social media, this information should come as no surprise. Yet, these findings are significant as they reveal a marginalized population which has overcome multiple barriers to gain technological access.

Among the earliest studies to examine the relationship between homelessness and ICT usage, Redpath et al. (2006) found that only 55% of 265 homeless individuals they interviewed reported ever having used a computer and that only 24% of interviewees reported having an email account. This study is often referred to as a “turning point” in the literature examining homelessness and ICT usage, as nearly every study which has been conducted since has found levels of ICT use which are equal to, or higher than,

those reported by Redpath et al. in 2006. Levels of ICT usage reported in this study may be explained by the fact that digital technology was generally more inaccessible to marginalized populations in the early 2000's, as it was still relatively cost prohibitive, and that the interview sample was older and therefore less familiar with ICTs than younger homeless populations. Studies conducted since have demonstrated increasingly higher levels of ICT usage among homeless youth populations as well as homeless populations in general. In 2010, a study found that out of 100 homeless youth surveyed, 44% reported owning a mobile phone (Eyrich-Garg, 2010). A later study (Rice et al., 2010) reported that out of 150 homeless youth interviewed, 62% owned a mobile phone, and many of these same youth indicated that the phone was an essential part of maintaining contact with home-based peers, a factor which has been linked to improved social outcomes for individuals experiencing homelessness (Rice et al., 2011; Uchino, Cacioppo, Kiecolt-Glaser, 1996). A sizeable study conducted in Los Angeles found that 92% of homeless youth interviewed reported using ICTs at least once per week, and that the majority of this technology use was geared towards connecting with friends and family (Bender, Ferguson, Pollio, Thompson, and McClendon, 2009). This same study found that those interviewed used email and social media sites 3.8 days per week on average, and that social media in particular allowed for increased contact with pro-social connections. A study by Pollio et al. (2013) found evidence of even greater levels of technology use by homeless youth, indicating that out of the 100 individuals they interviewed in Los Angeles and Denver, 93% reported used ICTs on a daily basis. Unfortunately, no information on levels of ICT use by homeless youth in Canada could be found.

1.8 The Purposes for Which ICTs are Used by the Homeless

In 2014, I conducted a systematic review which explored and synthesized studies that examined the ways in which individuals experiencing homelessness utilize ICTs, and the ways in which this usage may influence health and social outcomes of these populations (Sala & Mignone, 2014). The review findings suggested that the nature of ICT utilization by homeless individuals is often highly dependent on individual factors such as mental health, addictions histories, pre-existing social factors, and time spent living on the street (LeDantec & Edwards, 2008; Woelfer & Hendry, 2010a). While the review did not focus specifically on homeless youth, the purposes for which homeless populations were found to be using ICTs was generally similar between studies that specifically examined ICT usage by homeless youth and those that broadly examined ICT usage by homeless populations of various age ranges. The review identified three broad categories of use: social connectedness; instrumental purposes; and identity management (Sala & Mignone, 2014). Unless specifically noted, the research outlined in the following sections refers to studies that examined the use of ICTs by homeless populations in general, and not homeless youth in particular.

A number of articles have identified that ICTs can play an important role in helping homeless individuals to stay connected to family and friends by bridging physical and social gaps (LeDantec & Edwards, 2008; Roberson & Nardi, 2010; Eyrich-Garg, 2010; Rice, Lee, & Taitt, 2011, Eyrich-Garg, 2011, Yost, 2012). As a high percentage of homeless people live in places other than the communities in which they were born and raised, keeping in touch over long distances is greatly facilitated by the use of ICTs (Rice,

Lee, & Taitt, 2011, Eyrich-Garg, 2011). This allows them to stay connected to family and friends who may be able to help them with social support and access to resources when needed (LeDantec & Edwards, 2008). ICTs also allow individuals experiencing homelessness to develop ties to individuals outside their socio-economic sphere, and can assist in the maintenance of relationships which may otherwise be untenable within a strictly physical environment (Roberson & Nardi, 2010). At the broadest level, several studies have shown that homeless individuals currently rely heavily on ICTs as a means of staying connected to family members and close friends from “back home” (LeDantec & Edwards, 2008; Bender, et al., 2009; Eyrich-Garg, 2010; Rice, Lee, & Taitt, 2011; Eyrich-Garg, 2011; Woelfer & Hendry, 2012; Yost, 2012; Pollio et al., 2013).

Studies have shown that ICTs can play an important role in helping homeless individuals gain access to critical support infrastructures as well as employment resources (LeDantec & Edwards, 2008; Roberson & Hendry, 2010; Eyrich-Garg, 2010; Rice, Lee, & Taitt, 2011; Eyrich-Garg, 2011; Yost, 2012). Eyrich-Garg (2011) found that half of the 100 individuals they interviewed reported using the internet for business purposes, and that 25 of those interviewed used the internet to search for employment. Interviews conducted by LeDantec and Edwards (2008) found that a number of interviewees used the internet to identify free drug programs when they were unable to afford pharmaceuticals, and that others identified the importance of having an online presence in order to find employment. One study which focused on homeless youth found that the majority of individuals interviewed used cell phones for instrumental purposes such as contacting their case workers or searching for employment (Rice, Lee, & Taitt, 2011). Mobile phones were identified within three studies as a relatively low cost means of

enabling homeless youth to access employment opportunities, housing, and social support resources (LeDantec & Edwards, 2008; Rice, Lee, & Taitt, 2011; Yost, 2012).

Several studies have found that ICTs may play an important role in allowing homeless individuals to manage their presentation of self, and that this can be instrumental in fostering the conditions necessary for some individuals to get off the street (LeDantec & Edwards, 2008; Eyrich-Garg, 2012; Woelfer & Hendry, 2012). By being able to create and manage multiple profiles online, homeless individuals are able to simultaneously present themselves to family members and home based peers in one light, while at the same time are able to present a different image of themselves to their street-based peers (Sala & Mignone, 2014). These studies found that homeless youth reported using multiple unlinked profiles as a means of managing identities which were multi-faceted and often times incompatible (Eyrich-Garg, 2011; Woelfer & Hendry, 2012). This ability to achieve “pseudonymity” through the management of multiple online profiles was reported to have many advantages, including: the creation of an ability to avoid the undesirable convergence of distinct social groups which may result in further alienation or disenfranchisement from pro-social support systems; and the ability to isolate a particular presentation of self which may facilitate obtaining employment or housing that may be inaccessible to those perceived as being street entrenched (LeDantec & Edwards, 2008; Woelfer & Hendry, 2012). While the use of multiple profiles has been observed in other populations, such as college graduates transitioning into employment (DiMicco, Millen, 2007), the tactical management of multiple online profiles by homeless youth can have radical implications for their wellbeing and health. By allowing for a multiplicity of online identities, ICTs can offer homeless youth opportunities to

explore themselves, cultivate and exploit social ties, deal with shifting affiliations and tensions in their street based life, and to feel validated through an ability to portray themselves on-line as being normal members of society (LeDantec & Edwards, 2008; Eyrich-Garg, 2010; Woelfer & Hendry, 2012).

1.9 Impact of ICT Use on the Health and Social Outcomes of Individuals Experiencing Homelessness

Several studies have suggested that ICT usage by homeless populations can act as a protective factor in reducing the likelihood of sexual risk behaviours, depression, as well as substance abuse among interviewees (Freedman et al., 2006; Rice, 2010; Young & Rice, 2011; Rice, Milburn, & Munro, 2011; Rice, Kurzban, & Ray, 2012). One study by Freedman and colleagues (2005) found that cell phones could help reduce the incidence of crack cocaine use by homeless individuals undergoing drug treatment. Rice et al. (2010) analyzed social network composition data among 136 homeless adolescents and found that increased connectivity to non-substance using home based ties were potentially associated with decreases in alcohol use among this population. As peer-based prevention programs are becoming increasingly prevalent, and deviancy training is a major problem with the peer-based prevention model, ICTs are identified as potential means of delivering peer based addictions programming to homeless youth who are at heightened risk of deviancy training (Rice, Kurzban, & Ray, 2010).

Relating to the impact of ICT usage on the sexual health of the homeless, some articles suggest a correlation between ICT access and an increase in condom use and

sexual health knowledge. Given 2010 data showing that there are 1.6 million runaway youth in the U.S. each year, and that homeless youth are 2-10 times more at risk than their peers of contracting HIV, this is an area which seems vastly underexplored (Young & Rice, 2011). In relation to condom use, one study found that respondents who reported having a home-based, condom using peer with whom they communicated through social networking technology was associated with a 90% reduction in risky sexual behavior and a 3.5 times increase in safer sex behaviors (Rice, 2010). Another large study from the same year revealed that while social network site usage was indeed correlated to increased HIV knowledge, it was also found to be associated with increased levels of exchange sex (Young & Rice, 2011).

2.0 CHAPTER TWO: METHODOLOGY

The study had the following objectives: 1) to contribute to a greater understanding of how and why homeless youth are using ICTs 2) to improve understanding of how ICTs may assist homeless youth in coping with challenges of being homelessness. Three core research questions were explored:

RQ1: To what extent are homeless youth in Winnipeg using ICTs, where are they accessing them, and how are they being used (or for what purposes?)

RQ2: How are homeless youth in Winnipeg using ICTs to help them cope with the challenges of being homeless?

RQ3: What programmatic and policy related recommendations can be made to youth serving organizations and policy makers which may contribute to the development of ICT based programming and services for homeless youth?

2.1 Study Sample

Data for this thesis are drawn from thirteen qualitative interviews conducted with youth using the services of Siloam Mission, a homelessness services organization operating in Winnipeg, Manitoba. Two interviews with Siloam Mission support staff also form part of the data set. Siloam Mission is the largest provider of services to the homeless in Manitoba. As described on their website, Siloam Mission is a “Christian humanitarian organization that alleviates hardships and provides opportunities for change for those affected by homelessness”. Core services provided by Siloam Mission include a drop-in

and a meal program, where approximately 1300 meals are served every single day. Siloam also operates a number of programs aimed at helping individuals escape life on the street, including pre-employment training, emergency shelter services, transition programming, clothing programs, an art program, as well as a variety of medical services aimed at meeting the specific medical needs of street entrenched individuals. In 2015, approximately 1,100 individuals used their emergency shelter services and there were over 10000 unique visits to their medical centre. In addition to the programming offered through their core site in the Exchange District, Siloam operates a transitional housing program from an apartment block in Wolseley which was purchased in 2012. Ten of the units located within this block are allocated to their youth homelessness program, Exit-Up! The program provides housing opportunities for homeless youth aged 18-25 within a supportive environment, employing two dedicated staff who provide a broad range of social supports and counselling services to program participants, with a focus on building independence and life skills prior to program exit. Staff working with the program were exceedingly accommodating throughout all stages of study, and resultantly, there were few obstacles to obtaining data.

Participants in the study included homeless youth using the drop-in and meal program at the main site in the exchange district, as well as youth who were transitionally housed within the Exit Up! program. Both of the support staff employed with the Exit Up! program at the time of my site visits were also interviewed. With the exception of these staff, the age range of study participants was between 18-25. Ten of the participants are male, two are female, and one identified as transgender. All participants in the study

were either Aboriginal or Metis, with one participant self-identifying as Inuit. Siloam staff reported that this was representative of the homeless youth population they typically served. While the representativeness of this sample relative to the broader homeless youth population in Winnipeg cannot easily be established due to a lack of available population data, studies have identified that First Nations peoples are extremely overrepresented within homeless populations in Canada (Belanger, Awosoga, Weasel Head, 2013). Further, the majority of respondents had been in the care of Child and Family Services at some point during their childhood, or had experienced periods of contact with a Child and Family services connected agency. Eight of the study participants were drawn from the Exit Up! program, while a total of five participants were drawn from the drop-in at Siloam's main site in the exchange. This was done to obtain a mix of perspectives on ICT usage from homeless youth who were living on the street as well as individuals in more stable living arrangements. All participants in the study were asked to participate with the help of Siloam Mission program support staff who were present during site visits. The only criteria provided to staff in advance of them seeking out prospective participants was that those invited should be between the ages of 18-25 and that participants would need to self-identify as having experienced homelessness at some point during their life. As a result, any and all who were present at the time of the five site visits were invited to participate as long as they met the above criteria and were able to provide informed consent. The majority of participants were cooperative and interested in the purpose of the study, while only a few were guarded and less open during the course of the interviews.

2.2 The Interviews

Prior to the commencement of interviews, the researcher received approval to proceed from the Joint Faculty Research Ethics Board at the University of Manitoba. Consent in writing was obtained from each participant before the approximately one hour long interview. The thirteen interviews with youth, and the two interviews with Siloam support staff, took place between November 2015 and February 2016 and were conducted at Siloam's main site in the exchange as well as in their temporary housing facility in Wolseley. Prior to the start of each interview, participants were given ample time to review and complete informed consent forms which outlined the purpose of the research and highlighted that their participation would remain completely anonymous. Clear communication was provided to each participant that they had the right to terminate the interview at any time they saw fit with the full guarantee that they would receive \$25 cash compensation at the end of the interview regardless of how long the interview lasted. The final value of these honorariums was determined with the assistance of Siloam Mission staff who suggested \$25 was a fair but non-coercive level of remuneration. Participants were encouraged to avoid using their personal names or the names of their peers during the course of the interview, but were notified that should they accidentally use any identifiable names, that these would either be eliminated or fictionalized in the transcriptions. Two Siloam Mission support staff working with Siloam Mission's transitional housing program were also interviewed as part of the study, though neither received compensation for participating. Interviews were semi-structured and were designed to address two main areas: 1. How and why are homeless youth using ICTs in

Winnipeg; and 2. How is the use of ICTs impacting their lives? The interviews also included questions aimed at obtaining specific programmatic suggestions on how social agencies or government could make better use of ICTs in engaging homeless youth populations, such as “What recommendations would you make to agencies or organizations about technologies and how they benefit youth who are dealing with issues of homelessness? What would you like to see?” Other questions exploring the ways in which homeless youth conceptualized the use of ICTs along gender or temporal lines were also included, such as “relating to what we discussed, how is your use of technology different in the winter from in the summer? Do you use it differently because you are a man/woman?” To complement the qualitative data, all participants were asked to complete a two page questionnaire which was used to obtain a range of basic descriptive data on participant age, cultural background, the amount of time they have been homeless, and some information regarding frequency of ICT usage and locations of access. Copies of both the main interview schedule and the questionnaire can be found in the attached appendices. All interview data was digitally recorded on the researcher’s mobile phone. After each site visit, audio files were transferred onto the researchers home computer, backed up onto a separate hard drive, and then erased from the researchers mobile phone.

2.3 Grounded Theory and Analysis

Data analysis was conducted using a constructivist grounded theory approach. Since the publication of Glaser and Strauss’ seminal work, *The Discovery of Grounded Theory: Strategies for Qualitative Research*, grounded theory has become an immensely popular

approach to conducting qualitative research (Denzin, Lincoln, 2005). The grounded theory method offers the researcher a systematic process for collecting and analyzing data in order to construct abstract interpretive understandings ‘grounded’ in the data themselves (Charmaz, 2014). Grounded theory encourages the use of iterative strategies where the researcher moves back and forth between data collection and analysis with the aim of keeping the researcher involved in the data and the emerging analysis (Strauss, Corbin, 1998). Some of the core hallmarks of using grounded theory include performing data collection and analysis simultaneously, analyzing actions and processes rather than themes and structure, the use of theoretical sampling methods, and emphasizing theory construction rather than the application of theories (Strauss, Corbin, 1998).

In the early 1990’s, a growing number of scholars began to move away from the positivist focus of earlier versions of the approach (Denzin, Lincoln, 2005). As the fundamental strategies involved in grounded theory were easily transported across paradigms, an increasingly large number of researchers began employing a more inductive, emergent, and open-ended approach to the method (Charmaz, 2014). This new approach to grounded theory, which became known as constructivist grounded theory, sought to emphasize that social realities are multiple and constructed, that the researcher must take into account her/his own privileges and social position throughout the research process, and that any theoretical rendering developed through research is effectively an interpretive portrayal and not an exact picture of the reality being examined (Charmaz, 2014).

In both data collection and analysis, I closely followed the suggested approach outlined in ‘Constructing Grounded Theory’ by Kathy Charmaz. Data analysis began

with a line by line, initial coding process which encouraged the use of action based codes. The use of action based codes was encouraged as a means of reducing the tendency to code for types of people, which is argued to lead researchers to focus on individuals rather than what is happening in the data itself. Action based codes are also argued to help minimize tendencies to make conceptual leaps before doing necessary analytic work with data. Initial coding was done in pencil on printed copies of the transcripts, and to whatever degree possible, codes were made short and precise. Initial coding processes on interviews which took place during the first two site visits led to the development of emergent categories which resulted in an increased focus on these areas in subsequent interviews with participants. Throughout the entire initial coding process, memo-writing was used to chart and record analytic breakthroughs. Memo-writing is identified as a crucial method in grounded theory as it prompts the researcher to analyze data and codes early in the research process, and further, it can play a significant role in helping the researcher to increase the level of abstraction in his/her ideas (Charmaz, 2014). There are no specific directions for memoing, only that researchers are encouraged to use it as a means of dialoguing with themselves regarding data, codes, ideas, and their experiences throughout the research process. For this project, memoing was used immediately after each coding session as a means of capturing meaningful ideas, comparing data, and flushing out emergent categories. Due to the length of time between some of the interview sessions, re-reading memos in advance of interview sessions was also found to be a useful way of re-engaging with the data to ensure that emergent themes or ideas were top of mind during interview processes. Memo-writing was used during all analytic stages of the research and was found to play a critical role in driving forward the analysis.

Once all data had been collected and the initial coding process had been completed, codes which appeared to be the most significant or telling, or those which appeared to be the most useful, were synthesized into focused codes. This stage of the coding process, referred to as focused coding by Charmaz, allows the researcher to sift, sort, and analyze large amounts of data. The purpose of this stage of coding is on sharpening and condensing the work completed during the initial coding stage, with the goal of advancing the theoretical direction of the research. In terms of the specific process used by the researcher during this stage of coding, focused codes were collected into a word document and organized by participant. This resulted in a fifteen page, single spaced document which was then reviewed and condensed multiple times over, leading to the development of an increasingly abstract set of focused codes and an initial framework for their organization. Throughout the course of this stage of focused coding, the researcher continued to memo-write and consult with previous memos which had been written during the initial coding stage to ensure that key ideas were captured and integrated into the analytic work.

During the final stages of analytic work, the researcher began using diagramming as a strategy for organizing the categories and their relationships. For many prominent grounded theorists, diagramming is argued to be an intrinsic part of using grounded theory methods (Clark, 2012; Corbin & Strauss, 2008). Diagrams enable researchers to develop a deeper understanding of the power, scope, and direction of categories in the analysis and the connections between them (Charmaz, 2014). In the context of this research, diagrams were drawn and redrawn multiple times. The use of this technique was found to be especially helpful in conceptualizing the core categories of analysis, and

in abstracting them into larger categories which ultimately formed the basis of my theory outlining the ways in which ICTs are used by homeless youth populations in Winnipeg.

According to Charmaz (2014), the use of constructivist grounded theory allows for the development of interpretive theories which place emphasis on the development of abstract understanding rather than explanation. As opposed to positivist focused theories, which seek to offer predictive power and universality, interpretive theorizing allows for and accepts indeterminacy. As a result, the categorizations of ICT use presented in this thesis should be understood as an initial attempt to theorize how homeless youth in Winnipeg have organized their use of ICTs into practices of survival, and not as an attempt to produce a theory of their ICT usage.

2.4 Use of the Term 'ICT'

Early literature reviews for this study identified that the majority of existing articles which had sought to examine technology use by the homeless often examined technology use at the broadest level. In examining technology use by these populations, many studies had grouped a variety of technologies, but most commonly the internet, social media, and mobile phones, under the umbrella of 'Information Communication Technologies' (ICTs). In keeping with these studies, this study uses the term ICT to refer to a multiplicity of technologies, including the internet, social networking sites, mobile phones, email, and any technology which offers basic networking capabilities. Where respondents refer to a specific technology, efforts have been made to ensure clarity surrounding which form of technology is being referenced.

3.0 CHAPTER THREE: FINDINGS

Introduction

This study sought to examine three key questions in relation to the use of ICTs by homeless youth populations in Winnipeg. The first of these was to determine the extent to which homeless youth in Winnipeg were using ICTs. Information relating to this question is summarized in the following paragraph, and further information is provided in the discussion section in Appendix C. Responses to the second research question, which sought to explore the ways in which homeless youth are using ICTs to assist them in coping with the challenges of being homeless, make up the bulk of the findings section. Specific policy recommendations for government and youth serving non-profit organizations are outlined within the discussion section in response to research question three.

While homeless youth populations are generally assumed to be largely disconnected from ICTs, every single participant in this study reported using ICTs and the internet multiple times per day. The average intensity of internet usage across the sample amounted to twelve unique visits per day and mean intensity of usage across the sample was approximately seven hours per week. The vast majority of participants reported accessing the internet at social service agencies and at public libraries, and an equally large number of participants reported owning or having regular access to mobile phones which were used to access free wi-fi in a number of public and private spaces.

Further data on intensity of internet usage and on locations where ICTs are accessed can be found in Appendix C.

For homeless youth who participated in the study, information communication technologies (ICTs) represented opportunities for connectivity or connection. The terms connection, connectivity, and connectedness, were used multiple times by various participants throughout the interviews and it is important to note that the meanings attributed to these terms were quite different depending on the participant. For instance, some respondents used the term ‘connection’ for the exclusive purpose of referring to the social aspects of connection. That is, connection was used as a means of conveying the development of human relationships through ICTs. In other instances, use of the term was meant strictly to reflect the physical act of ‘connecting’ to and through technological devices. Where ever possible, distinctions have made throughout the course of this paper.

In conceptualizing the ways in which ICTs were being used by homeless youth, three main categories of use were identified under which various ICT based practices were organized. The three main categories of use include: ‘connecting to resources’, ‘connecting outward’, and ‘developing the self’. The categories of ‘connecting to resources’ and ‘connecting outward’ represent ICT based practices which were found to bring homeless youth out into the world, to help them make connections to the resources they require, create relationships, and to connect them outwardly to a cultural sphere from which they might otherwise be excluded. ‘Developing the self’ represents those ICT based practices which allow homeless youth to turn their gaze inward, to deepen their understanding of self, and to develop themselves intellectually and emotionally. At the end of this section, a summary of barriers to access describes some of the challenges

which homeless youth face in accessing ICTs.

3.1 Connecting to Resources

Respondents expressed a high degree of reliance on ICTs in helping them gain access to housing, employment opportunities, emergency services, formal supports from social agencies, as well as health and medical support. The following comment summarily describes the general utility of ICTs in helping homeless youth obtain what is required to exit life on the street:

It's very helpful, that's for sure...where you're using it rather than actually trying to do everything yourself. Definitely helps a lot. If we didn't have technology, I think we would be lost. (Brandon)

This sentiment of being unable to imagine successfully accessing resources without the assistance of ICTs was shared by a large number of participants, many of whom had not considered the degree of their reliance on ICTs prior to the interview.

3.1.1 Housing

Every single participant in the study identified that ICTs played an integral role in the various strategies they used to find shelter. On the overall importance of ICTs in helping homeless youth find shelter:

It's the gateway for finding places to stay and live...I mean, Winnipeg doesn't have a whole lot of options for younger youth, and they're hard to find out about if you're not connected. (Henry)

Many participants identified the lack of available emergency shelters for homeless youth in Winnipeg as a key concern, and this lack of age appropriate emergency housing only seemed to amplify the importance of being able to easily access networks of peers and family through ICTs. In relation to how social media and mobile phones can help keep homeless youth connected to their networks of support:

It keeps everyone connected to their family and friends...it gives that person a choice to ask multiple different people, hey, can I stay here, are you busy tonight, is it okay if I stay here? (Faron)

ICTs were seen to play a key role in facilitating access to networks of support who would otherwise need to be engaged through door to door visits. The way in which ICTs significantly reduced the amount of effort required to access temporary housing supports was described by many participants.

If I didn't have Facebook, I would have to go door to door. The odds of them even being home are slim and the odds of even them letting me in are even slimmer...I need a place to stay, I can connect with one of my family on there and find a floor for a night. Just easy. (Daniel)

Many of the youth describe spending countless hours in social agencies or at libraries messaging family and friends in the hope of accessing shelter.

I spent a lot of time at the library contacting friends and family. I was mostly talking to my friends. I was always asking them about if I could come and stay there. Try and meet up with people...that was mostly what I did. (Brandon)

In addition to using ICTs to connect with family and friends as a means of accessing temporary housing, others described using ICTs in order to access rental housing options

which were outside the mainstream rental market. Housing accessed in this manner was typically short term, cash only, and did not involve tenancy agreements. Connections to these types of housing opportunities were typically made through Kijiji, a popular online classifieds service, with the youth contacting the prospective renter and developing arrangements informally.

If you look on Kijiji long enough, there's going to be some places that can get you in without an application. Some of them will take just cash up front...I've met people on Kijiji and we exchanged Facebooks, and then that's how we went through so I can live there [room within an apartment]. (Ethan)

While ICTs were described as being essential in reducing the efforts required in order to access emergency or temporary housing within support networks, and as being useful in bridging access to temporary housing through informal arrangements with renters on Kijiji and Facebook, many respondents found that ICTs did little to break down barriers of access to permanent or more secure forms of housing. Respondents identified that a lack of rental history, economic limitations, and sometimes, discrimination, still prevented them from being able to access permanent housing, even though ICTs were providing them with a high level of awareness of the rental universe within Winnipeg and increased opportunities to communicate with prospective renters.

I looked up housing, like housing companies to see if I would be able to get in or they were taking eighteen year olds into like a bachelor or whatever ... then I don't know it just never came to it. There wasn't no offers, I didn't have no money to pay for it. I just left it... It didn't actually go good. I'd be leaving calls and emails, nobody got back to me. (Alexis)

One of the support workers who provides a range of supports to homeless youth

accessing services at Siloam Mission echoed the perspective that while ICTs may assist youth in locating available rental housing and communicating with prospective landlords, ICTs provide little advantage in overcoming core barriers to obtaining permanent rental housing.

I think at first, when they're just emailing back and forth with a property manager, then yeah, it works. But initially, like let's say we get an apartment viewing. Brandon goes and views it. Then, they look at him. They see what he looks like and that he only has certain amount of months of rental history, or none. He's not going to get that unit. (Marie)

Respondents also identified that barriers to accessing ICTs placed them at a further disadvantage in accessing the rental market relative to those who had regular and free access to ICT devices. Describing the role played by ICTs in accessing rental housing, and the disadvantage then faced by homeless youth with limited access, one respondent stated:

If they're interested they go, hey send me an email, right away. Then you'll email them back and forth, and so you'll get a phone number. It's basically who has the most quantity of contacts. It's not even quality at that point. It's who has the most back and forth, because you're looking for someone who wants it. The person sends the most emails and the most messages, okay, I'm going to meet that person obviously. (Cole)

In summary, ICTs were identified as a crucial bridge to emergency and temporary housing supports, providing a degree of security and safety to many respondents on a routine basis. Yet, respondents shared no evidence of ICTs working to assist them in overcoming core barriers to housing, even though ICTs did permit a greater level of visibility on the available rental universe and an increased ability to effectively

communicate with prospective landlords.

3.1.2 Employment Opportunities

All respondents to the study who were currently employed, had previously been employed, or were looking for work identified that they relied almost exclusively on ICTs to learn about job opportunities, and that ICTs played a key role in helping successfully connect them to under the table and market based employment. The majority of these opportunities were low skilled, informal, and labour oriented, and were either accessed through online postings found on a variety of classified websites or through direct connections to employers who maintained a presence on social media. Describing the fundamental importance of ICTs for homeless youth seeking employment, one respondent shared:

That's the only way I've been able to recently [find work]. I've only had one job in my entire life where I've actually walked into the store and got it.

Everything else has been through online with Kijiji and stuff. (Henry)

Though a small number of respondents reported successfully obtaining full time employment using ICTs, the majority reported accessing temporary labour work in exchange for cash through Kijiji. Obtaining temporary employment in this manner was described as being fast paced and requiring that youth be prepared to work at short notice.

Yeah, that's usually how it's done, they'll just contact you by email and say, you want to work today? You have to be ready when they are. (Lucas)

Some respondents identified that the only jobs they had ever worked had been arranged

through Kijiji. The predominance of temporary, low paid employment opportunities obtained through classified ads did not seem to bother the respondents, many of whom felt largely incapable of accessing employment by any other means. While all respondents described using ICTs to search for employment opportunities, many identified that they possessed varying degrees of knowledge on how to use ICTs for this purpose, with some suggesting that the little they did know had been learned from their peers or through self-education.

I [have] seen others doing it, so I learned to do it...I [have] seen people doing it everywhere, now I'm on my own. (Faron)

Many respondents identified that homeless youth were broadly in need of a better understanding of how to use ICTs for employment seeking purposes. Respondents also identified that social agencies seeking to leverage ICTs for the benefit of homeless youth populations should consider developing targeted programming aimed at improving their employment seeking skills in online environments. Lastly, some respondents referenced a need for an employment related website specifically designed to meet the employment needs of homeless youth. While there were a variety of perspectives on what the proposed website might include, most agreed that it should bring together socially interested employers, social agencies, and homeless youth together in one online environment.

Maybe it's a place where employers who are interested in helping could be like, maybe we will help them...we'll take one person from Exit-Up [Siloam's youth homelessness support program] every six months. Let's give them like, even just work experience. Like let's get them to work for three

weeks at a place. Even to just get stuff on that resume because that's what's lacking. (Marie)

While ICTs were identified as being an important and convenient mechanism for connecting homeless youth to low skilled temporary employment opportunities in exchange for much needed financial resources, little evidence was offered to suggest that ICTs played a role in assisting homeless youth to obtain work experience or skill sets which would allow them to transition into stable, full-time employment opportunities.

3.1.3 Health and Medical Support

With limited access to transportation, and often little knowledge of the city, it can be challenging to obtain access to proper medical care as a homeless youth in Winnipeg. Adding to transportation related and navigational challenges, many homeless youth do not possess identifications or health cards, creating additional barriers to accessing the medical care they require. In the interviews, many respondents suggested that they frequently used ICTs to locate and learn about the existence of available medical resources in Winnipeg, and that ICTs were also frequently used to learn more about health issues from which they suffered and wished to treat. In relation to the perceived challenge of locating health resources without access to the internet or a mobile phone, one respondent shared:

I would find it much harder, because then I would have to go out and find these places myself, and it's hard. I couldn't even find that place where you go get your health card. On the side of Portage Place? That was hard to find. (Alexis)

Some respondents identified that their ability to easily locate required medical services was a determining factor in their actually having gone through with obtaining treatment.

The hospital told me to go to this place, and I didn't know where it is so I had to use the internet to find it. It was just down Portage, right beside that apartment. It doesn't even look like a clinic, it looks more like an apartment, so not sure I would have went otherwise. (Brandon)

In addition to helping them to locate the physical locations of medical services, respondents identified that ICTs can play an important role in helping them to remember important medical appointments. One respondent who suffers from serious medical issues described the importance of ICTs in maintaining his health:

They're pretty damn important [ICTs]. Without any of that information on there, I'd probably lose a lot of important stuff that I'd planned to do in the future cause I don't have anywhere else to keep that information safe. Like an upcoming appointment, like taking a screen shot for example of a bus stop sign to know when your buses are coming and how to get there. (Faron)

In addition to using ICTs to access medical assistance within clinics and hospitals, several respondents reported that ICTs were instrumental in helping them connect to telephone based mental health resources, and that the anonymity it provided increased their desire to use these services.

Yeah, it's really helpful and I've used it [the internet] to find both hotlines, those mental health hotlines when you just are having a bad day. There's always a nice old lady on the health phone line, not going to leave you. (Cole)

A large percentage of respondents also described using ICTs to seek information on a

variety of personal health issues online, and some described using information obtained online to self-diagnose or self-treat. Some of the issues which respondents described self-treating had clearly arisen as a result of 'sleeping rough', or sleeping outdoors.

If I feel a certain pain that's been developing and spreading throughout my body from loss of sleep I just look it up online and try to find out what it is.
(Gabe)

None of the respondents described experiencing negative repercussions from having privately sought out health information online, and the majority conveyed an understanding that most health issues were better left to medical professionals. Respondents did however describe a critical awareness of medical information quality online. On whether he would trust health information gleaned from any random website, one respondent states:

Oh, no. I would try to find a legit fact site, like a health government site... At the end of all the internet websites there's like .government, .org, .com. and .government, like .gov is usually legit. You never know with the internet...its just like, hard to know if what you're reading is truth or not.
(Daniel)

While some respondents suggested they were more inclined to trust health information found on government related websites, a minority expressed a mistrust of anything related to government, and that they would be less inclined to use health information obtained from these sources. Overall, the use of ICTs can be linked to helping youth connect with health care during times of need, and potentially improving health outcomes.

3.1.4 Safety

For homeless youth populations, communication related limitations can increase risks to personal safety. Several participants shared stories of using ICTs to assist them through emergencies or varied situations where their personal safety was placed at-risk, and the majority felt that ICTs were important in helping homeless youth mitigate personal safety risks.

For me, it was very hard to get a hold of people when I was really in need or scared or whatever because I didn't have a mobile phone or a computer. Say if I needed something, to have a phone or computer or just even access to one was very good. I wouldn't be here maybe if I didn't have technology.
(Brandon)

Several interviewees felt that ICTs had provided them with important information about emergency shelters or 24/7 support services, and that ICTs played a significant role in helping ensure street youth were able to remain safe.

I guess that's what people need now to be safe [access to ICTs]. People need to be safe. How to sleep right, sleep at night...not to be out in the streets. Being in the streets could cause death. Once a person's just laying out on the ground, he could be kicked around and stabbed or something. Technology can help that. (Issac)

Respondents offered a handful of examples of occasions where they felt ICTs had played an important role in helping them to find emergency shelter and stay safe. One particularly representative story was shared by a female respondent:

This was at a time when I burned a lot of bridges with my family and I couldn't go anywhere. I went to one of my friends houses and he couldn't let me stay but he let me use his phone to look up safe houses and stuff on google and found out that there was places, they could actually take people in, you don't have to make appointments and stuff. I phoned them up and then I got to sleep there for like a week and a half. (Daniel)

Respondents also identified that ICTs can play a role in helping maintain the safety of their peers on the street as the connectivity facilitated by social media offered them visibility on each other.

Let's say I'm worried for somebody and there's no other way of getting a hold of them except through Facebook. Everyone worries for somebody so let's say I'm worrying for my girlfriend. She's somewhere where I know it's not a good place for her to be and someone is telling me I have to go and figure out where she is. Maybe she's not safe on the street or something. I'm going to try to find her or tell other people "Can you come help me find her?" It's important for stuff like that, spreading the word and helping people to keep safe. (Faron)

The ability to instantly connect with formal supports at social agencies was also found to have played an integral role in preventing drug relapses and assisting respondents in coping with intense periods of suicidal ideation. One such incident was described by a of support worker with Siloam:

One time, one of our young adults was having a really bad day and felt like using meth and he texted me saying like, "I'm hearing voices. I don't feel like using. Can you come here? I need you. And so I got that message on my phone from Facebook and then I came here at like ten at night and sat with him for like two hours, talked him down and then I left...and so I find like

technology super crucial in finding out if our youth are safe or not. (Marie)

In summary, ICTs provided access to information and connectivity with social supports which was identified as being vital in assisting respondents to remain safe during a variety of emergency situations where personal safety was at-risk.

3.1.5 Formal Supports

The ability to use ICTs to easily connect with formal social supports such as Siloam Mission and Resource Assistance for Youth (RaY), another homeless youth serving agency, was associated with improved health and social outcomes by a number of participants within the study. Through social support organizations, homeless youth are offered access to housing opportunities, basic needs, employment opportunities, as well as counselling services. While these organizations seek to act as bridges between homeless youth populations and the services they require, ICTs were identified as playing an increasingly important role in creating initial connectivity between these organizations and homeless youth, and later, in increasing the success of their programming by increasing the level of contact between support workers and their youth clients. This heightened level of connectivity strengthened relationships between service providers and homeless youth clients, and in some cases, acted as the basis for which youth remained in contact with formal social supports.

There was a staff at RaY who I connected with on Facebook for awhile but she left her job...basically just kept in touch with her, told her when I was coming down to the centre there, she'd just kind of keep tabs on me you

know? I probably wouldn't have kept going to RaY if she didn't keep messaging me. (Jocelyn)

ICT based communications with social agency staff was typically initiated by staff within social agencies and not the other way around. On the overall importance of being able to connect with Siloam clients using ICTs, a support worker from Siloam states:

I wouldn't be able to help them as well as I do now [without use of ICTs]. I wouldn't be able to check on them. They wouldn't be able to contact me if they needed something or if they're upset or emotional or in a crisis. So I find like it's essential to do in support work...one of the guys you interviewed before, he was homeless when he first aged out of care, and Facebook was the only way to get a hold of him. (Marie)

Many of the respondents shared stories which highlighted the wide range of uses for which homeless youth used ICTs to contact formal support staff working at agencies such as Siloam and Resource Assistance for Youth. For some, it was simply a means of 'checking in' and letting staff know they were ok, whereas for others, these communications served a more instrumental purpose. For the majority of respondents, the general purpose of these communications was best summarized by the following:

I use it a lot for keeping in touch with Marie [Siloam support worker], helping me keep my shit together and stuff. If I need to talk to her or whatever, or if somethings up, I can just text her and she'll get back to me. (Ethan)

Two participants identified using ICTs to connect formal social supports to family members as a means of coordinating and strengthening their networks. For one respondent, Facebook was identified as a bridge between a foster parent with whom the

youth had a damaged relationship and a social worker who were then able to provide coordinated support to the youth throughout a drug related court proceeding. Describing the relationship between his support worker and his foster mom, and how this increased connectivity of supports was going to assist him in reducing his engagement with the justice system, one respondent states:

She messages my social worker here [his mother]. Her and Marie, they will message back and forth. Like today I went to court and the proceedings weren't really the news we expected, so everyone who is in my life is writing a letter to keep me out of jail, [because of ICTs] there will be 5 or 6 letters from common people in my life saying, this person needs to stay in their community. (Cole)

Though the vast majority of respondents stated that increased connectivity with formal social support staff was welcome and would likely have a positive impact on their social outcomes, one youth did suggest that social support staff had no place in his private life. Many of the respondents suggested that very few of the social agencies with whom they had been connected throughout their lives had offered connectivity to support staff through ICTs.

3.2 Connecting Outward

Throughout the course of the interviews, several participants related connecting to their peers, family, or to entertainment online as “catching a signal”. When asked about the meaning of the expression, respondents offered that it meant ‘connecting to the world’

and ‘escaping reality’. There were other variations, but it was chiefly associated with gaining access to the internet and engaging with the outside world. For several respondents, many of whom were largely disconnected from normative economic and social participation in society, using ICTs offered an escape from the realities of being homeless, a degree of reprieve from the loneliness and isolation they faced, and an opportunity to feel re-connected to family and friends from whom they may have long been separated.

3.2.1 Interpersonal Connections

ICTs offer homeless youth a powerful means of remaining in contact with large networks of family and friends. Many youth remarked that it made the world seem smaller and that ICTs allowed them to shrink enormous physical distances. ICTs offered respondents a relatively low-risk, non-confrontational tool for rebuilding broken relationships with family members, a means of feeling cared for in an otherwise challenging and harsh environment, and more commonly, a means of communicating with their friends on and off the street.

3.2.1.1 Beneficial Connections to Peers

Respondents identified that ICTs provided an essential means of staying in contact with their peer networks on the street. Without telephones or a means of transportation, homeless youth are heavily reliant upon social media as a means of communicating with each other and arranging face to face contact. Further, ICTs were identified as an

important means of staying in contact with pro-social peers from home communities, and as a means of developing relationships outside of their normally accessible social sphere. Describing the convenience of using ICTs to stay connected to his peers on the street, one respondent shared:

I could catch them whenever by messaging them. We keep in touch easier. It's hard to find people sometimes when you don't have a phone and you're on the street, but this way you can just catch a signal and be with your bro's you know? (Lucas)

The use of ICTs to connect with peers was often described as an effective means of overcoming the challenges of lacking access to transportation and needing to travel significant distances by foot in order to meet with friends and associates.

Everybody is so far from me, not even in walking distance anymore. Not like when I was a kid. Technology brings us closer. I don't have to go all the way over there just to talk to him. (Daniel)

Some respondents indicated that they actually viewed Facebook as the only means of contacting people, and that nearly all of their communication with peers was done using instant messaging over social media. The importance of social media as a communication tool for this population was revealed in a quote from a respondent who had recently aged out of care into homelessness:

I never really used to be a big Facebook person...now that's how I get a hold of people and that's how people get a hold of me. That's it. (Faron)

In addition to using ICTs to stay in contact with street based peers or pro-social peers from their home communities, two youth described fostering positive online relationships

with individuals they had met through gaming related discussion sites. The potential for ICTs to connect homeless youth with pro-social influences outside of their normally accessible social sphere was identified as something which allowed these respondents to feel 'normal'. Both described the relationships they had developed as meaningful and enduring, and that connectivity to 'normal' peers had helped them to cope with their struggles.

I still talk to people all the time on Skype that I actually don't even know in person but we Skype all the time [met on Facebook}...it really helped me avoid becoming too depressed about being in this situation sometimes.
(Henry)

The impact of being able to easily access peers through ICTs was significant and far reaching. Most commonly, respondents described that the ability to use ICTs to connect with peers helped to reduce feelings of loneliness, isolation, and boredom, and that it often generated feelings of happiness and hope.

It helps me keep safe and happy. Keeps me from being lonely, stops me when I'm feeling sad or whatever. Its just having support there whenever you need it. (Lucas)

Several youth described a feeling of having the 'world at their fingertips' and that being able to use ICTs to connect with peers left them with a sense of boundless possibility. No respondents reported using email for any communication with peers, and some laughed at the suggestion that they would have considered using it for this purpose.

3.2.1.2 Harmful Connections to Peers

Many respondents identified that homeless youth are placed at increased risk due to their connectivity to anti-social peer groups online. High levels of connectivity were associated with increased risks of sexual exploitation, increased exposure to potential vices, and increased difficulty in detaching from life on the street.

Obviously, there's a lot of negative things about technology, connecting to bad people can keep people homeless, keep people on drugs, keep people away from their family, and some people who exploit others on social media.
(Cole)

Nearly every single participant identified that ICTs place homeless youth at a greater risk of sexual exploitation, though very few had examples, or were willing to offer any, of peers being connected to prostitution or sexually exploitative acts through ICTs. Though females were identified as being at higher risk, some respondents reported that homeless males, especially those who identify as homosexual, face significantly higher risks of being sexually exploited online. Respondents who related stories of being exploited, or having received proposals which would have led to exploitation, suggested that the greatest risks they faced were from individuals to whom they were already connected on social media. In one story, a respondent describes receiving messages from a peer who she felt was trying to encourage her to participate in exploitative behaviour in exchange for money:

This one dude, he sent me a picture [on Facebook], and I'm like okay what is it. It's like all black. It's one of those, with, I don't know ... It's like a video or

whatever, I don't know. And it was my little cousin, like naked. I'm pretty sure he was hoping like I would do it to [to exchange nude photos of herself for cash]. (Alexis)

For another respondent who had spent time working as a prostitute, the instant connectivity of social media created increased risks of self-exploitation and challenges in moving away from behaviours which kept him entrenched in the street. The connectivity he had maintained with old clients or peers who continued to work as prostitutes placed him at risk of being contacted and re-entering sex work.

I'm addicted to sexually exploiting myself, and that's what technology has done to me. It's made me addicted to knowing that people are getting off looking at me, in any sort of way. And everyone is still there. (Cole)

Connectivity with negative peers through ICTs was also identified as placing homeless youth at higher risk of using drugs or relapsing into drug use. Though numerous respondents insisted that it was not ICTs that were responsible for encouraging drug use, and that users will ultimately access drugs in any way necessary, many did suggest that online connectivity to drug using peers could increase urges and accessibility to drugs for those who were struggling with addiction. Describing the easy accessibility of hard drugs to homeless youth in social media environments, one respondent states:

I don't know if you know but the meth scene out there is horrible right now, and a lot of people I know are scoring their shit [accessing drugs] through Facebook. (Faron)

High levels of drug use among homeless youth mean that those with histories of addiction can be placed at a greater risk of relapse due to their usage of social media.

Relating to the non-stop messaging and exposure to temptation which is facilitated through the use of social media, a support worker at Siloam describes her observations on the challenge of staying clean and the risks associated with maintaining a network of drug using peers in social media environments:

I notice that people would message them like, "Do you want to hang out? Do you want to come get high? Do you want to come party? Do you want to come chill?" And I know what that means...you have your vices right in front of you when you're still friends with them on Facebook. What are you going to lose because of that? (Marie)

In order to mitigate risks posed by negative peer connections, respondents described using strategies of 'unfriending' or blocking social media connections who they felt placed them at greater risk. Others described blocking or 'unfriending' peers who they simply felt were dragging them down, or who were preventing them from staying on a generally positive path.

If I think that the stuff they're saying is ignorant, or maybe they're pulling me down, I'll block them. I just want the best for me and my day now. Let's say I hop on Facebook, I see that this person had a shady morning, it doesn't mean that I have to have a shady morning because I'm reading your negative vibes. (Faron)

Many of the respondents described using this strategy independently in order to reduce their exposure to negative influences, but several indicated that they had been encouraged to do so by staff working at Siloam. This was generally received positively and viewed as a helpful part of 'getting on the right path'. Though it was not explicitly stated,

encouraging homeless youth clients to consider eliminating negative peers online seemed to form part of Siloam's programming with their youth clients. Describing the role of Siloam support staff in encouraging him to reduce his connectivity to negative peers online, one respondent shared:

I get rid of people that put my life on the spotlight or create problems for me. The staff here have actually helped me to do that a bit. Might not have done it unless Marie [Siloam support worker] suggested it to me. (Gabe)

Aside from the use of 'blocking' or 'unfriending' strategies, respondents identified that social media sometimes provided a less confrontational way of reducing real world contact with anti-social street based peers.

I did face to face with some street buddies but Facebook makes it a little easier to be get people out of my life sort of I guess. Things kind of changed for me a couple years back and I just sort of changed I guess, and this just sort of makes it easier for me to get ahead. (Gabe)

Respondents related that being able to minimize contact with negative peers through a less confrontational mechanism has the potential to reduce risks to their personal safety. Overall, the way in which ICTs provide easy access to sex work for individuals who are otherwise struggling economically was found to place them at higher risk of sexual exploitation. In a similar vein, the easy availability of hard drugs in social media environments, especially within social network environments where homeless youth are prevalent, was identified as both as a potential trigger for relapse or as a factor which could lead to increased likelihood of experimentation with drug use.

3.2.1.3 Connections to Family

A significant percentage of respondents reported using ICTs for the purpose of remaining in contact with family members. While some of this contact was aimed at obtaining access to economic or social supports, connectivity to families through ICTs was often maintained for the simple purpose of ensuring that their loved ones were healthy and secure. Respondents used ICTs to obtain positive encouragement from family members and to sometimes work on repairing damaged or troubled relationships with parents or siblings. The following quote shared by a respondent whose family lives in a First Nations community in northern Manitoba summarizes the feelings shared by numerous respondents on the value of ICTs and its role in connecting with family:

Because I want to know how my nephews and my nieces are doing, and how my granny's doing, and you know, like the couple families that I know. Id be worried more if I couldn't talk to them on Facebook. Makes me feel less alone. (Jocelyn)

ICTs were often used as a means of accessing positive encouragement from family members. Several respondents shared that connectivity to family members through Facebook allowed them to feel that someone cared about the choices they were making and that this sometimes reinforced good decision making patterns:

I use Facebook with her [adopted mother]. I'll send her pictures and stuff. I'll be like, "Here I got a picture of me." She'll be like, "You're looking so good." and she'll be like, "You look healthy." I'm like, "I gained 60 pounds." She's like, "Don't worry. You looked like shit when you were using. (Cole)

The value of social media as a tool for communicating with family was especially important for respondents whose families lived at long distances. With the advent of Skype and other ICT based telephony technologies, respondents identified being able to remain connected with family who they would have otherwise been unable to afford remaining connected to through conventional long distance telephone services. This increased connectivity sometimes resulted in family reunifications, as described by one respondent:

If it wasn't for Facebook I probably wouldn't have known when my dad was coming into town. I got to see my dad after, how many years? I was taken away from my dad before I was taken away from my mom. My dad kind of left the city, I don't know why. I think it just felt really good to get to meet him again and to have an arrangement on when and where to meet him. "We're going to be at the airport at this time." We were there ahead of time to go and wait for him coming out of that place. The only way I could stay connected to him is through Facebook. That's all I have, is Facebook. (Faron)

Many respondents reported using ICTs as a tool for mending strained or broken relationships with family members. In some cases, youth were found to be using ICTs to safely engage with abusive or alcoholic family members to whom they wanted to remain connected at a safe distance, and in other cases, ICTs were a comfortable way of re-engaging with family members who had been negatively impacted by addictions or mental health related episodes which led to a youth being 'kicked out' of his or her home.

My sisters, we don't really have a really good relationship, because they know that I was lying to my parents when I was on meth, but sometimes I can still talk to them on text. Sometimes they respond to me, sometimes they don't.

I'm working on them. (Cole)

The utility of ICTs as a secure means of re-engaging with family members to heal wounded support networks while living life on the street was echoed by support staff from Siloam:

It gives them chances to talk to people they don't normally see or connect with family that they've sort of burned their bridges with and maybe they want to try again. And that makes them feel good...Sometimes it doesn't go well and then we have to figure out, "Okay well, how can we fix it with your family?" And so they can just have a conversation on Facebook with them. (Marie)

Overall, ICTs were found to play a significant role in facilitating connectivity with family supports and assisting youth in rebuilding broken support networks. The utility of ICTs in this regard cannot be understated as respondents repeatedly highlighted using ICTs to assist them in coping with the realities of being homeless.

Pretty much makes me feel connected I guess. Like remember that I have a family and stuff... If I couldn't talk to my brother and shit, I'd feel alone. If I couldn't talk to my family, if I couldn't talk to anybody, I'd feel alone. I don't like going to talk to random people and starting conversations. (Daniel)

Maintaining contact with family members was repeatedly identified as a coping mechanism for the extreme loneliness respondents experienced, and many felt that it was an essential part of what helped them to make good decisions.

3.2.2 Connecting to Pop Culture and Recreation

Unsurprisingly, one of the major purposes for which homeless youth used ICTs was to remain connected to pop culture of the day. As with their housed peers, but perhaps with more spare time, respondents identified spending countless hours using ICTs to listen to music, watch movies, and for streaming endless episodes of their favourite TV programs. Several participants reported that the simple ability to remain connected to their favourite music and entertainment played an important role in staving off loneliness and boredom, helped them deal with depression, and allowed them to feel more strongly connected to broader society. When asked about their recreational use of ICTs, respondents answered in a way that would seem typical of any youth in their early twenties.

When I had my phone, I would watch every episode of Netflix, of Orange Is the New Black. I would watch all of Weeds. I watched Grey's Anatomy. I watched all of these full seasons of shows that I could relate to. (Cole)

Many youth reported a tendency to overuse ICTs for the purposes of recreation. Given the amount of free time homeless youth are faced with managing, and given the frequent lack of positive supports which might otherwise encourage awareness about overuse of ICTs devices, this is unsurprising. However, the degree of overuse reported by several youth could be considered severe in some cases. The impact of overuse, and some of the underlying reasons, are summarized by a respondent:

Sometimes I'll just sit and check out stuff online all day and not do anything. Definitely makes me not want to do shit. Sometimes I'll just play games for like eight hours straight until my eyes hurt. But I'm bored so it's not like I'm

avoiding business or anything. I just don't have anything to do most of the time. (Lucas)

Many respondents referred to ICTs as a drug, or to their use and reliance upon ICTs as an addiction. ICTs were often referred to as something which hindered positive decision making and which sometimes encouraged sedentary behaviour:

I turn it off through like half way through the day and then I'll take a little bit to go on, not like over-exaggerate the use of social media like other people do... I find that it could possibly be a problem to people. It could be something where they're always on it, or like an addiction kind of. I see homeless kids who are gamers...like lose big opportunities because they're too stuck in their games. They like to play ... they just like to sit there and play games their whole life. (Ethan)

While the overuse of ICTs was identified as problematic by numerous respondents, the ability to lose themselves in recreational ICT use was also felt to be a powerful coping tool, and the benefits of being able to access free entertainment at all times of day were thought to far outweigh the risks of overuse.

3.3 Developing the Self

Throughout the interviews, respondents identified that not only did ICTs play an important role in allowing them to connect outwardly with the world around them, but that ICTs also allowed them to turn their gaze inward, to deepen their understanding of self, and to wrestle with the way in which they presented themselves to their peers and the rest of the world. While the use of social media as an avenue for engaging with self

and identity is common to any youth in their late teens or early twenties, the high prevalence of trauma and abuse within the social histories of homeless youth have been shown to lead to uses of these technologies which are unique to this population.

3.3.1 Self-Expression and Impression Management

Many participants reported exploring their identities and furthering their understanding of self through engaging in self-expression in social media environments. 'Status updates' were identified as the main vehicle for self-expression, as these allowed individuals to post a broad range of information in the form of text, videos or photos to profiles which is then visible in the newsfeeds of 'friends' within a given social media environment. Self-expression through 'status updates' was often seen as a way in which their identities could be shaped, and though never explicitly stated, participants implied that self-expression in social media environments allowed them to regain some control over the narrative of who they were as a homeless individual.

It lets people know how I want to be seen in the world...I don't try to force this stuff on people or, like, bug people to read it, its just more about getting things out there and expressing that to people... What I talk about on my Facebook and all that, like hopefully people understand my life a lot better, that I've been through it all. Shit like, this is who he is, who he was, and who he's going to end up to be. (Lucas)

Self-expression online was identified as being an indirect means of reaching out to online support networks. Numerous respondents spoke to using social media in this way,

indicating an awareness that formal and informal support networks were likely monitoring their status updates and could possibly glean information from their posts which would offer insight into their social and psychological condition.

Why do I post? To tell people that I'm okay, I'm doing good, I'm on the right path, I'm doing this, I'm doing that. Says how I'm feeling but also that I'm alright. I'll write about something that I found online, a quote or whatever, and then something else comes to mind, and then I'll just write it out to say how I feel at the moment. Tells a story, you know? (Alexis)

One of the support staff with Siloam Mission confirmed that she often relied upon status updates as a means of understanding the needs of her clients. In the following quote she shares a powerful story which speaks to the role of social media in the life of her clients and her perspective on the importance of ICTs in maintaining an awareness of the condition of those whom she serves:

I honestly do it to keep tabs on them to make sure they're safe because usually everyone's pictures are like a story of their week or month right? One of our young men came out on Facebook and he posted a picture of him dressed up as a woman, and he finally just said, "I am free." And the fact that I had the power to comment on that and tell him like how proud I was of him, and that I was so ... I thought he showed so much courage. Afterwards, he inboxed me [sent an email], thanking me and he was like, "That really meant a lot." So I find that technology allows me to have a more personal relationship with these kids and get to know them more and be in their lives because that's what they're on all the time. So I need to be there all the time just to make sure they're okay. Like watch their statuses so that they know someone's listening. (Marie)

Some respondents identified that they ‘curated’ their online self as they made improvements in their life, perhaps eliminating photos of themselves intoxicated or associating with negative peers, as a way of marking their self-improvement and being recognized for making positive changes. Actively managing social media profiles as a way of documenting self-transformation was identified as playing a role in reinforcing good decision-making.

There are still some pics on the internet that I've been going back and deleting, because just like I said, I'm not going to just leave a legacy of methamphetamines and destruction behind. No, there's actually a lot of good things I did on social media...I leave the stuff I want people to see. (Cole)

Respondents recognized that self-expression, and working to actively manage their presentation of self online, not only allowed them to explore their identities, but that it could also serve an instrumental purpose in facilitating access to resources. One respondent describes the relationship between his social media profile and his ability to successfully access rental housing, and then references how this impacts the way in which he adjusts his profile and expresses himself on Facebook:

Yes, people get to know you on Facebook, "This is how I look in my pictures. Maybe our pictures will go side by side." Also when you're thinking of some of the best ways to make yourself look to renters ... Like for me, I talk about movies or artists that I like, like pages that I like. (Henry)

Relating to the intentional use of self-expression in social media environments as a means of accessing resources, several participants suggested that they used multiple profiles, or that they were connected to others who had multiple profiles, and that this practice was

typically undertaken as a means of increasing access to resources. By maintaining one profile where expressions of self were understood to be ‘clean’, and another profile which would be used to more accurately trace the realities present within their lives, homeless youth were able to present different versions of themselves to varied audiences for different purposes.

My mom knew that I was doing multiple profiles ... That I would message her, but I would be on three different ones, looking for money, asking my mom for a care package, while I was with a friend and messaging these people, and trying to book a photo shoot for money on my other profile. (Kevin)

Whether the use of multiple profiles and the acts of self-expression within them were purely instrumental acts geared towards accessing resources was unclear, but it was apparent that opportunities for self-exploration which are facilitated by social media are an important means for homeless youth to obtain validation and deepen their understanding of self.

3.3.2 Self-Improvement and Development

The easy access to information provided by ICTs was found to promote independence as well as the development of hard skill sets such as reading and spelling. Further, ICTs were used as a means of developing a deeper understanding of Aboriginal culture and spirituality, and as means of generating inspiration and a desire to grow. Participants reported feeling lost in ‘boundless possibility’ when they were searching for information online. One particularly street entrenched respondent who was fascinated by science

describes his use of Google as a means of escape:

I like looking at some science and learning more about more technology. I just think in my head, inside, paying attention to the words while I'm not being distracted. The more I work on that, the further I go, makes me want to grab a piece of blank paper and write it down. Collect all of those ideas that I've been working on. (Issac)

Others identified that ICTs were a powerful tool for self-educating and improving hard skill sets such as reading and writing. Describing his own use of ICTs to improve his ability to spell, one respondent states:

Learning. Learn stuff all the time non-stop. I'm constantly looking up shit, just things I'm interested in or how to spell stuff...it just helped me spell better because before I couldn't spell too good. I couldn't spell three syllable words properly. I'd have to sound it out and even then I'd get it wrong but it's helping me learn. (Daniel)

Others described exploring professional career paths in which they were interested and looking up information about how to enter their field of interest. One respondent describes using ICTs to explore information on how to become a pharmacist and how ICTs can shrink the perceived gap between his current state and his aspirational state:

How do I use the internet? Usually just to look up information about pharmacology, because I want to be a pharmacist when I grow up. I can find out what I need to do the job and I don't think it's that hard. (Gabe)

While some described using ICTs to access information geared towards improving their position in future years, others described the utility of ICTs in helping them to become

more independent and less reliant on formal social supports:

Because it can teach you how to take care of yourself [technology use]. You just study yourself and read instead of being dependent on someone else to take care of you. Taught me a lot, like stuff that's going on in my life, I would ask other people and ask for help, but I was getting kind of tired of that, to be dependent on other people's advice, so I just started searching stuff, studying human psychology and all that myself, and all that, and just clicked in my brain. (Kevin)

Two Aboriginal respondents using the services of Siloam's downtown shelter described using ICTs to research Aboriginal cultural practices and to learn about the history of Aboriginal peoples in North America. Describing how he feels when using ICTs to explore Aboriginal cultural history, one respondent states:

It makes me feel more like it's just a straight line, I'm walking to a right line. I'm not looking back. It's about going forward, not back. I heard a lot about the Aboriginal residential school thing... Yeah, it instantly connects the people to their culture if they want it. (Issac)

Other participants referenced connecting to elders through connections on Facebook, and using ICTs to research locations of Aboriginal spiritual or cultural services. In summary, respondents identified that ICTs can play an important role in providing intellectual stimulation and a desire to develop themselves, and that this increased access to knowledge could play a role in helping them to exit the street.

3.4 Barriers to Access

Given the findings just presented, it would be reasonable to question whether or not homeless youth populations actually face barriers to accessing ICTs. Unfortunately, while every single respondent to the study reported using ICTs multiple times per week, and in some cases multiple times per day, many respondents identified that they continued to face barriers in accessing the internet or had faced significant barriers at one time in their lives. For the majority of respondents, the main barrier to access was simply economic.

People don't really like, they don't always have money, so they can't pay for this stuff. Most people are broke and hungry and lonely, they want to go online and see what the world's doing or see if they can make some money or make some cash or get some food. I think people should be able to walk around and get wifi, you know, to help them basically. (Alexis)

Many participants expressed deep frustration that the internet was not universally accessible and that it should be a right and not a privilege. One respondent summarized the need for universally accessible wi-fi with this statement:

I'd say it's just all about providing accessibility and ensuring people who can't afford it can get online whenever they want to without having to pay for it. Some people want to do job searches, some people want to do whatever they want to do to stay in touch with families and stuff, its important and they should be able to use it. So nothing fancy I guess, just more access for people who can't afford to pay for the internet is important. (Henry)

Some respondents spoke about the role of connectivity in their life and the impact of not

being able to access ICTs during times of need. Describing his reliance on public organizations for ICT access, and the challenges this can create in remaining connected to support networks, one respondent states:

And when RaY closes [a youth serving homelessness agency], which is for lunch, they are not open all day for day drop-in, evening drop-in. There's hours in between where you're like, I'm waiting for my auntie or I'm waiting for my friend, and I don't know if I can get a place to sleep tonight, and there's no evening drop-in, and maybe I don't have any friends. (Cole)

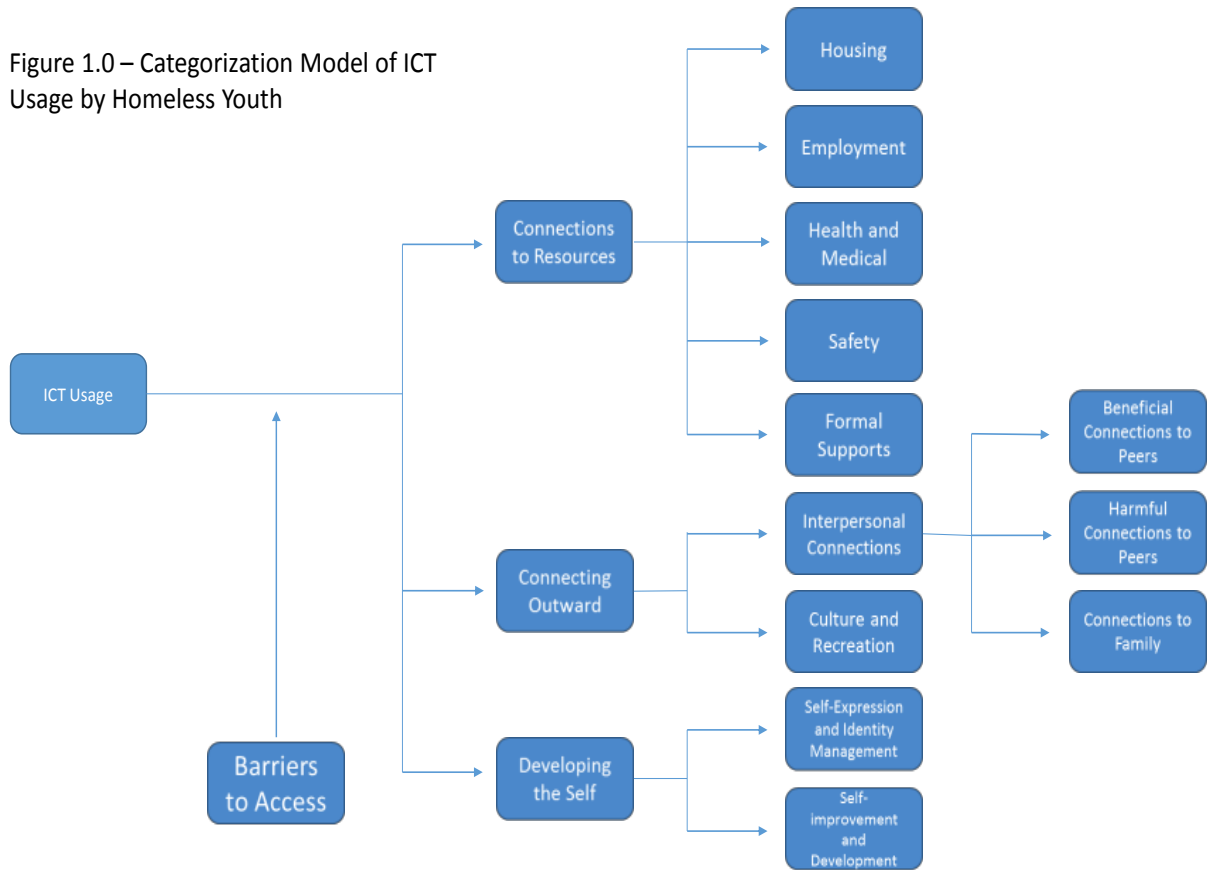
Participants shared a wide variety of interesting ideas on how connectivity could be increased. These included the creation of safe spaces in core areas of the city where at-risk youth could use ICTs in a monitored environment, offering controlled wi-fi access in all city parks, and ensuring that homeless youth were given access to smart mobile devices through social agencies at little to no cost. Participants identified that the last suggestion could lessen criminal involvement, risks of sexual exploitation, or the need to make difficult decisions about how to spend their minimal resources in order to access their networks of support.

The identification of the above barriers to access suggest that while notions of the digital divide should be reconsidered as they relate to homeless youth populations, it is clear that barriers to access continue to persist even in an environment where technologies are becoming cheaper and more accessible.

3.5 Categorization Model of ICT Usage by Homeless Youth

Figure 1.0 presented below breaks down the ICT based practices of homeless youth into categories and subcategories representing strategies for survival. The model instantly highlights the distinct ways in which homeless youth in Winnipeg are using ICTs and the importance of access for this population. Many of these categories and subcategories presented are interrelated in that they produce similar outputs or outcomes. For example, obtaining financial assistance or temporary housing may be an output of connecting to the self *and* of connecting to peers or family. Given the pace of technological change, and the speed with which its uses can be altered or adapted to meet the needs of homeless populations, this model should be understood in relation to the time in which the study was conducted and the place in which it occurred.

Figure 1.0 – Categorization Model of ICT Usage by Homeless Youth



4.0 CHAPTER FOUR: DISCUSSION

4.1 Research Purpose

With recent evidence suggesting that access to ICTs may improve health and social outcomes for homeless populations, it is becoming increasingly important to understand the ways in which technological access, or lack thereof, may impact the lives of youth experiencing homelessness (Rice, Kurzban & Ray, 2012; Freedman et al., 2006; Rice, 2010; Rice et al., 2010; Young and Rice, 2011; Rice, Milburn & Munro, 2011). To date, only one study examining the use of ICTs by homeless youth has ever been conducted in Canada (Karabanow & Naylor, 2010). Given the prevalence of ICTs in modern Canadian life, and their fundamental role is in normative socio-economic participation in Canadian society, the current lack of understanding on the ways in which homeless youth in Canada are using ICTs is troubling. Findings from this study may serve as a starting point for Canadian homeless youth serving agencies seeking to further leverage ICTs to benefit their clients, and for government policy makers seeking to identify the place of ICTs in service delivery models.

The study had the following objectives: 1) to contribute to a greater understanding of how and why homeless youth are using ICTs 2) to improve understanding of how ICTs may assist homeless youth in coping with challenges of being homelessness. Core research questions which this study sought to examine are as follows:

RQ1: To what extent are homeless youth in Winnipeg using ICTs, where are they

accessing them, and how are they being used (or for what purposes?)

RQ2: How are homeless youth in Winnipeg using ICTs to help them cope with the challenges of being homeless?

RQ3: What programmatic and policy related recommendations can be made to youth serving organizations and policy makers which may contribute to the development of ICT based programming and services for homeless youth?

4.2 Study Significance

The majority of previous studies which have examined the ways in which ICTs were used by homeless youth populations have been relatively narrow in scope. Some have examined the intensity of internet usage by homeless youth populations (Pollio, Batey, Bender, Ferguson, Thompson, 2013; Guadagno, Muscanell, Pollio, 2013), others have sought to examine specific impacts of ICT usage on various health outcomes, (Rice, Munro, Barman-Adhikari, Young, 2010; Rice, Lee, Taitt, 2011), and others still have examined the relationship between the use of ICTs by homeless youth and the construction of identity (LeDantec & Edwards, 2008; Eyrich-Garg, 2010). Interestingly, the only other study conducted in Canada which sought to examine ICT use by homeless youth was relatively broad based and sought to examine the ways in which homeless youth understood, experienced, and accessed ICTs (Karabanow & Naylor, 2010).

There is currently very little information available exploring the ways in which homeless youth populations in Canada are leveraging ICTs to meet their needs, and therefore very little information upon which policy or programs may be developed should

government or community based organizations seek to impact youth homelessness through the use of technologies. Further, as all of the individuals in the sample self-identified as having Aboriginal ancestry, the data presents specific insights into the use of ICTs by homeless Aboriginal youth in Manitoba. Data in this study was also enriched through interviews with Siloam program staff who offered insights into the ICT usage patterns of their clients. This is the first identifiable study examining ICT usage by homeless youth which has combined interview data from both homeless youth and support staff working with these populations. Much of the information provided by youth participants was corroborated and verified through these staff interviews, allowing the researcher to fill gaps in knowledge and gain valuable insights into ICT use behaviour specific to the sample.

4.3 Similarities to Pre-Existing Studies

Participants in the study identified using ICTs extensively for the purpose of staying connected to family, home based peers, and street based peers, and this reflects findings from a number of U.S. based studies which have underscored the important role played by ICTs in allowing homeless individuals to remain connected to their support networks (LeDantec & Edwards, 2008; Roberson & Nardi, 2010; Eyrich-Garg, 2010; Rice, Lee, & Taitt, 2011; Yost, 2012). Relating to their use of ICTs to remain connected to family and peers, several participants reported on how this connectivity fostered positive decision making which they felt had the potential to assist them in transitioning from life on the street. This relationship between ICT based connectivity with family and peers and

improved decision making has been identified in several U.S. based studies (Rice, Lee, & Taitt, 2011, Eyrich-Garg, 2011; LeDantec & Edwards, 2008). Previous studies have also identified the ways in which online connectivity to pro-social connections and family can help homeless youth to cope with feelings of isolation, loneliness and boredom (Eyrich-Garg, 2011), and this study produced similar findings.

As identified within a number of U.S. based studies, findings from this study confirmed that homeless youth in Manitoba are using ICTs to access a variety of economic and social resources. For instance, study participants mentioned using ICTs to access housing supports (LeDantec & Edwards, 2008), employment opportunities (Eyrich-Garg, 2011; Yost, 2012), and critical support infrastructures (Rice, Lee, & Taitt, 2011). Lastly, this study found similarities to U.S. based studies which identified that homeless youth were using social media as a means of exploring personal identity and managing their presentation of self online (Eyrich-Garg, 2012; Woelfer & Hendry, 2012). The use of multiple unlinked social media profiles by several participants in this study was also consistent with findings in a number of U.S. based studies which identified that multiple social profiles were sometimes strategically used by homeless youth as a means of isolating particular presentations of self which then facilitated access to material resources or housing (Eyrich-Garg, 2011; Woelfer & Hendry, 2012; LeDantec & Edwards, 2008).

4.4 Intensity of ICT Use

Though homeless youth populations are generally assumed to be largely disconnected

from ICTs, every single participant in this study reported using ICTs and the internet multiple times per day. In fact, the average intensity of internet usage across the sample amounted to twelve unique visits per day and approximately seven hours of internet usage per week (see intensity of usage data in Appendix C). Over the last several years, U.S based studies examining the use of ICTs by homeless youth have suggested these populations are increasingly connected to the digital world (Pollio et al. 2013; Bender, Ferguson, Pollio, Thompson, and McClendon, 2009; Rice et al., 2011; Uchino, Cacioppo, Kiecolt-Glaser, 1996), and this study confirms that within the Manitoban context, regular use of ICTs among homeless youth is becoming nearly ubiquitous. Only one other Canadian based study examining ICT usage by homeless youth could be found, and this study identified similar levels of intensity of internet usage among its participants (Karabanow & Naylor, 2010). This level of internet usage is on par with that of average Canadians aged 18-24 (Canadian Internet Use Survey, 2012), suggesting that while there are known economic barriers to ICT access, homeless youth in Canada overcoming these barriers through ingenuity and innovative practices.

4.5 Categorization Model of ICT Use by Homeless Youth

Homeless youth in Manitoba are becoming increasingly reliant upon ICTs and have organized their use of these technologies into everyday practices of survival. In their hands, ICTs have become tools for accessing temporary housing, employment, emergency assistance, self-awareness, and emotional support. These ICT based practices of survival are organized into three main categories: ‘connecting to resources’,

‘connecting outward’, and ‘developing the self’. The categories of ‘connecting to resources’ and ‘connecting outward’ represent external connectivity, or ICT based practices which were seen to bring homeless youth out into the world, to make connections to the resources they require, and to assist them in connecting outwardly with a cultural sphere from which they might otherwise be excluded. ‘Developing the self’ is largely about the use of ICTs in developing identity and notions of self. This represents ICT practices which allow homeless youth to deepen their understanding of self, to develop themselves intellectually and emotionally, and to wrestle with their presentation of self to the world. Under each of these categories, various subcategories representing notable ICT based practices are described in detail. A categorization of these practices is provided in Figure 1.0 on page 69.

The provided breakdown model classifies the ways in which homeless youth have shaped their use of technologies, and in some ways technologies themselves, in relation to the social conditions they face. For example, while some may simply view Facebook as a mechanism for sharing information and building relationships amongst peers and family, homeless youth were found to be appropriating its networking potential and shaping their use of this technology in exceptional and sometimes ingenious ways. As a result, homeless youth expressed an understanding of Facebook, Instagram, and other social media technologies which was complex, multiple, and distinctly reflective of their social location and economic status. A lifeline to the outside world, a means of connecting to emergency housing and material goods, a tool for rebuilding broken family relationships, a way of measuring and monitoring improvements in their lives, a motivator for improved decision making. These and many other exceptional and varied

ways in which homeless youth were found to be adopting and domesticating ICTs can all be understood in relation to the lifestyle patterns and social realities they face on a daily basis. It is important to consider that these uses of technology expand upon the purposes for which they were originally designed. While the immense networking and connectivity potential provided by ICTs is self-evident, the unique ways in which homeless youth have adopted these technologies and appropriated them to meet their specific needs rejects the notion that technologies provide ready-made solutions to social issues such as homelessness. Instead, the findings from this study begin to outline the ways in which homeless youth populations have adapted existing technologies and altered them to fit the patterns of their lives. The implications of the breakdown model are multiple and require a specific set of responses from social agencies and government policy makers. These are outlined in the following section.

4.6 Theoretical Considerations

The purpose of this study was not to systematically deploy a Social Construction of Technology analysis to understand how homeless youth themselves have shaped technologies, or to examine a socio-technical transition using an MLP approach, but rather to simply begin to develop an understanding of how homeless youth in Winnipeg are using ICTs to meet their social and economic needs. Still, SCOT theory played a significant role in informing the way in which the researcher interpreted the data provided by participants, and elements of the insights provided through the use of SCOT theory have been embedded within the discussion section of this thesis.

4.7 Policy and Programmatic Considerations

Study findings highlighted a number of areas of opportunity which may be explored by non-profit organizations and government policy makers seeking to impact the lives of homeless youth through the use of ICTs. Three main areas of focus were identified: closing the digital divide for homeless youth; formalizing ICT use in all aspects of service delivery by homeless youth serving organizations; and developing ICT based programming targeted at helping homeless youth to meet needs identified throughout the findings of this study. Homeless youth have already done much of the work in identifying innovative ways in which ICTs can be used to assist them in meeting a variety of social and economic needs. The job of social agencies and policy makers is to further understand the specific ways in which ICTs have been adopted into practices of survival by these populations, and to ensure that efforts to develop ICT based programming or services remain complementary to their existing relationships with technologies.

4.7.1 Reduce Barriers to ICT Access for Homeless Youth in Manitoba

Throughout the study, participants repeatedly identified the importance of ICT connectivity in their lives and the various barriers they face in gaining access. Given the levels of connectedness identified by participants, it is reasonable to question whether or not barriers to connectedness actually exist, however, the majority of respondents were found to be accessing ICTs and the internet through tenacity and willingness to travel to wherever they could “catch a signal”. Many had gained access to older mobile devices

which they used to access free WiFi in public spaces, and a large majority of respondents reported a reliance on public libraries and social agencies in order to access the internet. While the provision of ICT access by libraries and social agencies was viewed as incredibly important by respondents, limitations to access were identified. Social organizations and public libraries have limited hours during which they are open. Free wifi may seem common to those who spend time in upscale cafes, but participants reported that there are few locations in Winnipeg's core where free wifi can be accessed other than the Health Sciences Centre and a handful of non-profit organizations. Given the purposes for which homeless youth were found to be using ICTs, their high levels of reliance, and in some cases the direct relationship between ICT access and safety during emergency situations, access to ICTs, and perhaps more specifically wifi access, should be considered a right and not a privilege. Viewing the internet as a resource which should be free and universal was a sentiment shared by the majority of participants within the study. Many felt that an inability to access the internet due to economic status was discriminatory. Others expressed concern that at certain times of day, because a social agency or library may be closed, that they may be incapable of sending a Facebook message to a peer or family member who could potentially provide access to emergency assistance or shelter. Further, participants identified that the importance of ICT access, and the utter reliance which has been developed upon them, can lead homeless youth who are prevented access to engage in illegal activities or self-exploitation in order to gain the resources necessary to buy a mobile phone. In response to these concerns, a couple strategies may be employed to increase access. Firstly, homeless youth serving agencies may consider collecting unwanted "smart" phones, or any mobile devices capable of

accessing wifi signals and the internet, and could then distribute these to clients who would then be able to make use of these devices wherever wifi signals can be accessed. This type of “upcycling” program would be relatively low cost to manage and would have a significant impact as many participants identified that access to mobile devices could significantly increase their level of security and connectivity and ensure access to supports when required.

Secondly, homeless youth serving agencies should work towards ensuring that wifi signals are accessible outside of their regular business hours, and more importantly, that these signals are accessible outside of their physical building. The same should be applied to all City of Winnipeg run facilities which currently offer internet or wifi access. Where there is available infrastructure, and where the financial burden is minimal, these investments could provide important connectivity when needed. Given the importance of internet access for this population, social organizations and policy makers should be focused on devising strategies for increasing connectivity levels of homeless youth populations within their communities. As several low cost strategies may be pursued, and seeing as how the study identified no drawbacks to increasing connectivity levels of homeless youth populations, these opportunities should be explored aggressively and without delay.

4.7.2 Integrate ICTs Into Service Delivery Models for Youth Serving Organizations

One of the most striking findings which emerged during this study was the degree to which many of the respondents reported using ICTs to remain connected to formal

supports working within homeless youth serving agencies. All but one of the respondents living within the temporary housing facility operated by Siloam reported regular ICT based contact with support staff, and approximately half of the street entrenched respondents interviewed at Siloam's emergency shelter site reported some degree of ICT based connectivity to formal supports. In all cases, this ICT based connectivity was reported to have been initiated by formal support staff and not by the youth themselves. Participants reported benefitting from this connectivity in major and minor ways. For instance, some participants reported receiving helpful reminders from support staff to attend medical appointments, or to ensure that they delivered important pieces of mail, while on another extreme, one respondent reported relying on ICTs to remain instantly connected to support staff during a period of intense suicidal ideation. ICT based connectivity between youth and staff was also found to be used for more routine purposes and simply 'checking in', yet, this routine connectivity was viewed as invaluable by respondents who often had few people 'looking over their shoulders'. From the perspective of support staff, ICT based connectivity allowed for engagement with individuals who were largely transient, inaccessible, and for the most part, 'off the grid'. Support staff respondents reported a variety of innovative uses of social media and mobile phones, many of which were found to play an integral role in allowing for the effective delivery of support services to this population. An example of innovative ICT use by Siloam staff included monitoring youth 'status updates' in social media environments in order to identify social or psychological needs, then using this information to modify service delivery and support levels. Siloam support staff also identified engaging clients in conversations about the impact of maintaining negative

peer connections and then assisting them in eliminating these ‘friends’ from their online social networks in an effort to minimize temptations to engage in drug or alcohol use and partying. The findings within this thesis outline several other strategies implemented by homeless youth serving staff who have recognized the potential of ICTs, and in particular social media, to allow them to remain connected to individuals who may otherwise be transient and inaccessible.

Given the incredible importance of ICTs in facilitating the connectivity outlined above, it was surprising to learn that none of the connectivity between staff respondents and homeless youth respondents was governed by policy or standards of practice, and that this connectivity was not mandated by Siloam. Instead this was informally pursued by Siloam staff who felt that it was often *the only means* of establishing relations and maintaining consistent contact with the youth they aimed to serve. One of the support staff respondents suggested that her social work program had instructed that the use of ICTs for the purpose of contacting clients was problematic and potentially unethical. In seeking to clarify the position of the Faculty of Social work on this matter, I was directed to the Manitoba College of Social Workers and was told that the use of ICTs by social workers in Manitoba was guided by a document created by the Association of Social Work Boards and the National Association of Social Workers. This document, entitled “NASW & ASWB Standards for Technology and Social Work Practice”, was created in 2005 and contains no references or guidelines on how social workers should govern their use social media or text messaging when working with clients. The document does identify significant ethical concerns which could arise in engaging clients through the use of technologies, many of which seem very well-founded, but provides no practical

guidance on how to navigate these ethical concerns for workers within Manitoba. This is concerning, as homeless youth supporting staff that were formally trained as social workers through the University of Manitoba Social Work program may be more inclined to view the use of ICTs as unethical or inappropriate, leading them to potentially avoid their use. Given that the findings of this study provide preliminary evidence that the use of ICTs is not only helpful in delivering programming and services to homeless youth, but is in some ways essential, it is recommended that the Manitoba College of Social Workers and the University of Manitoba Faculty of Social Work re-examine their position and seek to develop an updated set of standards for technology use which would allow social workers in Manitoba to safely and ethically deliver ICT based services to their clients. These updated standards for technology use could not only be used for the purpose of informing ethical ICT use by trained social workers, but may also be used to inform the development of policies within homeless youth serving organizations such as Resource Assistance for Youth or Siloam Mission. This is especially important as many staff working within non-profit agencies do not possess formal social work or youth worker training, and this lack of formal training could place these individuals at greater risk of engaging in problematic or unethical forms of ICT based contact with the youth they are serving.

In summary, this study provides preliminary evidence that homeless youth serving staff that use ICTs are able to deliver more effective services and to have a potentially greater impact on the lives of their clients. Increased ICT based connectivity between staff and youth was associated with increased youth safety, better decision making, lessened engagement in anti-social activities, and more fundamentally, stronger

relationships with social organizations, their staff, and their programs. As this study found that participant intensity of use levels rivalled those of the general population, it is incumbent upon social organizations and funding agencies to modernize their approaches to connecting with these populations and to explore mandating the use of ICTs as part of their service delivery models. An updated standard for technology use guideline developed by the Manitoba College of Social Workers could inform the integration of ICTs into service delivery models by social organizations and help to ensure that technologies are used as safely and as ethically as possible by both trained social workers and untrained youth workers alike.

4.7.3 Development of ICT Based Programming by Homeless Youth Serving Organizations

Homeless youth serving organizations should be actively exploring how the use of ICTs may be developed into formal programming to meet the needs of their clients. For organizations interested in doing so, the results of this study offer a number of potential starting points and some guidance on how and where programming should be directed. Programming should be focused on helping homeless youth meet core needs outlined within this study and should build on the innovative ways in which they are already known to be using ICTs. Homeless youth have shaped their use of technologies, and technologies themselves, to meet a set of needs specific to their social location, and social organizations should take their lead and leverage their innovations accordingly.

Study participants reported using ICTs extensively for the purpose of connecting with temporary labour opportunities using online classifieds services such as Kijiji or

through social media sites such as Facebook. While there are valid concerns around whether or not these forms of employment translate into long term employable skill sets, social organizations should be closely examining the ways in which homeless youth are currently using ICTs to access employment opportunities and identifying whether or not they have a role to play as intermediaries in these transactions. Respondents to the study identified that while they would much rather be working in regular forms of employment, informal temporary labour was simply the only form of work they could access. Social organizations should therefore examine the potential for developing employment programming which leverages the apparent connectivity between homeless youth and the purchasers of temporary labour in the interest of regulating these relationships, increasing safety levels for all parties, and for using these labour opportunities to springboard into the mainstream economic market. This may take the form of a social enterprise, or some form of non-profit business, where a social organization could offer temporary labour services to interested parties. In addition to exploring the development of employment related programming which builds upon the unique ways in which homeless youth are currently using ICTs to access temporary labour opportunities, social organizations should seek to develop formalized programming which could teach their clients how to perform job searches online. Many respondents identified that this type of programming would be helpful as they were either self-taught or felt that they possessed a limited knowledge of how to use the internet for this purpose.

Social organizations should consider examining how some of the innovative uses of social media which were identified by respondents to this study may be developed into programming. This is a significant area of opportunity as respondents identified the

predominance of this particular technology in their practices of survival. This programming could be delivered by social agencies as a tutorial which would serve to review some of the more impactful uses of ICTs by homeless youth. As outlined in the findings, participants reported using social media to work towards rebuilding broken relationships with family, for detaching or disconnecting from relationships which were known to bear a negative influence upon their lives, and to increase connectivity between networks of support such as distant family members and social agency support staff. These represent a disparate handful of examples drawn from the findings of this study, but the strategic use of social media could be further broken down into specific categories of use, including self-development and presentation of self. Interested social organizations should seek to further understand the use of social media by homeless youth and to find ways of helping them share knowledge and innovations within their community. This programming would be low cost and could significantly improve the capacity of recipients to navigate the realities of being homeless.

Findings from the study identified a number of potentially high value opportunities for ICT based programming which could be delivered by social organizations capable of allocating staff resources to such efforts. While the focus of this study is not to prescribe the specific types of programming which should be delivered, two opportunities for ICT based programming were broadly discussed. The opportunities described do not seek to present ICTs as a solution to coping with the challenges of being homelessness, but the potential of technologies to improve the lives of homeless youth cannot be ignored. The development of ICT based programming should be guided by the ways in which these populations are already using ICTs and should build upon the novel

and creative approaches to technology use which homeless youth have devised in response to their social and economic needs.

4.8 Limitations

As the study was only conducted in one Canadian city, the ability to generalize the findings within the Canadian context is minimized. Further, homelessness in Winnipeg is relatively distinct from homelessness in a number of other Canadian jurisdictions due to the overrepresentation of Aboriginal peoples among homeless populations (Higgitt, Wingert, Ristock, 2003; Baskin, 2007). Relating to this concern, all of the respondents to this study self-identified as being Aboriginal or Metis. Findings from this study may therefore be less applicable to other Canadian jurisdictions where homeless populations are more culturally diverse. Further, as the entire sample was either Aboriginal or Metis, the practices of ICT use identified throughout the interviews may specifically reflect experiences of Aboriginal and Metis peoples in Manitoba. As this research did not set out to specifically examine the use of ICTs by Aboriginal or Metis homeless youth, and given limitations in expanding the scope of the project, the researcher was unable to specifically probe or more deeply examine the relationships between the perspectives of participants and indigenous history in Canada. Given that every one of the study participants shared some form of Aboriginal ancestry, and considering that homelessness is one of the core social ills which has manifested in response to the colonial experience, the lack of focus on these relationships and their meaning constitutes a significant limitation of the study.

Due to the decision to focus more broadly upon the use of information and communication technologies (ICTs), and to use this term throughout the interview process, data presented within the study does at times fail to distinctly identify which form of technology is being referenced. In some instances, when participants are referring to their use of a mobile phone, there is a lack of clarity as to whether or not they are using it for the telephoning purposes, social media, the internet, or text. Where ever possible, distinctions are made in the findings, however, the failure to be more specific throughout the interview process creates some limitations in knowing precisely which form of technology is being referenced by participants.

Lastly, while the study sought to interpret data through the lens of SCOT and MLP theory, it did not explicitly seek to use SCOT or MLP frameworks for examining socio-technical transitions. The SCOT and MLP frameworks for examining socio-technical transitions are robust and their deployment would have necessitated undertaking a much larger project. The limited deployment of these theories therefore resulted in a relatively superficial application of SCOT and MLP thinking to collecting and analysing data.

4.9 Future directions for research

More study is required to develop a clearer understanding of the whether or not increased levels of ICT connectivity experienced by homeless youth in Canada are resulting in greater levels of access to resources. The current study is a starting point, and studies should be organized in cities across Canada to improve our collective understanding of

how ICTs increase access to material and social resources for these populations. Future studies could also be more specific in focusing on the effectiveness of ICTs as tools for accessing temporary housing, temporary employment, medical needs, or any one of the specific needs outlined in this study. While this study has provided some insight into the ways in which ICTs can facilitate access to these resources, little is known about the impact of this connectivity on social, economic, and health related outcomes. Given the increased levels of ICT based connectivity of homeless youth, studies focused on examining long term outcomes may be more feasible. Due to the enormous potential of ICT based connectivity between homeless youth serving staff and homeless youth, further studies should seek to examine the outcomes of this connectivity. While this seems self-evident, many homeless youth serving organizations have taken a hands-off approach in encouraging their staff to work with clients through the use of ICTs. Research highlighting the potential of this increased connectivity could encourage social organizations to consider mandating ICT use as part of their service delivery models. Notions of the digital divide should also be further explored in future research. New studies could focus on examining whether the increased levels of ICT connectivity experienced by homeless youth populations is resulting in greater levels of social inclusion, or if the specific ICT based practices of homeless youth actually lead to further isolation and exclusion from broader society. Lastly, more research should be undertaken to further understand the ways in which online acts of self-expression and identity management are sometimes indirectly used by homeless youth to access resources. This study provides some initial evidence relating to these practices but more study is required.

CONCLUSION

Despite perceptions of ICTs as distractions or mere forms of recreation which prevent youth from engaging in productive or meaningful activity, this study provides preliminary evidence to suggest that homeless youth populations in Manitoba have appropriated ICTs into their everyday practices of survival and are increasingly reliant upon internet access in order to meet their basic needs. While early research in this field suggested that homeless youth were not strongly connected to the internet (Redpath et al., 2006), study participants were found to be connecting to the internet an average of seven hours per week through access provided by social agencies, public institutions, and often through their own tenacity and willingness to travel great distances to ‘catch a signal’. Yet, the significance of this research is not that homeless youth were found to be using the internet at levels similar to that of the general Canadian population, but instead that they were found to have shaped their use of ICTs and the internet in ways which were entirely responsive to the realities they face on the street.

ICT based practices of survival identified in this study were organized into three broad categories: ‘connecting to resources’, ‘connecting outwards’, and ‘developing the self’. Practices organized under ‘connecting to resources’ represent those uses of ICTs which bring youth into contact with housing, employment opportunities, health and medical assistance, emergency safety, as well as formal supports working with social agencies. Evidence was provided to suggest that respondents were heavily reliant upon ICTs for the purposes of accessing temporary housing and employment opportunities, and several respondents reported examples of ICTs playing an integral role in keeping

them safe during emergency situations.

‘Connecting outward’ organizes practices of ICT use which are geared toward building interpersonal relationships and increasing levels of social inclusion through participation in mainstream culture and recreation. For many respondents, isolation from family and peer groups ‘back home’ results in extreme feelings of loneliness. Initial evidence was provided to suggest that ICT based communication practices play an important role in stabilizing mental health and improving the likelihood of positive decision making among homeless youth. Further, some evidence was provided to suggest that the ability to connect with mainstream culture, such as modern television programs or music, was correlated with reduced feelings of depression and loneliness, as well as an increased sense of being included within broader society.

The category of ‘developing the self’ organizes ICT based practices which were geared towards self-expression, self-improvement, and managing presentation of self. ‘Status updates’ were found to sometimes be used by respondents as an indirect means of reaching out for psychological and emotional supports. Initial evidence was provided to suggest that support staff were able to effectively use social media based connectivity, and their visibility on client statuses, to make impactful modifications to their service delivery. Further, some respondents reported using ICTs to connect with Aboriginal cultural resources and that this easy connectivity to their culture reinforced pro-social decision making and steered them away from engaging in anti-social behaviour.

The thesis concludes with three policy and program related recommendations, beginning with the need to reduce barriers to ICT access for homeless youth populations. While the results of the study suggest that homeless youth are more connected to ICTs

than ever before, many barriers to access continue to exist. Homeless youth serving organizations should be working towards the development of programming which offers homeless youth access to older model smartphones at no cost, and further, social organizations and the City of Winnipeg should be seeking to ensure that wifi signals are accessible outside of their buildings at all hours of the day. Next, given significant potential which was identified in this study, it is recommended that social organizations seek to integrate ICTs into their service delivery models and work towards increasing connectivity between formal support staff and homeless youth wherever appropriate. Increased connectivity should be guided by a standard of practice for technology use by social workers and youth care workers which could be developed by provincial policy makers or the Manitoba College of Social Workers. Lastly, homeless youth serving organizations should be working towards the development of ICT based employment programming which leverages the innovative ways in which homeless youth were shown to be connecting to the purchasers of temporary labour. Interested organizations and policy makers should further consider the development of social media focused programming which builds on the innovative survival practices currently being exercised these populations.

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Appendix A: Interview Schedule

1. How old are you?
2. What is your gender?
3. How would you describe your ethnicity?
4. What level of education have you obtained?
5. Do you consider yourself homeless?
6. Have you had involvement with a child and family services agency?
7. Do you have a job?
8. Can you talk about a time when you struggled to find housing, employment, or health information, and what you did about it? How did you find info?
9. We're here to talk about when you use technology. What do you own? When do you use it, and why?
10. What are the benefits to using these technologies? What are the costs and negatives?
11. What recommendations would you make to agencies or organizations about technologies and how they benefit youth who are dealing with issues of homelessness? What would you like to see?
12. Relating to what we discussed, how is your use of technology different in the winter from in the summer? Do you use it differently because you are a man/woman?

Appendix B: Questionnaire

1. How many times per day do you get online? _____ Per week? _____

2. Please indicate how many times per day you use each of the following (check one for each question):

a) Social Media Sites:

- Several times per day ____
- Once a day ____
- Once every couple days ____
- About once per week ____
- Less than once a week ____
- Never ____

b) Email:

- Several times per day ____
- Once a day ____
- Once every couple days ____
- About once per week ____
- Less than once a week ____
- Never ____

c) Internet:

- Several times per day ____
- Once a day ____
- Once every couple days ____
- About once per week ____
- Less than once a week ____
- Never ____

d) Mobile phone:

- Several times per day ____
- Once a day ____
- Once every couple days ____
- About once per week ____
- Less than once a week ____
- Never ____

3. Do you use the internet, social media, email, or a mobile phone to find job opportunities? Y__ N__

4. Do you use the internet, social media, email, or a mobile phone to find housing? Y__ N__

5. Do you use the internet, social media, email, or a mobile phone to find health info?
Y__ N__

6. Where do you get online? Please check all that apply:

- Social service agencies__
- Public library __
- Where you are currently living __
- Friend's place __
- Cafes or public restaurants with wifi __
- My cell phone ____
- School ____
- At work ____
- Other__
- Nowhere ____

7. Who do you communicate with when you use email? Please check all that apply:

- Parents (including foster or step family) __
- Sisters, brothers, cousins, or other family members __
- Case workers, social workers, staff at social agencies __
- Friends or associates you know from the streets
- Friends or associates you met online __
- Boss or employer at your job __
- Potential employers, looking for work ____
- Potential housing providers____
- Other__

8. Who do you communicate with when you use social media sites? Please check all that apply:

- Parents (including foster or step family) __
- Sisters, brothers, cousins, or other family members __
- Case workers, social workers, staff at social agencies __
- Friends or associates you know from the streets
- Friends or associates you met online __
- Boss or employer at your job __
- Potential employers, looking for work ____
- Potential housing providers____
- Other__

8. Who do you communicate with when you use texting? Please check all that apply:

- Parents (including foster or step family) __
- Sisters, brothers, cousins, or other family members __
- Case workers, social workers, staff at social agencies __
- Friends or associates you know from the streets
- Friends or associates you met online __
- Boss or employer at your job __

- Potential employers, looking for work _____
- Potential housing providers_____
- Other_____

Appendix C: Summary responses to interview and questionnaire

Response summary data sheet	1	2	3	4	5	6	7	8	9	10	11	12	13
Age	18	22	21	18	22	20	19	25	21	18	25	25	18
Gender	F	M	transgender	M	M	M	M	M	M	F	M	M	M
Ethnicity	Aboriginal	Aboriginal	Mixed heritage	Mets	Mets	Inuit	Mets	Aboriginal	Aboriginal	Aboriginal	Aboriginal	Mets	Mets
Level of education (highest completed)	Grade 9	Grade 11	Grade 12	Grade 11	Grade 10	Grade 9	Grade 8	Grade 12	Grade 9	Grade 9	Grade 10	Grade 12	Grade 10
How many times a day do you get online?	10-15	10	5	6	2	5	5	10	5	15-20	15	5	7
How many hours per day do you spend online	1.5	1.5	1	1	0.25	1	1.5	1.25	0.5	1.5	1.5	0.5	0.75
How many times per day do you use social media?	Several per day	Once a day	Several per day	Several per day	Once a day	Several per day	Several per day	Several per day	Once a day	Several per day	Several per day	Several per day	Several per day
How many times per day do you use email?	Once every couple	Less than once/week	Once a day	Several per day	Once a day	Never	Never	Several per day	Never	Less than once	Less than once	Never	Never
How many times per day do you use the internet?	Several per day	Several per day	Several per day	Once a day	Once a day	Several per day	Several per day	Several per day	Several per day	Once every couple	Several per day	Less than once	Once per day
How many times per day do you use a mobile phone?	Several per day	Several per day	Several per day	Several per day	Several per day	Several per day	Several per day	Several per day	Several per day	Several per day	Never	Several per day	Several per day
Do you use ICTs to find job opportunities?	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y
Do you use ICTs to find housing?	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y
Do you use ICTs to find health information?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y

Appendix D: Coding progression – Focused Coding Summary V1.0

Note: each line below summarizes an initial code which was written in pencil on the transcripts as well as page number from interview.

Participant 1

Looked for housing online – 9
Feeling negative about experience of searching for housing online, rejected – 9
Searching for housing online – 10
Being aware of challenges faced by youth with no rental history – 10
Going to kijiji to find employment – 10
Lacking awareness of where to access health info online – 11
Lacking certainty about what constitutes good info online - 11
Ingenuity in finding health info online – 11
Identifying how icts greatly reduce difficulty in finding medical assistance/resources – 11
Relying on others to get basic IDs – 11
Needing to rely on others to use their mobile phone – 12
Recognizing that it would be challenging to find info without icts – 12
Recognizing importance of having a mobile phone as homeless youth – 12
Being reliant on ICTs to stay connected as a homeless youth – 12
Being aware of how ICTs provided assistance during dangerous situation/connecting with assistance during dangerous situation using mobile – 13
Relying on others to pay costs associated with using ICTs as homeless youth – 13
Being concerned about having ICT stolen or used improperly – 14
Relying on library/public institutions to access internet – 15
Using ICTs to stay connected – 16
Using ICTs to signal to others that you are safe/ok – 16
Using ICTs to let others know what you are doing – 16
Dealing with boredom/isolation through use of ICTs – 16
Staying connected and aware of what others are doing through ICTs – 16
Being able to confirm well-being of family using ICTs – 16
Using ICTs to access emergency assistance – 16
Relying on ICTs to help access food or money -17
Feeling that access to ICTs is cost prohibitive/unable to afford access to ICTs – 17
Feeling access to ICTs should be universal/right – 17
Being unable to afford access to ICTs – 17
Using ICTs to stay connected to the outside world – 17
Using ICTs to access economic opportunities – 17
Feeling access to ICTs should be universal – 18/25
Identifying wifi access as something which could assist homeless individuals – 18
Seeing ICT access as vital to helping homeless youth access “support” – 18
Identifying ICTs as a place of risk for sexual exploitation and “being used” – 18
Identifying ICTs as a place of risk for sexual exploitation and “being used” – 19 x 2
Using ICTs as a means of storing information – 19
Losing control/power over information when using ICTs – 20

Feeling that privacy/information security is at risk using ICTs – 20 x 2
Feeling that homeless individuals would benefit from learning ICT skill sets – 21 x 2
Identifying gap in ICT knowledge between younger + old homeless populations – 21/24
Identifying ability of younger homeless generation to teach older homeless generation how to use ICTs – 21
Identifying importance of offering wifi access to homeless youth w/controls in place to prevent searching of inappropriate material – 22/23/24
Feeling that women use ICTs more appropriately than men – 23 x2
Identifying importance of supervising use of ICTs by homeless girls – 24
Identifying ICTs as a place of risk for homeless females – 24
Feeling ICT education should be free to all – 24
Identifying importance of ICTs in staying connected to family – 25
Using ICTs to stay connected and get healthier – 25
Seeing ICT use as means of staying safe as it increases sedentariness – 25
Seeing risks to real world relationships caused by overuse of ICTs – 25
Seeing ICT overuse as a form of addiction – 25
Seeing use of multiple profiles by homeless youth – 25/26

Participant 2

Using video game consoles to get online – 5
Feeling that using ICTs is a waste of time – 6
Feeling addicted to use of ICTs – 6
Using email as a means of storing passcodes and accessing social media sites – 7
Seeing email as having little value – 7
Using email exclusively to look up employment opportunities – 7
Feeling addicted to ICTs – 7/17/19/20 x 2/21/22/24
Feeling lost and needing to rely on ICTs for medical information – 8
Relying on libraries to access ICTs – 9/16
Relying on others to gain ICT access – 9
Relying on free wifi in public spaces – 9
Using ICTs to look for housing – 15/16
Using ICTs to seek employment opportunities – 16/19
Having negative experiences using ICTs to seek employment – 17
Realizing that ICTs are powerful way to seek employment – 17
Experiencing challenges in accessing ICTs due to economic limitations – 17/25
Using ICTs to cope with boredom – 17
Identifying differences in ICT usage between younger and older homeless populations – 18
Feeling that homeless youth would be “lost” without ICTs/ICTs are invaluable to homeless populations – 19/31
Staying connected to friends and family using ICTs – 19
Using ICTs to find shelter – 19 x 2
Feeling that ICT use is holding back potential and encouraging laziness – 20/21 x2/22/29
Using ICTs as means of coping with boredom of being homeless – 21/24 x 3/29*
Feeling impact of ICTs may be more negative than positive – 21/29

Feeling that homeless youth need to know how to use ICTs “in the right way” or instrumentally – 22
Relying on social media to stay connected with family – 22 x 2/25
Using ICTs in winter to pass the time – 23
Relying on ICT to stay safe and find shelter – 25 x 2/26
Owing money to telecom company and finding dishonest means of retaining ICT connectivity – 25
Using ICT to access social supports during time of need – 26
Feeling that lack of equal access to ICTs for homeless youth is unfair – 27
Seeing ICTs as necessary in helping homeless youth communicate to obtain access to what is needed – 27 x 2
Seeing ICT access as important for helping homeless youth in emergencies – 27
Feeling that homeless youth are using ICTs in many of the same ways as housed peers – 28
Feeling that ICTs facilitate job search processes – 29
Feeling ICTs played important role in keeping self safe – 31
Feeling that ICTs play a role in helping homeless youth but that individual use of ICTs is determining factor – 31*

Participant 3

Coming to grips with how self is being presented in social media environment – 5
Eliminating online connection to sever negative social tie – 6 x 2
Using several email accounts/social media accounts at same time to allow for multiple selves – 7 x 2
Feeling addicted to ICT usage – 8/29/30
Feeling unproductive due to addiction to ICTs – 8
Using ICTs to find employment opps – 8
Using ICT to access emergency counselling services – 9
Identifying psychological impact of using ICT to access health information – 9/10
Being denied access to internet at library due to fees – 10
Feeling wifi should be universally accessible – 11 x 3, 12
Identifying ways in which public spaces could be used to provide wifi and assistance to homeless youth – 12
Identifying information security risks of using ICTs – 12
Using email to stay connected – 13
Feeling that email provides advantages in communicating with government staff or other agencies – 13
Using ICTs creatively to obtain what is needed faster – 14
Using email predominantly to find housing – 14
Identifying that ability to connect with prospective renters through ICTs increases presentability – 15
Having limited access to ICTs can minimize opps to find housing – 15
Feeling disadvantaged compared to economically privileged people in seeking housing due to lesser access to ICTs – 15
Blocking negative connections on social media – 15

Increasing economic opportunities through access to ICTs – 16
 Using ICTs creatively to get access to instrumental resources – 16
 Seeing relationship between expressed self online, including photos, and likelihood of being successful in accessing housing – 17
 Becoming aware of need for privacy on ICTs, how to better control privacy on social media – 17
 Becoming aware of presentation of self online – 17
 Using texts to stay connected to family and remaining happy – 17/19
 Accessing moral support through social media – 18
 Staying connected to family through ICTs, rebuilding broken relationships with family through ICTs– 18/19
 Using ICTs to create linkages between informal and formal support networks – 18
 Implying that connectivity to anti-social peers online creates increased risks – 18
 Seeing importance of using ICTs to stay in contact with formal supports and social workers – 20
 Seeing ICTs as a creative outlet – 21
 Using ICTs to gain access to housing – 25
 Obtaining access to housing because of ICTs – 26
 Using creative means of accessing wifi – 27
 Being at increased risk due to ways ICTs facilitate stalking – 27
 Reducing use of ICTs to increase personal safety and reduce likelihood of sexual exploitation, learning how to use ICTs more safely – 28/29 x 2
 Realizing that improper use of SM can create increased personal safety risk – 28
 Seeing risks in sharing opinions in social media environment – 28
 Using ICTs to facilitate sexual exploitation of self - 29
 Using ICTs to manage parts of life which previously managed by guardian – 30*
 Using ICTs to stay connected to family – 30/31 x 2
 Using ICTs to assist during emergency – 30
 Seeing ICTs as a way for homeless youth to keep their social groups safe – 30
 Feeling that ICTs can create significant risks to homeless youth and can propagate homelessness – 30
 Losing oneself and identity through ICT usage – 30
 Staying connected to formal supports through ICTs – 31
 Seeing ability to control who you're connected to and who can see your profile as a means of retaining control and power over your life – 31*
 Seeing importance of ICTs in helping to gain access to educational opps – 31
 Using ICTs and social media to maintain anti-social street based connections – 32
 Use of multiple profiles on social media– 32/33/35/41
 Seeing use of multiple profiles a positive in different social categories, but as “illness” when used by homeless individuals – 33/34
 Cleaning up old online self in attempt to improve lifestyle and image – 34 x 2
 Seeing dangers in creating online selves which cannot easily be erased - 34
 Seeing opportunities for presence on social media to have positive effect on peers – 34
 Blaming ICTs for creating feeling of being cast away and out of control of self – 35
 Seeing risks in over connected world – 3
 Identifying importance of creating spaces where ICTs can be accessed in high risk

communities, such as small technology based wireless cafes – 36/37
 Identifying that presence around pro-social influences in creative and open environment where ICTs can be accessed would reduce anti-social behaviour – 37
 Feeling that ICT access should be universal - 37
 Seeing ICT access as potentially significant factor in helping homeless youth get off street – 38
 Using technology to cope with loneliness – 39
 Using ICTs as recreation and distraction – 39, 40 x 2
 Identifying that use of ICTs can lead to more isolation and lack of productivity – 39
 Seeing ICTs and mobile phones as tools for success and productivity – 40
 Seeing the use of multiple profiles as promoting “inconsistencies of self” and leading to worsening health outcomes, reducing to one self is route to improvement – 41/42
 Identifying importance of parental control for youth at risk when using ICTs – 41
 Seeing risks for drug users in ICT use – 42
 Identifying risks to face to face social relations through over-reliance on ICTs – 42
 Feeling that social media devalues human connections – 42
 Identifying role of self in determining technology use and improving consistency of self – 42/43
 Feeling that having multiple selves in social media has negative repercussions – 44
 Seeing ICTs as a way of keeping safe and staying on a good path – 44
 Seeing ICTs as a way to seek out true identity, things to aspire to - 44

Participant 4

Conveying extreme reliance on ICTs – 1
 Using mobile phone for distraction and recreation – 1/14
 Relying on email as core means of connecting to employers – 2
 Seeing government websites as legitimate source of information – 2
 Teaching self how to find legitimate sources of health information online – 3
 Using ICTs to locate housing – 7/12
 Using social media to connect with formal social supports – 7
 Using ICTs to find emergency shelters and supports for homeless youth – 10 x 2
 Identifying potential challenges as homeless youth in accessing resources without ICTs – 10
 Experiencing challenges in accessing ICT due to income limitations – 11
 Relying on ICTs to communicate with peers and find shelter – 11
 Using ICTs to remain connected to family and maintain difficult family relations – 11
 Identifying lack of awareness of where ICTs can be accessed by general public – 11
 Seeing challenges in living life without access to ICTs – 12
 Identifying reliance on mobile phones to find shelter in emergencies – 12
 Using ICTs as a means of finding employment – 13
 Accessing health information to get through health challenges using ICTs – 13
 Using ICTs to access health info in emergency situation – 13 x 2
 Using ICTs to deal with boredom/isolation as homeless youth – 14 x 2/15
 Losing ICT device and emotional experience as low income person – 15 x 2
 Being given access to an ICT by a formal support, relying on others for ICT access – 15

Using ICTs as storehouse of data and personal information – 16
 Experiencing difficulties keeping track of passwords – 16
 Using ICTs to cope with stress and “getting through the day” – 16
 Experiencing happiness as a result of ICT access – 16/17
 Feeling that ICTs provide access to boundless opportunities – 16
 Seeing use of ICTs as a luxury – 17
 Seeing ICTs as important source of recreation for homeless youth – 17
 Identifying importance of mobile devices in helping homeless youth access information easily – 17
 Identifying ICTs as useful learning tool – 17/18
 Attributing improvements in spelling and grammar to ICT use – 18
 Seeing ICTs as something which distracts homeless youth, makes them less patient – 18
 Identifying role of individual in determining way ICT is used, not other way around – 18
 Seeing ICTs as simplifying access to anti-social opportunities, but not as the cause – 19*
 x 2
 Identifying ICTs as commonly used tool in criminal activity among at-risk youth – 19 x 2
 Using alternative and lesser known social media sites to engage in criminal activity – 19
 Identifying familiarity with use of multiple profiles – 20
 Seeing racial divides in access to ICTs, whites as privileged and having greater access – 21 x 2
 Seeing fluidity of ownership of devices as homeless individual – 21
 Valuing ICTs in multiple ways versus housed population – 21
 Seeing importance of giving homeless youth access to ICTs with easy to navigate employment information and opps – 23/24
 Seeing ability to access ICTs as essential to living a normal life – 24
 Seeing use of ICTs as addiction – 24
 Seeing ICTs as way of making life easier – 24
 Using Kijiji for multiple purposes (jobs, housing, etc) – 25
 Seeing ICT use as gendered, homeless females as using ICTs for more superficial and insubstantial purposes – 25 x 2
 Feeling that ICT access should be universal, “a right” – 26/27
 Seeing lack of access to ICTs for homeless youth as an income issue – 27
 Seeing ICTs as a way of shrinking world, making physical distance unimportant – 27
 Using ICTs to stay connected to those who are far away – 27
 Seeing ICTs use as a way of making low income life more manageable – 27
 Seeing ICT access for homeless youth as fundamental in remaining connected to family – 28*
 Seeing ICT as a way of dealing with isolation and remaining connected - 28

Participant 5

Identifying email as being something which is used to access other ICT sites – 2
 Identifying social media as core ICT for connections – 2
 Viewing social media as predominant ICT, even for employment – 2
 Relying on ICTs to locate employment opps – 2

Using Kijiji to locate housing (sometimes quasi legal) and employment opps – 3/10 x 2/11

Using Kijiji to assist in finding employment opps 11

Using ICTs to assist in locating medical services and accessing health info – 3 x 2

Having concerns about validity of health info found online – 4 x 2

Finding employment opps online – 5

Using Kijiji to assist in finding employment opps – 11

Learning about existence of health supports through ICTs – 12

Relying on mobile phone to remain connected – 13

Relying on mobile phone to assist in directions – 13

Identifying usefulness of having public access to ICTs for job search and housing for homeless populations – 13

Relying on ICTs for staying in contact with formal supports – 13

Using ICTs to assist in getting access to resources – 13

Perceiving class/wealth and being a determining factor in who gets access to ICT's – 14

Seeing little difference in the way housed and unhoused youth actually use ICTs – 14

Identifying importance of self-control in using ICTs – 14

Being aware of overuse of social media and its impact on self – 14

Seeing ICT use as being addictive/addiction – 14/18 x 3

Identifying over-reliance on ICTs as having a negative impact – 14

Seeing ICTs as increasing access to negative material – 15*

Seeing ICTs as way of facilitating access to criminal activities – 15

Feeling unsure about benefits of technology use – 16

Using ICTs to connect to formal supports, letting know they're safe – 16

Feeling that ICTs may overtake us, make us less important – 17

Connecting advancement of ICTs with reduced meaningfulness of life, reducing our purpose – 17 x 2

Seeing ICTs as causing laziness/inactivity – 18

Getting lost in ICT use – 18

Seeing ICT overuse as risk to living a normal life – 18

Identifying risks of ICT overuse causing laziness while acknowledging its use in dealing with loneliness and boredom – 18

Seeing ICTs as important tool for homeless youth accessing resources – 19

Identifying importance of ICTs in helping homeless youth access housing and employment opps – 19

Seeing ICTs a means through which a homeless youth can “change their life” – 19

Seeing impact of ICTs on homeless youth as multifaceted and complex – 19

Identifying importance of helping homeless youth use ICTs productively, creating employment sites specific to homeless youth populations – 20

ICTs as tool for connecting in person with people in summer and dealing with boredom in winter – 20

Seeing female use of ICTs as being more varied than use by males – 20

Seeing ICT use by males and females as gendered along typical gender lines – 20

Thinking of ICTs and their impact as being complex, not simply positive or negative – 21/22

Seeing ICTs as something which breeds laziness – 21

Identifying that lack of access to ICTs would make info and resources harder to obtain
Identifying how ICTs facilitate access to formal supports – 22
Seeing risks of being monitored or hacked due to ICT usage – 22
Identifying challenges faced by homeless youth in accessing ICTs due to economic challenges – 23
Seeing need for convenient access to ICTs for homeless youth – 23
Seeing ICTs as being important tool helping HY access housing and employment opps - 23

Participant 6

Using Kijiji to look for housing opps, identifying its utility in finding housing – 5
Using ICTs to find housing opportunities – 10
Using ICTs as a means of storing information (including informal banking) – 12 x 2
Seeing ICTs as a way to combat boredom – 13
Seeing ability to use ICTs as part of living a “normal” life – 13
Relying on ICTs to assist in finding directions and transportation – 13
Seeing utility of ICTs in emergency situations – 14
Using ICTs to stay connected with family over long distances – 14
Seeing ICTs as a “meeting ground” – 14
Seeing ICTs as a way of obtaining love – 14
Seeing social media as a mechanism for connecting to others – 15
Feeling that social media is a place of judgement – 15
Feeling that wealthier youth are less restricted in their use of social media – 15
Seeing social media instrumentally as a tool to be used for connecting with friends and family – 16
Seeing ICTs as a tool which can be used to keep safe and getting help – 16
Using ICTs to remain up to date on family health – 16
Seeing social media as a means of staying connected with relations who are also disconnected from society – 16
Seeing ICTs as invaluable mechanism for connecting/reconnecting with family – 17 x 2/26
Seeing ICTs as a means of accessing housing and EIA – 18/26 x 2
Identifying ICTs as a principal means for youth to access drugs – 18/19
Using alternate languages and codes to discuss anti-social behaviour on social media – 19
Seeing ICTs as place of risk of sexual exploitation – 19/20
Seeing social media as a mechanism which makes victimization easier – 20
Teaching self how to use ICTs in absence of formal teachings/learning to use ICTS instrumentally from peers – 20/21 x 2
Seeing ICTs as useful for finding employment – 21
Identifying summer as a time of increased “drama” on facebook – 22
Blocking friends on social media, shedding negative connections – 22
Seeing social media as a providing a convenient and less confrontational mechanism for removing undesirable peers from social circle – 22/23
Using social media to create a positive space for oneself– 23 x 2
Seeing ICTs as providing opportunities to change lifestyle for homeless youth – 24

Seeing ICT use as gendered in stereotypical fashion – 24
Seeing ICTs as making life a little easier for homeless youth , reducing physical distances – 24
Feeling that ICTs provide important mechanism for staying connected to family – 24
Feeling that ICTs are like a drug, addictive -24/25
Seeing ICTs as contributing to isolation and as a “motivation killer” – 25
Feeling that ICTs are important tool for getting stuff done – 25
Feeling that ICTs increase physical safety of homeless youth -25

Participant 7

Seeing email as being a way of accessing social media – 1
Using ICT’s to explore information about careers – 2
Using ICT’s to access “under the table” work – 2
Using ICTs to look up health related information – 4/14/16
Seeing lack of ICT connection to a social worker as a missed opportunity – 7
Using ICTs to access the informal economy – 13/14
Identifying libraries as places where ICTs were accessed – 14/17
Seeing Wikipedia as a reliable source of information – 15
Seeing online info as being unreliable – 16
Seeing use of ICTs as being “therapeutic”, as a painkiller – 18 x2
Seeing ICT use as addiction – 18/23/24
Accessing culture as therapy – 19
Feeling that ICTs assisted in preventing from entering justice system – 19
Seeing ICTs as a way to maintain and manage relationships during periods of personal change – 19
Being adversely affected by online presence of friends who have died – 19
Thinking of social media as important tool for staying connected and maintaining relationships – 21
Getting rid of negative influences in online environment in effort to improve real life – 22
Using help of formal supports to eliminate online connections – 22
Using ICTs to remain connected to pro-social peers – 23
Using social media as platform for exploring identity and self-expression – 23/25/26 x 2
Social media as important tool for staying connected or “in the loop” – 23
Feeling that social decisions shape use of technology* - 24
Feeling that better access to ICTs as a youth could have improved decisions – 25
Being unsure about impact of ICTs on oneself – 25
Seeing social media as a way to construct identity, defining self – 26
Using ICTs to connect with formal social supports, being “found” when lost – 27*
Seeing ICTs as way of remaining connected to negative peer group but at a distance – 27
Feeling that ICTs are incredibly important way for homeless youth to access resources – 28
Feeling that ICTs can promote productivity – 29
Seeing ICTs as a means of staving off depression and loneliness – 29

Participant 8

Relying on social agencies to access ICTs – 3
 Using Kijiji to find informal employment – 3/16/28*
 Using ICTs to access health information during time of need – 4
 Seeing social media sphere as “personal life” which formal supports should not be involved in – 8
 Using ICTs/video games as an escape – 13
 Seeing ICTs as much needed form of entertainment for youth in care – 13
 Meeting pro-social connections in on-line environment – 14
 Using ICTs to make connections outside of normally accessible social sphere – 14
 Using ICTs to cope with loneliness – 14/26
 Obtaining access to housing using ICTs – 15
 Successfully finding employment through use of ICTs – 16
 Using ICTs as a tool for self-expression – 17
 Using ICTs as a way to explore identity, for self-expression – 17/27
 Using ICTs to educate self – 19
 Seeing ICTs as important to accessing jobs and housing – 19* x 2/27 x 2
 Seeing ICTs as important tool for staying connected – 20
 Using ICTs to maintain strong pro-social personal connections – 21
 Using ICTs as a way of coping with depression – 21
 Using ICTs to remain connected with formal supports – 21
 Seeing ICT use as addictive, getting lost in ICT use - 21/22
 Using multiple profiles as a way of creatively managing relationships – 23/24
 Thinking of ICT access as a something which people should have a right to – 24
 Seeing ICT access as important in finding employment opps – 25
 Feeling that ICTs provide escape from difficulties of being homeless – 27*
 Feeling that amount of influence of ICTs is “scary” – 28
 Seeing time being wasted online, feeling ICTs can be non-productive – 29

Participant 9

Relying on others to access ICTs – 2 x 2
 Going to public places to access wireless – 2 x 2
 Catching a signal – 2**
 Having difficulty affording the internet – 2
 Selling off ICTs to pay for food – 3/21/22/23
 Lacking interest in email, seeing it as needed only for access to social media – 4
 Using ICTs to self-educate and explore interests, be inspired to learn more – 4
 Using self-guided learning and internet to escape reality of being homeless – 5
 Learning about indigenous culture through ICT usage – 5/25*
 Attributing use of ICTs to helping stay on a positive track – 6**
 Seeing positives and negatives associated with ICT use – 6
 Seeing ICTs as a placing people at risk of being monitored, form of control – 6/7 x 2/15
 Recognizing lack of ID’s as limiting access to public ICTs – 10
 Racializing lack of understanding of ICTs, seeing Aboriginals as being less likely to understand technology – 12

Using ICTs to connect with family over long distances – 13 x 3
 Seeing online connectivity as not being “real” – 13
 Thinking of ICT use as taking away hope or purpose – 13
 Getting rid of online friends to stay safe in real world – 14 x 2*
 Using ICTs to look for housing – 20
 Feeling less connected after selling ICT device – 23
 Identifying messages from friends as “signals” – 23
 Relying on wifi in public spaces to connect with friends and stay in touch – 23
 Relying on friends ICTs devices to go online – 23
 Seeing ICT use as a potential waste of time/decreasing productivity – 24
 Using ICTs and internet to self-educate and develop knowledge – 25
 Seeing ICTs being used to help homeless youth stay safe – 26* x 2
 Using ICTs as a way to find a place to sleep – 26
 Seeing online environments as a space of hope and possibility – 28* x 2
 Seeing social media as environment where people are not who they say they are – 29
 Seeing social media as creating risks, as being unsafe – 29
 Seeing opportunities for social organizations to use ICTs to assist homeless youth to access the “stuff they need” – 30
 Seeing ICTs as something which prevent people from living “real life” – 31
 Seeing ICT use as addictive/addiction, getting lost in ICT use – 32 x 2

Participant 10

Relying on public wifi for ICT access – 2
 Overusing ICTs, using them all day long – 2
 Using social media to express moods and express oneself – 3
 Seeing email as something which is needed only to access social media – 5
 Seeing Facebook as more convenient than email, just type in name – 5
 Using ICTs to find housing and employment – 5
 Using ICTs to find shelter, “floor for the night” – 6
 Using ICTs to connect with friends and family back home – 8
 Relying on ICTs to connect with formal supports at social agencies, let them know about safety status – 9 x 2
 Identifying that ability to connect using ICTs to support staff at social agency was essential in encouraging connection with support - 9*
 Being contacted by random strangers on social media as vulnerable female – 9
 Feeling distrustful of social media environment – 9
 Using innovative methods of “checking” on individuals online who are seeking to connect – 10
 Identifying risks of encountering bad people online – 10
 Using ICTs to look for housing – 15
 Finding inspiration in on-line environment, using ICTs for self expression – 17
 Seeing ICTs as important means of connecting with family and friends – 19
 Seeing ICTs as easy way of getting what is needed as homeless youth – 19
 Seeing ICTs as important tool for remaining connected to family over long distances – 19
 Identifying ICTs as important tool for helping homeless youth be aware of well being of

family – 19

Seeing ICTs as a potential site for sexual exploitation, “getting used up” – 20

Seeing ICT use by homeless males as being more sexualized in nature – 21

Recognizing overdependence on ICTs – 22

Identifying ICTs as important in helping homeless youth remain connected and able to find housing, keeping pro-social connections - 22

Participant 11

Seeing email as slower means of communication than social media – 2

Using social media specifically to access housing and employment opps – 4

Successfully finding employment through social media – 5

Using social media creatively to find housing – 6

Using the internet for medical self-care – 7

Relying on peers to access iCTs – 17 x 2

Using ICTs to stay connected with peers – 18

Seeing ICTs as a place where homeless youth can “always search for help” and connect with peers in times of need – 19*

Seeing ICTs as tool which can be used to “take care of yourself” – 20

Seeing ICTs as a means of reducing reliance on others, increasing independence – 20 x 2/21

Using ICTs as a learning tool – 21

Developing unique methods to discern good from bad information online – 21

Feeling that government websites cannot be trusted – 21

Seeing ICTs as a place of risk for sexual exploitation – 23/24

Seeing ICTs as a tool for distributing drugs – 23

Seeing ICTs as reducing human connection, impacting peoples ability to be “present” – 24 x 2/25

Seeing ICTs as addictive, dependence forming – 24/27

Identifying importance of self-control in using ICTs – 25

Identifying facebook as a location for organization break and enters, criminal activity “nicks” – 25

Seeing ICTs as having more of a negative impact than a positive impact – 26

Seeing ICTs as bringing down peoples intelligence – 27

Seeing peoples as shapers of how ICTs are used, not the ICT impacting the person – 27/33

Relating ICT usage to negative impact on morality – 27

Seeing ICTs as sites of mind control – 27

Using ICTs to seek out culture which has a positive impact on self, providing insight into self – 29/31

Posting things on social media to self-express and impact homeless peers – 30 x 2

Using social media to express and explore identity – 30

Seeing attempts to impact homeless peers as laden with risk, potential creator of conflict – 31

Using ICTs to get through mental health related crisis, preventing suicide – 32

Seeing ICTs as important tool for finding employment opps – 33

Seeing ICTs as tool for overcoming addictions – 33
Feeling that ICT and social media is safer for males than females as females are constantly being approached – 35
Identifying ICTs as potential site for connecting with Aboriginal culture – 36

Participant 12

Using ICTs to look up information of interest – 1
Seeing email as a way of sustaining access to social media – 2
Seeing social email as being less formal than email – 2
Being asked to do jobs through social media – 4
Staying connected to friends and family through ICTs – 7/8
Identifying challenges of staying connected with peers as homeless person and ways in which ICTs assist in connecting by “catching signals” – 7*
Exploring culture and identity on ICTs – 7/8
Using ICTs to develop self awareness and consciousness – 8
Seeing social media as useful way of posting info/messages which could impact homeless peers – 8 x 2
Staying safe and happy through ICT use, dealing with sadness – 9
Seeing ICTs as providing support when its needed – 9
Identifying how ICTs may reduce human connectivity – 9
Feeling ambivalent about impact of ICTs as being positive or negative – 9
Seeing ICTs as being addictive – 9
Seeing ICTs impacting motivation and productivity, but also needed to pass time – 10
Feeling watched by government through ICT devices – 10 x 2
Seeing ICTs as useful tools for searching for employment and housing – 10
Identifying lack of ICT knowledge among older homeless individuals – 10 x 2
Seeing online environment as a place of harassment for women – 11
Feeling “normal” through use of ICTs, escaping realities of being homeless – 11*

Staff interview

Seeing ICTs as being incredibly important for connectivity with homeless youth populations – 1/7 x 2/8/13
Using social media in innovative manner to connect with youth in care – 1
Identifying social media as exclusive means of contacting street youth – 1
Using social media to monitor safety of youth clients – 2
Seeing social media photo updates as representations of client state of mind and safety – 2 x 2
Seeing ubiquity in use of social media by homeless youth – 2
Identifying increasing importance of ICTs in accessing employment opps – 3
Seeing shift to electronic job apps as creating barriers for homeless youth – 3 x 2/4 x 2
Identifying ICTs as being useful tool for seeking housing for homeless youth – 4/5
Identifying that ICTs help homeless youth “get in the door” to see potential housing units but that racism discrimination still kicks in – 5
Witnessing homeless youth using ICTs to look up sexual health info and medical services

– 6

Seeing ICTs being used as a sort of mobile storage unit for info, etc – 6

Being contacted by youth during times of crisis – 6

Using social media as innovative tool to help keep youth safe – 6

Identifying how ability to connect over ICTs can impact youth decisions of use drugs – 6

Seeing social media s being extremely necessary to working with high risk clients 0 6

Seeing disconnect between social work training and actual needs of the job – 7 x 2

Seeing lack of interest of other social workers in using ICTs as being fuelled by desire to separate personal and work – 7

Seeing youth using ICTs for self-expression, coming out of closet – 8

Building closer relationships with youth through social media – 8

Using social media updates to keep “pulse” on youth – 8

Identifying issues of being connected to youth through social media – 8/9

Identifying risks of sexual exploitation for youth using ICTs – 9

Seeing ICTs as a place of risk, where drugs and illicit money can be accessed – 9/11

Seeing relationship between social histories and increased risk of exploitation online – 9

Seeing youth lose control over their identities online – 10

Seeing youth have their “power” taken away through social media – 10

Working with youth to delete their online connections as a way of reducing anti-social influences – 10 x 2

Seeing Facebook connections as a way of putting “vices right in front of you” – 11*

Seeing challenges in encouraging youth to delete online friends due to relationship between popularity and volume of friends – 11

Identifying importance of keeping tabs on ICT use by at-risk youth – 11

Seeing ICTs as an important tool to help homeless youth communicate their safety – 12/14

Seeing ICTs as crucial interface for assisting homeless youth through crisis periods – 12*

Identifying negative and positive uses of ICTs by other socail workers – 13

Posting pro-social opportunities on social media site as means of catching attention of youth – 13/15

Failing to use ICTs to connect with youth as disservice – 13

Seeing rules relating to social work and social media use as out of date – 14

Seeing an impact in using ICTs in helping homeless youth – 14

Seeing “street day” broken out from “real day” in social media profiles of homeless youth – 15

Using social media to help homeless youth find housing – 16

Using social media creatively to help get homeless youth material goods, by putting “asks” online – 16*

Seeing ability of social media to help shape youth identity as beneficial – 16

Seeing youth seeking validation of self on social media – 17

Seeing identities be shaped through use of ICTs – 17

Seeing ICTs as a way of creating belonging and purpose among homeless youth – 17**

Seeing ICTs as a tool for helping homeless youth figure out who they are – 17

Identifying ICTs as a low risk means of helping youth re-establish connections with “burned bridges” or damaged relationships – 17**

Seeing youth reconnect or connect with family on social media who would otherwise be

inaccessible – 18**

Identifying need for technology based network of youth workers and prospective housing providers– 18

Identifying needs for online platform connecting homeless youth with prospective employers who are willing to give a chance, LinkedIn for homeless youth – 19**/20

Seeing challenges with online environment for street youth who get easily frustrated - 20

Seeing use of ICTs as essential to just doing job of being formal support to street youth – 20

Seeing access to ICTs as something which should be a right for homeless youth, incredibly important – 21 x 2

Seeing ICTs as a means for homeless youth to contact the world, not just because they're bored – 21

Seeing ICTs as a means of helping youth feel less alone and more connected to a meaningful life - 21

Appendix E: Coding Progression – Focused Coding Summary V2.0

Note: Core categories outlined below represent first attempt at roll-up of focused codes outlined in summary V1.0.

Core categories

- 1) linking to assistance with resources jobs/economic opps/under table work/housing/health-medical/psychological/addictions/financial/general safety assistance/instrumental uses of ICTs
- 2) staying connected to peers/"catching signals"/reconnecting with family or damaged relations/happiness/feeling normal/living "normal life"/social connectedness/connectedness over long distances/feeling normal/"boundless opportunities"/meeting ground/accessing love/online connectivity as "unreal"
- 3) identity/identity management/expressing self/building self-awareness/creative outlet/connecting to culture – aboriginal culture/happiness/as painkiller – therapeutic/escaping reality/feeling normal/creating positive spaces/online expressions of well being or danger for consumption by supports/multiple profiles/using social media and ICTs creatively to improve personal safety/eliminating negative relations online to reduce risk to self and regain power – stay safe/accessing connections outside of normally accessible social sphere/create improved self-cleaning up online self to improve image/impacting homeless peers through positive postings
- 4) loneliness/boredom/addiction/unproductivity/happiness/dealing with sadness/sedentariness/damage to "world relations"/motivation killer/for of recreation and distraction/reduced purpose/coping with stress/isolation from ICT use (should addiction be its own category?)
- 5) ICTs as home/place of storage/etc
- 6) ICTs as places of risk/exploitation/addiction/criminal involvement/coping mechanism/place of risk for females/places of conflict when unwelcome opinions are expressed/place where "vices are put right before you"/feeling that ICTs may do more harm than good/increasing risk of victimization/places of alternate languages and codes for anti-social activity
- 7) ICTs and connectivity to formal supports/informal supports for safety and assistance/ICTs as toolkit for getting youth off of street – finding the right path (is this a separate category)/staying on the right track/letting supports know about safety status

Additional categories

- Relying on others for access to ICT devices/internet (whether gov/library/friends)/challenges in accessing ICTs
- Online environments as places of hope and possibility
- Increasing independence- reducing reliance on others through ICT use
- Feeling that use of technology of socially determined
- ICTs providing assistance during emergency situations
- Using ICTs for self-guided learning/improving general knowledge
- Teaching self or others on how to use ICTs as street youth

- Feeling ICT access should be a universal right/economic barriers to access/targeted expansion of ICT access and wifi to meet needs of homeless youth/feeling ICTs are important tool for homeless youth
- Feelings of losing privacy through ICT use/privacy control/information security risks/being monitored/being hacked
- Mistrust of government websites/trust of government website
- Feelings that homeless would benefit from learning about ICTs/gap in knowledge between older and younger homeless populations
- The importance of monitoring and controlling use to mitigate risks if misuse by individuals with troubled social histories
- Email has being irrelevant/subservient to other ICTs/access point
- Feeling that homeless youth should be educated on how to use ICTs more effectively
- Impact of lack of access to ICTs
- Losing ICTs/buy and selling ICTs as homeless youth – fluidity of ownership/having ICTs stolen/misuse of ICTs among homeless peers
- Identifying class differences in ICT usage/ICTs as being for privileged – luxury items/racial differences in ICT use/gender differences in ICT use/winter and summer uses/
- Kijiji the be all end all
- ICTs and the reduction of physical distances
- Social media as predominant ICT
- Social media as tool for managing negative peer groups while trying to improve life
- Ambivalence about whether ICTs have more positive or negative impact

Appendix F: Coding Progression – Focused Coding Summary V3.0

Note: Categories outlined below represent near final breakdown of ICT usage by homeless youth presented within thesis.

1. Linking to assistance with resources (connected to formal resources)

- Jobs, social assistance, financial assistance
- Health
- Safety (safe places to sleep, 24 hour resources, reporting crime)
- Help getting off the streets (getting ID, finding housing, clothes for applying for jobs, coaching for job interviews, finding resources for training for education)
- Addiction / psychological services

jobs/economic opps/under table work/housing/health-medical/psychological/addictions/financial/general safety assistance/instrumental uses of ICTs/ ICTs and connectivity to formal supports/informal supports for safety and assistance/ICTs as toolkit for getting youth off of street – finding the right path (is this a separate category)/staying on the right track/letting supports know about safety status / ICTs providing assistance during emergency situations/ Increasing independence-reducing reliance on others through ICT use

2. Staying connected (interpersonally): “catching signals”

- to peers, old and new
- to family
- to normal life, ICT as home
- to recreation and distraction
- Why? To manage boredom, loneliness, stress, sadness, pain, escaping reality (physical and emotional)
- Results? Happiness...feeling normal

to peers/”catching signals”/reconnecting with family or damaged relations /living “normal life”/feeling normal / social connectedness/connectedness over long distances / “boundless opportunities”/meeting ground/ addressing loneliness and boredom / coping with stress / dealing with sadness / as painkiller – therapeutic/escaping reality/feeling normal / for recreation and distraction/ ICTs as home/place of storage, etc /accessing connections outside of normally accessible social sphere/As we address more fully in section 4, there is also a sense of online connectivity as being “unreal” (obviously being connected solely through ICTs will be problematic in a number of ways) but the youth discussed a strong sense of positive emotional effects: consequence of connection: positive emotional state such as increased happiness; (did they report less stress, less addiction, less anxiety?) or more just managing stress, etc?

3. Identity (connections to self)

- managing self impressions (for a variety of reasons)
- self-expression (and its connection/relation to obtaining supports)
- self improvement (education, etc)
- self transformation (selfies that show a change, showing the world you're clean now, getting rid of negative online connections, etc)
- cultural identity development
- Consequences: happiness, etc

identity management/expressing self/building self-awareness/creative outlet/connecting to culture (as a sense of self) – aboriginal culture /creating positive spaces/online expressions of well being or danger for consumption by supports (caveat that this is similar to theme #1 connecting to resources, but the way its done is through an expression of 'self') /multiple profiles (impression management – Goffman) (also connected to resources)/using social media and ICTs creatively to improve personal safety/eliminating negative relations online to reduce risk to self and regain power – stay safe/ create improved self—cleaning up online self to improve image/impacting homeless peers through positive postings/ICTs for self-guided learning/improving general knowledge (improving self/ self-improvement) / Social media as tool for managing negative peer groups while trying to improve life (improving self/ self-improvement).

4. ICTs may do more harm than good (connection to risk or negativity in general)

- unproductivity, motivation killer, isolation, negative way of coping.
- Criminality
- addiction
- victimization (subcategory: female safety issues), also related to privacy breaches?

ICTs as places of risk/exploitation/addiction/criminal involvement/coping mechanism (in negative way)/place of risk for females/places of conflict when unwelcome opinions are expressed/place where “vices are put right before you”/increasing risk of victimization/places of alternate languages and codes for anti-social activity/addiction/unproductivity/ sedentariness/damage to “world relations”/motivation killer/reduced purpose/isolation from ICT use / Feelings of losing privacy through ICT use/privacy control/information security risks/being monitored/being hacked/Ambivalence about whether ICTs have more positive or negative impact