

The Relation between Body Image Satisfaction and Self-esteem
to Academic Behaviour in Pre-adolescent and Adolescent Girls and Boys

by

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Abstract

Relatively little is known about the relation between body image satisfaction and self-esteem to academic behaviour in pre-adolescent and adolescent girls and boys. The current study is guided by three research questions. The first question is to examine how does body image satisfaction and self-esteem relate individually and collectively with academic behavior? The second question is to examine how much do the relationships between body image satisfaction, self-esteem and academic behavior differ across grades 7, 8, and 9? The third question is to examine how much do the relationships between body image satisfaction, self-esteem and academic behavior differ across genders? A correlational research design is adopted for this study. The data is analyzed using multiple regressions to examine various relations. This study analyzed secondary data gathered from 161 girls and boys from a junior high school in Winnipeg, Manitoba, Canada as part of the school plan for the 2011 - 2012 academic year. Self-esteem had high positive correlation to academic behavior for both girls and boys across grades 7 - 9. Other highlight was that only for grade 9; body image satisfaction had a low positive correlation to academic behaviour.

Keywords: body image satisfaction, self-esteem, academic behaviour, pre-adolescents, adolescents

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Chapter One - Introduction

Puberty is a period of major transition in forming a positive attitude towards one's body image and self-esteem among adolescents. Harter (1999) found that adolescents' global self-esteem correlated most highly with physical appearance, followed by scholastic competence, social competence, behavioral conduct, and athletic competence. Adolescence is an important period for forming views about oneself and socio-cultural ideals. Harter refers to this process as the "construction of the self" as individuals are discovering who they are and how they fit into the world during this stage (p. 3). Some of the challenges associated with self-construction are accounted for by the many rapid physical and emotional changes that mark the transition from childhood to adulthood (Harter).

With the beginning of puberty, physical appearance, body image, and self-esteem become vital to the overall self-image of an adolescent. These physical and emotional changes could impact critical developmental outcomes related to positive body image, self-esteem, and academic behaviours necessary for academic success among pre-adolescents and adolescents.

Statement of the Problem

As a junior high educator teaching Home Economics for the last 16 years, I have found out that most programs and studies that focus on body image satisfaction during adolescence are for girls. Adolescent boys are getting sidelined and there is a need for programs for adolescent boys as they also are facing body image disturbances, are concerned about their body shape and size, and lower self-esteem. Most studies show the relation of dissatisfaction of body image to self-esteem (Tiggemann, 2005; Coyl, 2009) or

eating disorders (Ferguson, Munoz, Contreras, & Velasquez, 2011; Thompson, Heinberh, Altabe, & Tantleff-Dunn, 1999) or academic achievement (Lawerence and Thelen, 1995; Yanover and Thompson, 2008) among adolescent girls (Dohnt & Tiggemann, 2006; Tiggemann, 2005) or boys (Furnham & Calnan, 1998; McCabe & Riccardelli, 2001, 2004). In our fast paced society, body image dissatisfaction is beginning to sprout among younger populations including elementary students as well (Mendelson and White (1982). This study explored the relationship among body image satisfaction, self-esteem, and academic behaviour in pre-adolescent and adolescent girls and boys.

Research Questions

1. How does body image satisfaction and self-esteem relate individually and collectively with academic behavior?
2. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across grades 7, 8, and 9?
3. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across genders?

Purpose of the Study

The purpose of this study is to explore the relationships among body image satisfaction, self-esteem, and academic behavior. The society portrays a twisted image of beauty for women and men of all ages. Physical attractiveness is largely defined by thinness in females and muscularity in males (Norwood, Murray, Nolan, & Bowker, 2011). Typically adolescents compare their bodies to those of professional models and when not satisfied, they experience body image dissatisfaction and related negative states (Koyuncu, Tok, Canpolat, & Catikkas, 2010). A Canadian study found that 36 % – 50 %

of the adolescents from grade six to ten were not satisfied with their body size (Boyce et al., 2008). Pressure and unrealistic expectations from media, peers, parents, and society lead the adolescents to believe that they must go through many hurdles to make themselves look what the media wants them to look like and not what they already are.

Secondly, this study examined how gender and grade level influence the relationships among body image satisfaction, self-esteem, and academic behavior. If appropriate interventions will be developed for these age groups, there is need to have a better understanding of how these variables are related to each other and their relationships amongst each other. While extant research has examined some of these relationships, studies have mostly researched the relationships between single variables. This study addressed this gap by examining the relationships among body image satisfaction, self-esteem, and academic behaviours simultaneously using a sophisticated data analysis tool such as multiple regressions.

Definition of the Terms

The definitions operationalized in this study are as follows:

1. Body image - Body Image refers to a pre-adolescent or adolescent's perception of their own body and their perception of what others think of their own body. Body image satisfaction or dissatisfaction was measured by using a series of questions based on their feelings and attitudes towards their own body and ranked based on a Likert scale.
2. Self-esteem - Self-esteem refers to a pre-adolescent or adolescent's overall evaluation of one's own self. It includes beliefs about what they think about

themselves. This was measured using Rosenberg Scale ranked based on a Likert scale.

3. Academic behaviours - Academic behaviours refer to a pre-adolescent or adolescents' views about their school work and how well they think they come prepared to class. This was measured by using a series of questions based on their feelings and attitudes towards their own learning and ranked based on a Likert scale.
4. Pre-adolescent - Pre-adolescents in this study are students who are in grade 7. These students are 12 years old at the beginning of the school year in September.
5. Adolescent - Adolescents in this study are students who are in grade 8 and grade 9. These students are 13 and 14 years old respectively at the beginning of the school year in September.

Delimitations of the Study

This secondary study used existing data that was collected from a school in Winnipeg, Manitoba, Canada as part of the school plan for the 2011 - 2012 academic year. The study analyzed relationships among body image satisfaction, self-esteem, and academic behavior. It also studied the influence of gender and grade level to these three variables.

This study did not address any forms of eating disorders or associated conditions such as obesity, substance abuse or self-harm. Second, it did not address the role of media, peers or parents on the overall body image, self-esteem, and academic behaviours. Third, it did not disaggregate the data by ethnicity, socio economic groupings, current Grade Point Average (GPA) at school or by measuring current Body Mass Index (BMI).

While I acknowledge the importance of these foci, they are beyond the scope of the current study.

Significance of the Study

This study explored and described the relationship between body image satisfaction, self-esteem, and academic behavior. Data from this study will have implications for parents, educators, counsellors and for the development of programs that support healthy and successful pre-adolescents and adolescents.

1. Data from this study will inform parents about the issues regarding dissatisfaction with body image and lower self-esteem as soon as they see it coming and not brush it off as “part of growing up”. In order to help their children develop positive image, parents need to have the skills to intervene and help their pre-adolescent or adolescent to develop positive image and be comfortable in their bodies.
2. This study yields data which will better inform counsellors and educators about the daily challenges faced by pre-adolescents and adolescents. It will underscore the need for educators to understand that besides worrying about grades, young people may also have to worry about the developmental changes during puberty, pleasing their peers, dressing to “fit in”, dating, doing chores at home, being a ‘parent’ to a younger sibling, and many more.
3. Information from this study will highlight the significance of timely identification and prevention of body image dissatisfaction. Schools may need to implement primary intervention and prevention programs at the elementary level. The dissatisfaction with body image, if gone unnoticed, can also lead to maladaptive eating habits to attain the desired weight, lower self-esteem, unnecessary cosmetic

surgery, substance abuse, and it can also hinder their academic behaviours essential for academic success. Information from this study becomes significant because it will contribute towards patterns and impacts of dissatisfaction with body image and self-esteem and its effect on academic behaviours necessary for success in school.

Summary

Body image satisfaction and self-esteem play important roles in the development of pre-adolescents and adolescents. As the students move into late adolescence, body image and self-esteem become crucial factors for the students' academic behaviours necessary for success in school. Parents, counselors, and teachers are continuously in search of strategies that will enhance acceptance of all the body types and help promote self-esteem.

Chapter two will provide a literature review on the relationship of body image satisfaction and self-esteem to academic behaviours in two stages of adolescence. It will simultaneously look at research for both girls and boys and provide recommendations for promoting body image satisfaction and positive self-esteem among pre-adolescents and adolescents.

Chapter Two - Literature Review

The literature review will begin by outlining the literature related to body image satisfaction, self-esteem, and academic behaviour. It will then expand to find the relation between body image satisfaction and self-esteem to academic behaviour in pre-adolescent and adolescent girls and boys.

Body Image in Adolescence

Body image may be conceptualized as a multidimensional construct that represents how individuals think, feel, and behave with regard to their own physical attributes (Muth & Cash, 1997). Muth and Cash (1997) conceptualized body image in two self-evaluative ways including satisfaction or dissatisfaction with one's physical attributes and experience of discrete emotions. Body shape and weight are critical determinants of self-esteem in adolescence because interpersonal success is increasingly seen as being closely linked to physical attractiveness (Koyuncu, et al., 2010). Even though body image has been found to influence psychological well-being in different phases of life, this relationship is strongest during adolescence (Carroll, Tiggemann, & Wade, 1999).

Body image is central to adolescent girls' self-definition, because they have been socialized to believe that appearance is an important basis for self-evaluation and for evaluation by others (Thompson, et al., 1999). Pubescent girls are becoming intensely anxious and dissatisfied with their naturally developing, fuller bodies (Kater, Rohwer, & Londre, 2002). The implications of these to academic outcomes have been noted by Yanover and Thompson (2008). Yanover and Thompson noted that the body image dissatisfaction might lead to high level of school absenteeism due to social anxiety

regarding one's appearance. While body image research has been mostly centered on girls in the past, recent research indicates that body image concerns are rapidly increasing among boys too (Kater, et al., 2002 and Furnham & Calnan, 1998). Athletic abilities are found to define boys' popularity and self-confidence and thus, pre-adolescent boys report the desire to gain weight by increasing their muscularity (McCabe & Ricciardelli, 2004).

As male and female body ideals differ, body image dissatisfaction for girls and boys differs as well (Helfert & Warschburger, 2011). The onset of puberty entails bodily changes that, on average, move girls further away from societal standards of female beauty (Clay, Vignoles, & Dittmar, 2005). Young women desire to be perfect when it comes to their physical appearance, and describe their perfect ideal as tall, extremely thin, and slender (Parker, Nichter, Vuckovic, Sims, & Ritenbauth, 1995). Unfortunately, this ideal is unattainable to the vast majority of women, contributing to depression, low self-esteem, and eating disorders. Worry about body image has become so prevalent among adolescent girls that it has become an expected part of puberty (Kater, et al., 2002).

Males, on the other hand, are more likely to increase the size of their body parts and want to have a V-shaped masculine physique with broad shoulders (Furnham & Calnan, 1998; McCabe & Ricciardelli, 2001, 2004). Athletic abilities defined boy's popularity (Coyl, 2009). When the boys achieve their desired physical changes, they are able to move closer to achieving the lean and muscular body as endorsed by western society (McCabe, Ricciardelli, & Finemore, 2002). Research done by (Drewnowski & Yee, 1987; Furnham & Calnan, 1998) has indicated that about 50% of adolescent boys desire to be smaller and 50% want to be larger. Females on the other hand wanted to be smaller (Drewnowski & Yee, 1987; Furnham & Calnan, 1998). Both adolescents and pre-adolescents are torn

between their own actual body image and their perceived body image as a result of messages they get from various sources. The results are often drastic leading to problems such as lower self-esteem, dieting behaviours, self-harm, and substance abuse, among both female and male pre-adolescents and adolescents.

Body Types and Body Image Satisfaction

Dohnt and Tiggemann (2006) say that the desire for thinness is prevalent among women and adolescent girls and has been extended to include young girls also. Girls as young as five to seven years are dissatisfied with their body size, desire to be smaller, and some have also attempted to diet (Collins, 1991; Kelly, Ricciardelli, & Clarke, 1999; Poudevigne et al., 2003). Smolak, Levine & Shermer (1998) note that in the past decade, concerns about body image has affected a growing number of preteen children as well. Dissatisfaction with body shape and size and the desire to be thinner has become the norm for women and girls in most Western societies (Kater et al., 2002; Tiggemann, 2005). Parkinson, Tove´e & Cohen-Tove´e (1998) found out that girls of all ages want to be leaner than their perceived current shape. Recent research has explained that the most common source of this self-absorbed preoccupation to become thin is the subjective experience of "feeling fat" or fear of "becoming fat", regardless of actual size (Kater et al., 2002). Feeling fat is a psychological disconcert of body image dissatisfaction where pre-adolescents and adolescents of all size are dissatisfied with their weight due to the pressures they get from media, family, and peers.

Mishkind, Rodin, Silberstein & Striegel-Moore (1986) say that boys as young as five years old prefer the mesomorphic body type which is the V-shaped figure with broad shoulders and slim waist rather than ectomorphic (thin) or endomorphic (fat). Men and

adolescents who meet this ideal mesomorphic body type are considered to be more attractive and also receive social acceptance and benefits (Labre, 2002). Folk, Pedersen, & Cullari (1993) found that boys in grade 6 were more dissatisfied with body weight than boys in grade 3 and that there was a strong association between body dissatisfaction and a negative self-concept, particularly for boys in grade 6. Another study done by Parkinson, et al. (1998) confirmed that younger boys (grades 4 to 5) desired a larger body than their current shape and older boys (grades 7 to 8) desired a leaner shape than their perceived current body shape. These studies indicate that as boys get older and move closer to adolescence, they become more aware of the socio-cultural ideal for males and strive for a mesomorphic body type (Furnham & Calnan, 1998; McCabe & Riccardelli, 2004; Pope, Olivardia, Gruber, & Borowiecki, 1999). McCabe, et al., (2002) and McCabe & Riccardelli (2004) further state that high level of body dissatisfaction among boys lead to even split between wanting to lose weight and wanting to gain weight.

Age of Physical Development of Adolescents

The age of physical development during adolescence plays a role in the emotional and social development of an adolescent and has an effect on their body image satisfaction. Girls are usually encouraged to look “pretty” at a very early age to enhance their self-worth and boys on the other hand are encouraged to be “strong”. Petersen and Crockett (1985) believe that adjustment during the adolescent years is affected by the timing of pubertal changes. Spencer, Dupree, Swanson, & Cunningham (2007) write that girls who mature early, have more academic and behavioural problems than their peers who mature later but they are more popular among the boys during early adolescence. On the other hand, boys benefit socially from the increased growth spurt and muscle

development at the onset of puberty (Coyl, 2009). During late adolescence, the early-maturing girls have lower self-esteem than those who mature later and weigh more and are shorter when their pubertal growth is complete (Spencer et al.). Drewnowski & Yee (1987) write that men's desire to gain weight and increase muscle size is a direct result of the pressures society places on males to be physically fit and athletically successful. According to the deviance hypothesis, early or late maturation places the adolescent in a socially "deviant" category, because of their status to the rest of the peer group, and confers either social advantages or disadvantages (Petersen & Crockett).

Body Image and Disturbed Eating Behaviours

Research is consistent that the body image dissatisfaction is associated with disturbed eating behaviours (Ferguson, et al., 2011; Lawrence and Thelen, 1995; Thompson, et al., 1999; Yanover and Thompson, 2008). It can also have severe, detrimental effects on academic performance, especially, in the areas of cognitive tasks and problem solving abilities (Lawrence and Thelen, 1995; Yanover and Thompson, 2008). Pre-adolescent and adolescent girls typically desire to lose weight, even when they are of normal weight for their age (Coyl, 2009; McCabe & Ricciardelli, 2005). A negative view of one's body has been linked to increased incidence of disordered eating behaviours (Fabian & Thompson, 1989; Gray & Ford, 1985; Lawrence & Thelen, 1995; Leon, Carroll, Chernyk, & Finn, 1985). A longitudinal study of 12 to 15 year old girls has confirmed that bodily changes during adolescence such as development of breasts, increase in body fat, fuller bodies, etc. are associated with increased concerns about weight and eating habits (Attie & Brooks-Gunn, 1989). Coyl (2009) says that increase in fat, which is considered normal, due to pubertal changes also heightens the risk for poor

body image and dieting behaviours among girls. Body dissatisfaction is also related to binge eating behaviours in adolescent boys (Johnson, Grieve, Adams & Sandy, 1999; Ross & Ivis, 1999). This dissatisfaction with body image may further lead to high level of school absenteeism due to social anxiety regarding one's appearance (Yanover & Thompson, 2008). Adolescence should be looked as a carefree time for enjoyment and celebration and not as a time for having body image concerns, lower self-esteem, and other related disorders.

Body Image and Media

Dohnt & Tiggemann (2006) write that the media plays an important role in determining the ideal body image among adolescents. The ideal body image portrayed for females in the media has become unrealistically thin compared to the past (Koyunchu, et al., 2010). Magazines, toys, advertisements, clothes all portray an image for girls and boys. Girls are encouraged to be "thin and sexy" and boys are encouraged to be "big and muscular". An Australian study examined media influences and found that 6 to 10 year old girls who looked at women's magazines (e.g., Woman's Day) had greater dissatisfaction with their appearance and those who watched music television shows and read appearance-focused girls' magazines (e.g., Dolly, Total Girl) predicted dieting awareness (Dohnt & Tiggemann). Anderson and Di Domenico (1992) conducted a survey of the articles and advertisements featured in the most popularly read male magazines and found that the male magazines contained more shape change articles and advertisements, and thus it would seem that males do not escape the socio-cultural pressure to achieve the ideal body shape. Another study confers that young boys and girls become dissatisfied with their bodies when it comes to media influence and social

stereotypes (Dohnt & Tiggemann, 2008; Labre, 2002). Koyunchu, et al's (2010) study suggests that females may experience body image dissatisfaction when they compare their bodies to those of professional models.

Pressure to attain the ideal body type has been used to explain the emergence and maintenance of body dissatisfaction among girls and boys (McCabe & Riccardelli, 2005). Clay et. al (2005) confirms that the idealized portrayals of women in Western media have negative impact upon how adolescent girls see themselves. Harrison (2001) found that exposure to thin-ideal TV was associated with a rise in eating disorders in adolescent girls. American study done on adolescent girls' show that 70% believed that magazine pictures influenced their idea of ideal body shape and 47% wanted to lose weight as a result (Field et. al, 1999). Thus, adolescent girls may be the most vulnerable to media exposure and it can negatively affect their body image (Clay et al.). The media not only emphasize that female self-worth should be based on appearance, but present a powerful cultural ideal of female beauty that is becoming increasingly unattainable (Richins, 1991). This causes dissatisfaction and desolation about their bodies among adolescents and results in detrimental eating habits. Males, on the other hand, emphasize on exercise rather than dieting to achieve their ideal body image (McCabe & Riccardelli, 2004). Due to media and societal pressures, pre-adolescents and adolescents often fail to understand that images in advertisements are frequently not real. Male and female models are often made to look unrealistically attractive, thin, and /or muscular. Computer technology is used to alter the real image and create a flawless looking young, toned, and thin image (Anorexia Nervosa and Related Eating Disorders, 1999). The toys (Barbie dolls, action figures) that these adolescents played with while growing up also add to the delusion that

females should be thin and pretty and males should be buff (Anorexia Nervosa and Related Eating Disorders, 1999; Labre, 2002, Pope et al., 1999).

Body Image and Role of Parents

Parents and parental criticism about their own children's weight and physical limitations is a crucial factor in developing body image dissatisfaction. Both, mother and fathers' attitudes towards their own bodies is correlated to body dissatisfaction among adolescents. A number of studies have implicated the role of parents in the development of body image dissatisfaction and emphasizing thinness in pre-adolescent and adolescent girls and boys between 8 to 12 years of age (Helfert & Warschburger, 2011; McCabe & Riccardelli, 2005; Phares, Steinberg, & Thompson, 2004; Smolak et al., 1999). Direct parental comments, especially mothers' comments about their daughters' weight, have a strong relation with their body image (Smolak et al., 1999). McCabe & Riccardelli (2005) further state that parents, especially mothers, who go on diets and are concerned about their weight, tend to encourage their adolescent daughters to be thinner thus promoting body image dissatisfaction among them. Boys also received messages from fathers to exercise more and alter their body shape and size of their muscles (McCabe & Riccardelli). The desire and pressure to be bigger and muscular was for boys and girls had the desire to lose weight even when they were of normal weight for their age (McCabe & Riccardelli).

Parental modeling of dysfunctional eating attitudes and behavior, and parents' influence over their children by direct transmission of weight-related attitudes and opinions, such as comments or teasing resulted in poor body image (Phares, et al., 2004). If fathers were perceived to view thinness or lack of fat as important, both girls and boys

were more likely than their peers to become constant dieters (McCabe & Riccardelli). Parents should realize that they should not impart their own unrealistic expectations on their children and should support them for what they are and not for what they want them to be. Parents need to model in front of their children that having healthy eating habits and doing regular physical activity is the preferable way to attain a desirable body image rather than dieting or skipping meals. While these are healthy parenting advice, there is need for research which disaggregate the patterns of body image relationships with academic behavior, and self-esteem along gender, grade level and academic behavior lines. Such data will add validity to resources which emphasize healthy adult modeling for young people.

Body Image and Self-esteem

Harter (1999) write the perceptions of physical appearance and self-worth are inextricably linked, such that perceived appearance consistently emerges as the strongest single predictor of self-esteem among both male and female children and adolescents. This link is remarkably strong, with an average correlation of .65 in the United States and .62 in other countries such as England, Canada, Italy, Japan, Holland, Ireland, Australia, and Greece (Harter). Physical appearance was found to be of great importance to the popularity and self-confidence of girls and athletic abilities was of more importance for the popularity and self-confidence of boys (Coyle, 2009). Body satisfaction is positively correlated with self-esteem among boys (Cohane & Pope, 2000). Thus, it comes as no great surprise that adolescent girls, unlike boys, who are not subjected to such unrealistic ideals show a marked decline in perceptions of their physical attractiveness from about 11 years onward (Harter). The U.S. Department of Health and Human Services (2008),

observe that being overweight negatively affects children's psychological and social wellbeing.

Body image dissatisfaction is also associated with negative or low self-esteem (Clay et al., 2005; Fabian & Thompson, 1989; Folk, et al., 1993; Lawrence & Thelen, 1995; Wojtowicz & Ranson, 2012). A recent Australian study conducted with adolescents from 13 to 17 years of age confirmed that girls were significantly more likely than boys to be dissatisfied with their weight and physical appearance (Delfabbro, Winefield, Anderson, Hammarstrom, & Winefield, 2011). Mendelson and White (1982) found that in children, as young as seven, feelings about their body were associated with their self-esteem. McCabe and Ricciardelli (2005) write that physical appearance is critical for adolescent boy and girl's development of self-confidence. A study done in United Kingdom reported that in girls aged 11 to 16, experimental exposure to either ultra-thin or average-size magazine models lowered body image satisfaction and consequently, self-esteem (Clay et al., 2005). Self-esteem is defined as a "positive or negative attitude toward a particular object, namely, the self" and makes the person feel that he is a person of worth (Rosenberg, 1965, p. 30-31). Rosenberg (1965) describes a person of high self-esteem as an individual, who respects himself, considers himself worthy and not better than others, recognizes his limitations, and expects to grow and improve. According to Glasser (1969) the most important aspects of self-esteem are a feeling of belonging or of being needed, a sense of being accepted, and a feeling of being a competent person. On the other hand, a person with a low self-esteem shows self-rejection, self-dissatisfaction, and self-contempt, lacks self-respect, and paints a disagreeable self-picture (Glasser). When youth reach adolescence with a negative self-

image, they get a feeling of “being stuck” (Morganett, 1990, p. 85). Because self-esteem is especially vulnerable during the period from 12 to 14 years, early adolescence is the ideal time for intervention (Simmons, Rosenberg, & Rosenberg, 1973).

A meta-analysis of self-esteem studies conducted in Western nations has confirmed that women’s self-esteem is moderately, but significantly, lower than men’s and the average gender difference is greatest during middle adolescence peaking at around 16 years of age (Kling, Hyde, Showers, & Buswell, 1999). Clay et al. (2005) says in their research that controlling for family cohesion and stressful life event showed a pronounced and progressive drop in girls’ self-esteem from 12 to 17 years of age. Rosenberg (1965) showed that parental involvement and willingness to give adolescents autonomy and freedom are positively correlated to high self-esteem in adolescents.

The perception of appearance and self-worth are linked and perceived appearance is a strong single predictor of self-esteem among both male and female adolescents (Clay et al., 2005). According to Erickson’s theory, issues of self-worth become prominent in adolescence when the major developmental task is to establish identity and coherent sense of self (Seligman, 2006). Crocker’s Contingencies of Self-Worth Theory proposes that satisfaction with body impacts on global self-esteem especially among women than for men and has been supported in young adults as well (Crocker, Luhtanen, Cooper, & Bouvrette; 2003).

Self-esteem may be another relevant variable with regards to eating disorders, thus leading to body image dissatisfaction (Lawrence & Thelen, 1995). Studies done by Kelly, Riccardelli, and Clarke (1999) and Lawrence and Thelen (1995) found out that pre-adolescent girl who report higher levels of body dissatisfaction and dieting also

reported poorer self-esteem. Other study done by Fabian and Thompson (1989) and Tiggemann (2005) found that adolescent girls who are heavier perceive themselves as being overweight and are dissatisfied with their weight might be vulnerable to developing a low self-esteem. Even though self-esteem is something that cannot be touched or seen but it is always there following you like your shadow or the reflection in the mirror. Adolescents with lower self-esteem have a lower worth about them and think about themselves as nobody. Once this feeling of worthlessness takes power over their body and self-esteem they start falling in this dark hole with few chances of coming out unless intervened at the right time.

Body Image Satisfaction, Self-esteem, and Academic Behaviour

A study done by Fonseca, Matos, Guerra, and Gomes-Pedro (2010) confirmed that 5.4% of overweight adolescents performed below average at school and reported a poorer perception of academic achievement as compared to 4.4% of normal weight adolescents. This could be explained by research which note that self-esteem affects motivation to succeed and self-esteem is positively related to behaviours that promote academic achievement (Liu, Kaplan, and Risser, 1992). Hattie (1992) found the average correlation between academic results (overall average marks) and self-esteem, to be of 0.34. Alves-Martins, Peixoto, Gouveia-Pereira, Amaral, & Pedro (2002) conducted a study and found that students with low level of achievement possess a self-esteem that is considerably lower than that of students with a high level of achievement. A recent longitudinal study done by Schmidt and Padilla (2003) write that grades and extracurricular activities have been linked to the development of optimal adolescent functioning and are considered to be fairly reliable indicators of future well-being and

success. Alves-Martins, et al. conclude that academic results play an important role in the self-esteem of adolescents. Self-esteem rises as a person succeeds or is praised, thus, making self-esteem dependent on one's perceptions of self (Harter, 1999; Schmidt & Padilla) and others (Schmidt & Padilla). Rosenberg (1965) found that self-esteem was associated with both academic achievement and extra-curricular activities among adolescents.

Self-concept or self-esteem is a psychological factor that has a considerable impact on the academic and social performance of a person (Hoogeveen, Van Hell, & Verhoeven, 2009; Stringer & Heath, 2008). Children who are rejected by their peers develop academic problems (Parker & Asher, 1987). Better grades and involvement in extra-curricular activities also help in the prevention of negative behaviours, development of optimal adolescent functioning, and future well-being and success (Schmidt & Padilla, 2003). A recent study shows that positive self-concept is moderately correlated with positive outcomes, including better academic performance (Stringer & Heath, 2008).

Summary

Many studies have been conducted on body image satisfaction, self-esteem, and academic behavior among young people but few have simultaneously investigated the three variables together. Majority of the studies have been done on late adolescence and young adults but very little has been researched about pre-adolescents and early adolescence together. This study thus, looked at two different developmental stages such as grade 7, grade 8, and grade 9. It also took into account both girls and boys rather than looking at just one of the genders. This is important to school counselling programming. The intent of the present study therefore is to find out the relation between body image

satisfaction and self-esteem to academic behaviour in pre-adolescent and adolescent girls and boys. Based on the gaps found in the literature reviewed, the following research questions will need to be answered:

- a) How does body image satisfaction and self-esteem relate to academic behavior?
- b) How does this relationship compare across genders and grade levels?

This study is designed to understand these better through the review of existing literature and correlational research design.

Chapter Three - Methodology

The purpose of this study is to explore the relationships among body image satisfaction, self-esteem, and academic behaviour among pre-adolescent and adolescent girls and boys.

Research Questions

This study is guided by the following research questions:

1. How does body image satisfaction and self-esteem relate individually and collectively with academic behavior?
2. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across grades 7, 8, and 9?
3. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across genders?

Research Design

This study employed a correlational research design for the purpose of investigating the relationships between body image satisfaction, self-esteem, and academic behaviour. Cohen and Cohen (1983) defined correlational research design as “the systematic investigation of relationships among two or more variables, without necessarily determining cause and effect.” This design is appropriate given the flexibility and capacity to evaluate multiple relationships for the study (Cohen & Cohen). As the goal of this research was to measure complexities of relationships related to body image satisfaction, self-esteem, and academic behaviour, correlational design is appropriate for this study for various reasons such as:

a) The goal of this study was to investigate the existence and the degree of relationships among body image satisfaction, self-esteem, and academic behaviour. If body image is highly related to academic behavior or self-esteem, scores on body image satisfaction will be used to predict the scores on the other two (Isaac & Michael, 1977).

b) The variables under study do not yield to the application of experimental method of study. In this case, the goal is not to establish cause and affect relationships. The degree of relationships in this study will be expressed in correlation coefficient (Cohen and Cohen, 1983). The value of $r = 0.0$ will indicate the existence of no relationship. The value of $r = -1.00$ represents a perfect negative relationship. The value of $r = +1.00$ will represent a perfect positive relationship. (Howell, 2002).

Participants

The participants were randomly selected from an existing data base from one junior high school in Winnipeg, Manitoba, Canada. Three classes each of the grade 7, grade 8, and grade 9 were chosen for the purpose of collecting data for school plan for the 2011 - 2012 academic year. It included a total of 161 girls and boys. The secondary study had 51 participants at grade 7 where 19 were girls and 30 were boys. Two questionnaires were incomplete so they were excluded from the study. There were 61 students at grade 8 and out these numbers, 33 were girls and 28 were boys. There were 49 students at grade 9 level and from these numbers 20 were girls and 26 were boys. Among the grade 9 students, three questionnaires were incomplete and they were excluded from the study. The data was collected in February 2012 and the participants' age at the time of the study ranged from 12 to 13 years for grade 7 students, 13 to 14 years for grade 8 students, and 14 to 15 years for grade 9 students. Students were given the measures by their Physical

Education teacher. As the special needs students are not part of the regular Physical Education program, they were excluded from this study.

Source of Data

The data for this study was extracted from an existing school data. The variables were measured by the following scales.

Body image satisfaction scale.

A newly developed 17-item Likert scale with items based on a four-point scale ranging from never (0 point) to always (3 points) and took about ten minutes to complete it. This scale was developed by the school committee and some questions in this scale looked like; “I am proud of my body”, “My weight makes me feel unhappy”, and “I feel ashamed of how I look”. (See full Body Image Satisfaction Scale as Appendix A)

Self-esteem scale.

The Rosenberg Self-Esteem Scale (RSE) is a 10-item Likert scale with items based on a four point scale ranging from strongly agree (3 points) to strongly disagree (0 point) and took about seven minutes to complete it. Self-esteem was assessed through agreement with self-evaluative statements such as; “On the whole I am satisfied with myself”, “I wish I could have more respect for myself”, and “I certainly feel useless at times”. This scale is appropriate because of its strong psychometric properties. Rosenberg (1965) demonstrated that its test-retest correlations were typically in the range of .82 to .88, and Cronbach's alpha was in the range of .77 to .88. (See full Rosenberg Self-esteem Scale as Appendix B)

Academic behaviour scale.

A newly developed 20-item Likert scale with items based on four-point scale ranging from never (0 point) to always (3 points). This scale was developed by the school committee and questions were used to measure students' frequency (i.e. how often) to a countable behavior with regards to their academics and took about ten minutes to complete it. Some questions in this scale looked like, "I like hard work because I see it as challenge", "I get distracted easily when I am studying", and "I finish an assignment by the deadline". (See full Academic Behaviour Scale as Appendix C)

Procedure

This secondary data was anonymous. Students were clearly instructed by their Physical Education teacher that they should not include any personal identifiers on their response sheets. Parental consent or ethical consent was not required for this secondary data analysis. A copy of the University of Manitoba's ethical waiver is attached. (See the letter from University of Manitoba's Research Ethics and Compliance as Appendix D)

Data Analysis

This study used both descriptive and multiple regression analyses as the statistical means to assess the relationships between the independent variables (body image satisfaction and self-esteem) and dependent variable (academic behaviour). Basic descriptive statistics will include mean and standard deviations to present demographic information where appropriate.

Chapter Four - Results

This chapter addresses the research questions that looked at the relationship between body image satisfaction and self-esteem to academic behaviour in pre-adolescent and adolescent girls and boys and presents the results from the analysis of the study. The data was drawn from an archival data collected at a junior high school in Winnipeg, Manitoba, Canada as part of its school plan for the academic year 2011 - 2012 and a correlational statistical design was adopted. Three questions provided the framework for the study.

Research Questions

1. How does body image satisfaction and self-esteem relate individually and collectively with academic behavior?
2. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across grades 7, 8, and 9?
3. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across genders?

Table 1

Mean and Standard Deviation for Body Image Satisfaction, Self-Esteem, and Academic Behaviour for Grades 7, 8, and 9

Grade	Body Image Satisfaction	Self-esteem	Academic Behaviour	N
	Mean (SD)	Mean (SD)	Mean (SD)	
7 Girls	36.00 (4.38)	21.47 (5.30)	34.89 (6.97)	19
7 Boys	35.63 (8.20)	22.20 (4.16)	33.03 (6.76)	30
7 Total	35.98 (6.87)	22.16 (4.66)	33.92 (6.98)	51
8 Girls	35.02 (6.72)	20.36 (5.36)	32.30 (6.07)	33
8 Boys	36.70 (5.66)	23.21 (5.40)	28.75 (7.87)	28
8 Total	35.79 (6.26)	21.67 (5.52)	30.67 (7.12)	61
9 Girls	27.05 (9.24)	12.33 (7.06)	29.38 (6.36)	20
9 Boys	35.21 (6.88)	20.67 (4.59)	30.58 (5.99)	26
9 Total	31.93 (8.68)	17.24 (7.06)	30.07 (6.34)	49
7-9 Girls Total	33.06 (7.90)	18.42 (6.94)	32.17 (6.63)	72
7-9 Boys Total	35.86 (6.97)	22.07 (4.79)	30.85 (7.08)	84
7-9 Total	34.67 (7.44)	20.48 (6.15)	31.52 (7.01)	161

Note. Two samples at Grade 7 and three at Grade 9 level were incomplete and therefore, were not included in the overall data analysis.

Presentation of Findings

The values of mean and standard deviation are shown in Table 1. The values for body image satisfaction was high among grade 7 students ($M = 35.98$, $SD = 6.87$) as compared to grade 8 students ($M = 35.79$, $SD = 6.26$) and grade 9 students ($M = 31.93$, $SD = 8.68$). The values of mean and standard deviation for self-esteem were the same. They were higher among grade 7 students ($M = 22.16$, $SD = 4.66$) as compared to grade 8 students ($M = 21.67$, $SD = 5.52$) and grade 9 students ($M = 17.24$, $SD = 7.06$). It should

be noted that as the values for mean decreased with the grade level for body image satisfaction and self-esteem, the values for standard deviation increased with grade level for self-esteem but for body image satisfaction, the values for standard deviation increased only among grade 9 students.

The correlations between body image satisfaction, self-esteem, and academic behaviour for students at all the three grade levels for each gender are shown in Table 2. The analysis of data for girls at the three grade levels revealed self-esteem ($r = .42$, $***p < .001$) to have higher correlation to academic behavior as compared to body image satisfaction ($r = .03$, $p = .399$). Analysis of data for boys at three grade levels also revealed almost similar results. Self-esteem ($r = .47$, $***p < .001$) had higher correlation to academic behavior as compared to body image satisfaction ($r = .03$, $p = .386$).

The correlations between academic behaviour, body image satisfaction and self-esteem for both girls and boys in grades 7, 8, and 9 are shown in Tables 3, 4, and 5 respectively. Self-esteem had a higher correlation to academic behaviour as compared to body image satisfaction. Among the grade 7 students (Table 3), there were significant correlations between self-esteem and academic behaviour for both girls ($r = .47$, $*p < .05$) and boys ($r = .59$, $***p < .001$). Interestingly, for both girls and boys in grade 7, body image satisfaction was not significantly related with self-esteem and academic behaviour. This pattern of correlations was similar for the grade 8 students (Table 4) with the only significant correlations between self-esteem and academic behaviour for girls ($r = .35$, $*p < .05$), and boys ($r = .52$, $**p < .01$). Body image satisfaction had no correlation to self-esteem or academic behaviour for both girls and boys in grade 8. However, in grade 9 (Table 5) the correlation of body image satisfaction to academic behavior was significant

for only boys ($r = .24, p=.115$). Similar to grade 7 and 8, the correlations between self-esteem and academic behaviour was significant for grade 9 girls ($r = .20, p=.195$) and boys ($r = .46, **p<.01$).

The standardized regression coefficients of body image satisfaction for girls across grades 7, 8, and 9 respectively were ($\beta = -.15, \beta = -.14, \text{ and } \beta = -.19$) and of self-esteem were ($\beta = .42, \beta = .35, \text{ and } \beta = .30$) respectively. The standardized regression coefficients of body image satisfaction for boys across grades 7, 8 and 9 respectively were ($\beta = -.11, \beta = .06, \text{ and } \beta = .13$); self-esteem were ($\beta = .59, \beta = -.51, \text{ and } \beta = .42$) respectively. Among the grades 7, 8, and 9 students, the value of R^2 for girls was .25, .14, and .07 respectively and the value of R^2 for boys was .36, .27, and .22. The value of R^2 for all girls was .19 while the value of R^2 for all boys was .23. The standardized regression coefficients of body image satisfaction for all girls was ($\beta = -.15$), and of self-esteem ($\beta = .48$). The standardized regression coefficients of body image satisfaction for all boys was ($\beta = -.02$) and of self-esteem ($\beta = .48$).

Table 2

Pearson Correlations between Body Image Satisfaction, Self-esteem, and Academic Behaviour for Grades 7, 8, and 9 Total

	Academic Behaviour	Body Image Satisfaction	Self-esteem
Academic Behaviour	--	0.03	0.42***
Body Image Satisfaction	0.03	--	0.39***
Self-esteem	0.47***	0.12	--

Note. Correlations in upper triangle are for girls, lower triangle is for boys.
*** $p<.001$

Table 3

Pearson Correlations between Body Image Satisfaction, Self-esteem, and Academic Behaviour for Grade 7 girls and boys

	Academic Behaviour	Body Image Satisfaction	Self-esteem
Academic Behaviour	--	-0.30	0.47*
Body Image Satisfaction	-0.09	--	-0.38
Self-esteem	0.59***	0.03	--

Note. Correlations in upper triangle are for girls and lower triangle is for boys.
*** $p < .001$, * $p < .05$

Table 4

Pearson Correlations between Body Image Satisfaction, Self-esteem, and Academic Behaviour for Grade 8 girls and boys

	Academic Behaviour	Body Image Satisfaction	Self-esteem
Academic Behaviour	--	-0.14	0.35*
Body Image Satisfaction	0.08	--	0.00
Self-esteem	0.52**	0.03	--

Note. Correlations in upper triangle are for girls, lower triangle is for boys.
** $p < .01$, * $p < .05$

Table 5

Pearson Correlations between Body Image Satisfaction, Self-esteem, and Academic Behaviour for Grade 9 girls and boys

	Academic Behaviour	Body Image Satisfaction	Self-esteem
Academic Behaviour	--	-0.04	0.20
Body Image Satisfaction	0.24	--	0.51**
Self-esteem	0.46**	0.27	--

Note. Correlations in upper triangle are for girls, lower triangle is for boys.

** $p < .01$

Summary

In order to examine the relationship of body image satisfaction and self-esteem to academic behaviour, a Pearson's correlation was calculated. Interestingly, at all three grade levels, the relationship of body image satisfaction to academic behaviour was not significant ($r = .02$) but self-esteem was found to be significant ($r = .40$, *** $p < .001$). Comparison of data across the three grades revealed that among the boys, self-esteem ($r = .47$, *** $p < .001$) had higher correlation to academic behavior as compared to body image satisfaction ($r = .03$). Girls' analysis also revealed self-esteem ($r = .42$, *** $p < .001$) to have higher correlation to academic behavior as compared to body image satisfaction ($r = .03$). These findings indicated that the overall self-esteem of a pre-adolescent and adolescent played an important role in the academic behaviour in spite of the gender. Girls and boys with higher self-esteem will be able to emphasize their positive strengths and resources necessary for school success. Another thought-provoking result indicated that self-esteem was also significantly correlated to body image satisfaction among the girls ($r = .32$) and boys ($r = .12$) in the total sample. This implication signifies that as

these girls and boys move into late adolescence, self-esteem becomes a vital indicator for determining body image satisfaction.

Chapter Five - Conclusion and Recommendations

This chapter includes the conclusions on this research study. Recommendations for major stakeholders like parents, counsellors, and teachers are made to enhance the effectiveness of the programs for the benefit of the students. Implications for further research and a final summary are also included.

Conclusion of the Research

The purpose of this study was to find the relation between body image satisfaction and self-esteem to academic behaviour in pre-adolescent and adolescent girls and boys. As a result of an analysis generated from secondary data. The following conclusions emerged from this study as they related to the research questions on body image satisfaction, self-esteem, and academic behaviours among pre-adolescent and adolescent girls and boys.

1. How does body image satisfaction and self-esteem relate individually and collectively with academic behavior?

The results relating to the relationship between body image and academic behaviour were contrary to previous studies. The finding of this study is inconsistent with previous research. The results of this study indicate that body image had no significant correlation ($r = .02$) to academic behavior. However, studies done by Fonseca et al., (2010) confirmed that 5.4% of overweight adolescents performed below average at school and reported a poorer perception of academic achievement as compared to 4.4% of normal weight adolescents. This difference could be accounted for by the smaller sample size ($N = 161$) that was used for this study. Fonseca et al.'s (2010) study employed a large sample size ($N = 17,000$). The current study also did not ask the

participants to report about their actual weight and label themselves as normal weight, overweight, or underweight. Yanover and Thompson (2008) offered insight that speaks to an indirect but important relationship between body image and academic performance. They noted that body image dissatisfaction might lead to high level of school absenteeism due to social anxiety regarding one's appearance. It is important to note that the current study did not take into account the adolescents' attendance history.

The results relating to the research question that self-esteem influences academic behaviours indicated that self-esteem had high correlation ($r = .40$) to academic behavior. The findings were generally consistent with a previous research which found a .34 positive relationship between academic behavior and self-esteem (Hattie, 1992). Another research note both direct and indirect relationship between self-esteem and academic behaviour (Liu, Kaplan & Risser, 1992). This study found that self-esteem impacts motivation to succeed and self-esteem is positively related to behaviours that promote academic achievement. This finding is important for the design and implementation of school-based interventions because students with high self-esteem will have lower absenteeism history and in turn will perform better at school. Another study which noted a high correlation between self-esteem and academic behaviour is by Alves-Martins et al.'s (2002). They found that students with low level of achievement possess self-esteem that is considerably lower than that of students with a high level of achievement. This is particularly insightful considering that the current study found a statistically significant correlation between self-esteem and academic behavior. Alves-Martins, et al. conclude that academic results play an important role in the self-esteem of adolescents. Rosenberg (1965) found that self-esteem was associated with both academic achievement and extra-

curricular activities among adolescents. This is important because a longitudinal study done by Schmidt and Padilla (2003) write that grades and extracurricular activities have been linked to the development of optimal adolescent functioning and are considered to be fairly reliable indicators of future well-being and success.

Related to this, self-concept or self-esteem has been found to be a psychological factor that has a considerable impact on the academic and social performance of a person (Hoogeveen et al., 2009; Stringer & Heath, 2008). All of these previous studies indicate that self-esteem is a strong predictor of positive academic behaviour of adolescents. The implications for educational practice are clear. In order to promote academic success, educators need to first look at the overall self-esteem of the students and find ways to promote that. Considering that self-esteem is affected by familial influence, parents also need to make effort to give their children opportunities to increase their self-esteem and not to put them down for every learning mistake. This places self-esteem intervention in the universal counselling intervention category in the school system.

The results relating to the relationship between body image to self-esteem is that body image and self-esteem have ($r = .41$) correlation. R is the total correlation of all the independent variables (body image satisfaction and self-esteem) to dependent variable (academic behaviours). The results also indicate that self-esteem is statistically significant ($r = .32$) to body image among the entire sample size. Surprisingly, in grade 7 self-esteem was statistically insignificant ($r = -.04$) to body image satisfaction. But in grades 8 and 9, self-esteem was significant ($r = .05$ and $r = .56$) to body image satisfaction. This could be due to the fact that as these pre-adolescents become older and

enter into early adolescence; self-esteem becomes more significant, reaching its peak at grade 9.

2. How much do the relationships between body image satisfaction, self-esteem and academic behavior differ across grades 7, 8, and 9?

The results confirm the relationships of body image and self-esteem to academic behavior at the three grade levels. The analysis indicates that self-esteem had a statistically significant correlation ($r = .52$, $r = .39$, and $r = .33$) to academic behaviour among grades 7, 8 and 9 respectively, as compared to body image. It should be noted that the self-esteem correlation also decreased as the grades got higher. This could be accounted for by developmental factors. As the girls and boys become older and move into higher grades, their self-esteem becomes lower. Grades 7 or 8, boys may not be concerned about their body image as they do not enter puberty till grade 9 and are still “immature” and act “silly” to get attention. From a teacher’s perspective, it was therefore not surprising that the correlation of body image satisfaction to academic behaviour was not statistically significant in grade 7 and 8 ($r = -.13$ and $r = -.07$).

Girls on the other hand enter puberty by grade 5 - 6 and thus mature earlier than the boys. They are also more mature and act like “young ladies” by the time they arrive in grade 7. However, in grade 9 the correlation of body image satisfaction to academic behavior was significant among grade 9 girls ($r = .13$).

Folk et al., (1993) found that boys in grade 6 were more dissatisfied with body weight than boys in grade 3 and that there was a strong association between dissatisfaction with body image and a negative self-concept, particularly for boys in grade 6. Another study done by Parkinson et al., (1998) confirmed that younger boys

(grades 4 to 5) desired a larger body than their current shape and older boys (grades 7 to 8) desired a leaner shape than their perceived current body shape. These studies indicate that as boys get older and move closer to adolescence, they become more aware of the socio-cultural ideal for males and strive for a mesomorphic body type (Furnham & Calnan, 1998; McCabe & Riccardelli, 2004; Pope et al., 1999). The implication is that educators and parents should understand the importance of taking developmental approach especially when dealing with issues regarding body image satisfaction and self-esteem among girls and boys.

In the current study, girls and boys in grades 7 and 8 were less concerned about their body image satisfaction than their self-esteem. Self-esteem was more significant to these young pre-adolescents and adolescents as self-esteem can be a driving force related to body image satisfaction. This finding is inconsistent with everyday expectations of most adults who work with young males. Further research is required to unravel how self-esteem and body image satisfaction predict each other.

3. How does gender influence the relationships among body image satisfaction, self-esteem, and academic behavior?

While body image research has been mostly centered on girls in the past, recent research indicates that body image concerns are rapidly increasing among boys too (Kater, et al. and Furnham & Calnan, 1998). The findings of this study indicate that self-esteem ($r = .47$) is more highly correlated to academic behavior than body image satisfaction ($r = .03$) among pre-adolescent and adolescent males across the three grades. This is because contrary to expectations that body image predicts self-esteem among pre-adolescents and adolescents, self-esteem might actually predict body image satisfaction.

Female's analysis also revealed self-esteem ($r = .42$) to have higher correlation to academic behavior as compared to body image ($r = .03$). Person who has a higher self-esteem will be more satisfied with their bodies as compared to person who is not.

Girls usually mature earlier than boys and by grade 7, most of them have already entered puberty and become accustomed to their changing bodies. They do not hesitate to spend hours on their looks before school and come well groomed. Boys do not start puberty around grade 9, are still "goofy and silly" in grade 7 and 8, and not concerned about their bodies or their looks. They do not care if they "just crawl out of bed" and arrive to school.

Again the developmental factors could explain some of these results. The current study's small sample size, especially for grade 9 girls ($N = 19$) might have accounted for these results.

Summary

The results of this study shed light on the relationship between body image satisfaction and self-esteem. Self-esteem was significantly correlated ($r = .32$) to body image satisfaction among the total sample and was in the directions expected. However, the correlations between the grade 7 and grade 8 students ($r = -.04$ and $r = .05$) was not significant than was expected. Other highlight was that among the grade 9 students the correlations was significantly stronger ($r = .56$). This finding could be due to the developmental stage of the grade 7, 8, and 9 students. As the students move into higher grades, they start to absorb the cultural norms and ideals that revolve around them. As they become deeply immersed into these ideals, their self-esteem becomes a strong indicator of body image satisfaction.

Recommendations

The findings of the present study indicate that self-esteem is significant to body image satisfaction and impacts adolescents academic behaviours required for success in school. These findings have practical implications for parents, school counsellors, and educators which will be discussed below.

Recommendations for parents.

Parents are expected to meet all the basic human needs such as food, clothing, and shelter of their child. Parents are also expected to meet their child's emotional, intellectual, and social needs so that they will grow up to have a healthy body image and positive self-esteem. Parents need to be educated about the importance of their own attitudes with regards to food choices, weight, and appearance and its impact on their children. Both mothers and fathers should be aware of the implications of their perceptions and thoughts with regards to their daughter's and son's developing bodies. Parents can model healthy eating behaviours in front of their children and make meal planning a fun activity rather than a tedious chore.

Recommendations for counsellors.

Given that this study examines the relations between gender and grade levels, it is important for the design of developmentally appropriate interventions in school counselling. The data from this study may inform the removal of a significant barrier (body image dissatisfaction) to students' academic outcomes. This is important because one of the key roles of school counsellors and educators is to facilitate student's academic outcomes (Manitoba Sourcebook, 2007). Consistent with the data-driven expectations of the comprehensive developmental counselling model, this data will inform the design of

developmentally appropriate preventive interventions in school counselling (Dahir & Stone, 2012). Preventative strategies can be used to promote positive body image satisfaction and self-esteem among pre-adolescents and adolescents. These strategies build on strengths and promote resilience by incorporating a holistic approach. Preventive guidance and counselling programs will help students to feel encouraged about their learning process as well as their relationships with others as they are proactive in nature. Preventive planning involves consultation with other school personnel's, parents, and referrals to clinicians and external agencies. Its main focus is related to safe, caring, effective school environment. (Manitoba Sourcebook, 2007). Counsellors can facilitate friendship groups for girls and boys and provide support to feel good about themselves, adopt positive attitudes towards their body image, and respect diverse body types. Counsellors can also help to facilitate information sessions with regards to the physiological changes that occur with the onset of puberty for girls and boys. Counsellors can also coach older students to lead mentoring programs for younger girls and boys focusing on looking at the positive aspects rather than the negative aspects to increase self-worth. The findings of this study underscore the teaching of the concept of holistic wellness techniques that focuses towards optimal health and well-being of the body, mind, and soul of students. The benefit is that students will develop healthy self-images and learn how to practice relaxation techniques when stressed about self-image (Myers, Sweeney, & Witmer, 2000).

Recommendations for educators.

The goal of education is not only to teach the curriculum but to help the adolescents cope with their social and psychological problems. Schools need to build

young citizens who will contribute positively to the society and become comfortable with who they are and not what the society wants them to be. Data from this study will add to existing research which notes that dissatisfaction with body image is associated with poor self-esteem, onset of eating disorders, obsessive thinking about one's weight and appearance, self-mutilation, onset of poor life style such as smoking and drinking and many more social problems. Passing information to students and parents about the negative effects of dieting and skipping meals through school newsletters or web based information will help prevent the likelihood of adopting negative methods to obtain an "ideal" weight. Guest speakers like local nurses or dieticians could come into the schools and talk to students about body types and healthy eating by following all the food groups. Educators can develop a policy of 'no tolerance' for weight related peer teasing. The use of the word "fat" should be discouraged from classrooms. School teachers can encourage students to participate in school related physical activities to increase self-esteem. Non-athletic students can be encouraged to demonstrate their skills in volunteer work with the local day care centers, food banks, homes for the old, etc. School educators should teach the students strategies to evaluate the messages they receive from media sources and not let those messages exploit their developing mindsets.

Simultaneous examination of these variables adds strength to current research which notes the influence of body image on educational outcomes. It will set the stage for research which explores how some of the variables under study could act as predictors for the onset of body image dissatisfaction and lower self-esteem. This is crucial in order to inform more targeted intervention aimed at promoting academic outcomes among students who struggle with body image satisfaction and self-esteem challenges.

Implications for Further Research

Despite the fact that there are many implications for further research to this study, it is to my knowledge the first study to examine both girls and boys at two different developmental stages (pre-adolescents and early adolescents). This is also the first study to examine the relation of both body image satisfaction and self-esteem to academic behaviours. The results of this study need to be interpreted in the context of several implications. First, this study had a small sample size (N = 161). Therefore caution is required when applying to general populations of adolescents. Second, the sample was drawn from a secondary data which was collected out of convenience as part of the researcher's place of work. It was also part of the school plan for 2011 - 2012 academic year. Therefore, the findings may not be generalized to wider populations. Third, because of the young age of the participants, two measures (body image satisfaction and academic behaviour) were developed by the school committee. Future research might benefit from pre-existing measures. Fourth, this study also employed cross-sectional design and a case-control study will provide more definitive results. Fifth, the present study only used the quantitative methodology and in the future qualitative methodology can be used along with larger sample size. Lastly, a longitudinal study, where the participants are followed from grade 6 (pre-adolescents) to grade 11 (late adolescents), will provide more diverse results.

Final Summary

Schools do not offer courses on body image satisfaction or self-esteem. In early adolescence, when students lack the confidence in themselves due to lower self-esteem,

they can become more dissatisfied with their body image. They can stop having the trust in their abilities and thus may perform poorly at school; hindering their own success.

Eventually this cycle of poor body image satisfaction and lower self-esteem takes control over the negative self-criticism and in turn affecting their academic behaviours at school necessary for success.

As the students move into adolescence, they forget one important concept; just as two people do not have the same finger prints, they are not meant to have the same body types either. Adolescents are too busy pleasing others and constantly worry about what others are thinking about them rather than worry about school. Everyone is unique on their own and they should respect that fact without having to go through extreme turmoil to alter the way they look.

References

- Alves-Martins, M., Peixoto, F. Gouveia-Pereira, M. Amaral, V., & Pedro, I. (2002). Self-esteem and academic achievement among adolescents. *Educational Psychology*, 22(1), 51-62. DOI: 10.1080/01443410120101242
- Anorexia Nervosa and Related Eating Disorders (1999). (Copyright 2011). Retrieved from <http://www.anred.com/causes.html>
- Anderson, A. E. & Di Domenico, L. (1992). Diet vs. shape content of popular male and female magazines: A dose response relationship to the incidence of eating disorders. *International Journal of Eating Disorders*, 11(3), 28 -287.
- Attie, I. & Brooks-Gunn, J. (1989). Development of eating problems in adolescent girls: A longitudinal study. *Developmental Psychology*, 25, 70-79.
- Boyce, W., Craig, W., Elgar, F., Freeman, J., Janssen, I., King, M., McCuaig Edge, H., McLagan, S., Pickett, W., & Saab, H. (2008). Healthy settings for young people in Canada 2006. *Health Behaviour in School-aged Children Survey*. Public Health Agency of Canada. Retrieved from <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/publications/yjc/index-eng.php>
- Bulik, C.M., Wade, T.D., Heath, A.C., Martin, N.G., Stunkard, A.J., & Eaves, L.J. (2001). Relating body mass index to figural stimuli: Population-based normative data for Caucasians. *International Journal of Obesity Related Metabolic Disorders* 25(10), 1517 - 1524.
- Carroll, P., Tiggemann, M., & Wade, T. (1999). The role of body dissatisfaction and bingeing in the self-esteem of women with Type II diabetes. *Journal of Behavioral Medicine*, 22, 59-74.
- Clay, D., Vignoles, V. L., & Dittmar, H. (2005).

- Body image and self-esteem among adolescent girls: Testing the influence of sociocultural factors. *Journal of Research on Adolescence*, 15 (4), 451-477.
- Cohane, G.H. & Pope, H.G. (2000). Body image in boys: A review of the literature. *International Journal of Eating Disorders*, 29, 373-379.
- Cohen, J. & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum, Associates.
- Collins, M. E. (1991). Body figure perceptions and preferences among preadolescent children. *International Journal of Eating Disorders*, 10, 199-208.
- Coyle, D.D. (2009). Kids really are different these days. *Phi Delta Kappan*, 405-407.
- Crocker, J., Luhtanen, R. K., Cooper, M. L., & Bouvrette, A. (2003). Contingencies of self-worth in college students: Theory and measurement. *Journal of Personality and Social Psychology*, 85, 894–908. DOI: 10.1037/0022-3514.85.5.894
- Dahir, C. A., & Stone, C. (2012). *The Transformed School Counselor* (2nd ed.). Brooks/Cole Belmont, CA.
- Delfabbro, P.H., Winefield, A.H., Anderson, S., Hammarstrom, A., & Winefield, H. (2011). Body image and psychological well-being in adolescents: The relationship between gender and school type. *The Journal of Genetic Psychology*, 172 (1). 67-83.
- Dohnt, H., & Tiggemann, M. (2006). The contribution of peer and media influences to the development of body satisfaction and self-esteem in young girls: A prospective study. *Developmental Psychology*, 42(5). 929-936. DOI: 10.1037/0012-1649.42.5.929

- Dohnt, H., & Tiggemann, M. (2008). Evaluating a program to promote positive body image in young girls. *The Brown University Child and Adolescent Behavior Letter: An evaluation of Shapesville*. 3-4.
- Drewnowski, A. & Yee, D.K. (1987). Men and body image: Are males satisfied with their body weight? *Psychology Med*, 40, 626-634.
- Fabian, L. J., & Thompson, J. K. (1989). Body image and eating disturbance in young females. *International Journal of Eating disorders*, 8, 63-74.
- Ferguson, C.J., Munoz, M.E., Contreras, S., & Velasquez, K. (2011). Mirror, mirror on the wall: Peer competition, television influences, and body image dissatisfaction. *Journal of Social and Clinical Psychology*, 30 (5), 458-483.
- Field, E., Cheung, L., Wolf, A., Herzog, D. B., Gortmaker, S. L., & Colditz, G. (1999). Exposure to the mass media and weight concerns among girls. *American Academy of Pediatrics*, 103(3), 1-5. DOI: 10.1542/peds.103.3.e36
- Folk, L., Pedersen, J., & Cullari, S. (1993). Body satisfaction and self-concept of third- and sixth-grade students. *Perceptual and Motor Skills*, 76(2), 547-553.
- Fonseca, H., Matos, M.G., Guerra, A., & and Gomes-Pedro, J. (2010). How much does overweight impact the adolescent developmental process? *Child: Care, health and development*, 37 (1). 135-142
- Furnham, A. & Calnan, A. (1998). Eating disturbance, self-esteem, reasons for exercising and body weight dissatisfaction in adolescent males. *European Eating Disorders Review*, 6, 58-72.

- Glasser, W. (1969). *Schools without failure*. New York: Harper and Row.
- Gray, J. & Ford, K. (1985). The incidence of bulimia in a college sample. *International Journal of Eating Disorders*, 4(2), 201-210.
- Harrison, K. (2001). Ourselves, our bodies: Thin-ideal media, self-discrepancies, and eating disorder, symptomatology in adolescents. *Journal of Social and Clinical Psychology*, 14, 324-338.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guildford.
- Hattie, J. (1992). *Self-concept*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Helfert, S. & Warschburger, P. (2011). A prospective study on the impact of peer and parental pressure on body dissatisfaction in adolescent girls and boys. *Body Image*, 8, 101-109.
- Hoogeveen L., Van Hell, J. G., & Verhoeven, L. (2009). Self-concept and social status of accelerated and nonaccelerated students in the first 2 years of secondary school in the Netherlands. *Gifted Child Quarterly*, 53 (1). 50-67.
- Howell, D.C. (2002). *Statistical methods of psychology*. 5th edition. Duxberry, Pacific Grove, CA.
- Isaac, S., & Michael, W.B. (1977). *Handbook in Research and Evaluation*. San Diego: Edits Publishers.
- Johnson, W.G., Grieve, F.G., Adams, C.D., & Sandy, J. (1999). Measuring binge eating in adolescents: Adolescent and parent versions of the questionnaire in eating and weight patterns. *International Journal of Eating Disorders*, 26, 301-314.

- Kater, K. J., Rohwer, J., Londre, K., (2002). Evaluation of an upper elementary school program to prevent body image, eating, and weight concerns. *Journal of School Health, 72*(5). 199-204.
- Kelly, C., Ricciardelli, L. A., & Clarke, J. D. (1999). Problem eating attitudes and behaviors in young children. *International Journal of Eating Disorders, 25*, 281-286.
- Kling, K.C., Hyde, J.S., Showers, C. J., Buswell, B.N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin, 125*(4), 470-500.
- Koyunchu, M., Tok, S., Canpolat, A.M., & Catikkas, F. (2010). Body image satisfaction and dissatisfaction, social physique anxiety, self-esteem, and body fat ratio in female exercisers and nonexercisers. *Social Behavior personality, 38* (4), 561-570.
- Labre, M.P. (2002). Adolescent boys and the muscular male body ideal. *Journal of Adolescent Health, 30*, 233-242.
- Lawrence, C. M. & Thelen, M. H. (1995). Body-image, dieting, and self-concept: Their relation in African-American and Caucasian children. *Journal of Clinical Child Psychology, 24*(1). 41-48.
- Leon, G. R., Carroll, K., Chemyk, B., & Finn, S. (1985), Binge eating and associated habit patterns within college student and identified bulimic populations, *International Journal of Eating Disorders, 4*(1), 43-57.
- Liu, X., Kaplan, H. B., & Risser, W. (1992). Decomposing the reciprocal relationships between academic achievement and general self-esteem. *Youth and Society, 24*, 123-148. DOI: 10.1177/0044118X92024002001

- Manitoba Sourcebook for School Guidance and Counselling Services. A Comprehensive and Developmental Approach. (2007) Manitoba Education, Citizenship and Youth.
- McCabe, M.P., & Riccardelli, L.A. (2001). Body image and body change techniques among adolescent boys. *European Eating Disorders Review*, 9 (5), 335-347. DOI: 10.1002/erv.389.
- McCabe, M.P., Ricciardelli, L.A. (2004). Body image dissatisfaction among males across the lifespan: A review of past literature. *Journal of Psychosomatic Research*, 56(6), 675-685. DOI:10.1016/S0022-3999(03)00129-6
- McCabe, M.P. & Riccardelli, L.A. (2005). A prospective study of pressures from parents, peers, and the media on extreme weight change behaviors among adolescent boys and girls. *Behaviour Research and Therapy*, 43, 653-668.
DOI:10.1016/j.brat.2004.05.004
- McCabe, M. P., Ricciardelli, L. A., & Finemore, J. (2002). The role of puberty, media and popularity with peers on strategies to increase weight, decrease weight and increase muscle tone among adolescent boys and girls. *Journal of Psychosomatic Research*, 52, 145-154.
- Mishkind, M.E., Rodin, J., Silberstein, L.R., Striegel-Moore, R.H. (1986). The embodiment of masculinity: Cultural, psychological, and behavioral dimensions. *American Behavioural Scientist*, 29, 545-562.
DOI:10.1177/000276486029005004
- Morganett, R.S. (1990). *Skills for living: Group counseling activities for young adolescents*. Research Press: Illinois.

- Mendelson, B. K. & White, D. R. (1982). Relation between body-esteem and self-esteem of obese and normal weight children. *Perceptual and Motor Skills*, 54, 899-905.
- Muth, J. L. & Cash, T. F. (1997). Body-image attitudes: What difference does gender make? *Journal of Applied Social Psychology*, 27, 1438-1452.
- Myers, J.E., Sweeney, T.J., & Witmer, J.M. (2000). Wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling and Development*, 78, 251-266.
- Norwood, S.J., Murray, M., Nolan, A. & Bowker, A. (2011). Beautiful from the inside out: A school-based programme designed to increase self-esteem and positive body image among preadolescents. *Canadian Journal of School Psychology* 26(4) 263-282.
- Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low accepted children at risk? *Psychological Bulletin*, 102, 357-389.
- Parker, S., Nichter, M., Vuckovic, N., Sims, C., & Ritenbauth, C. (1995). Body image and weight concerns among African American and white adolescent females: Differences that make a difference. *Human Organization*, 54(2), 103-114.
- Parkinson, K.N., Tove'e, M.J., Cohen-Tove'e, E.M. (1998). Body shape perceptions of preadolescent and young adolescent children. *European Eating Disorders Review*, 6(2), 126-135.
- Petersen, A. C. & Crockett, L. (1985). Pubertal timing and grade effects on adjustment. *Journal of Youth and Adolescence*, 14(3), 191-206.

- Phares, V., Steinberg, A. R., & Thompson, J. K. (2004). Gender differences in peer and parental influences: Body image disturbance, self-worth and psychological functioning in preadolescent children. *Journal of Youth and Adolescence*, *33*, 421-429.
- Pope, H.G., Olivardia, R., Gruber, A., & Borowiecki, J. (1999). Evolving ideals of male body image as seen through action toys. *International Journal of Eating Disorders*, *26*(1), 65-72.
- Poudevigne, M. S., O'Connor, P. J., Laing, E. M., Wilson, A. M. R., Modlesky, C. M., & Lewis, R. D. (2003). Body images of 4–8-year-old girls at the outset of their first artistic gymnastics class. *International Journal of Eating Disorders*, *34*, 244-250.
- Richins, M. L. (1991) Social comparison and the idealized images of advertising. *Journal of Consumer Research*, *18*, 71-83.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Schmidt, J. A. & Padilla, B. (2003). Self-esteem and family challenge: An investigation of their effects on achievement. *Journal of Youth and Adolescence*, *32*(1), 37-46.
- Seligman, L. (2006). *Theories of counseling and psychotherapy: Systems, strategies, and skills*. Upper Saddle River: NJ: Pearson Education Inc.
- Simmons, G.R., Rosenberg, F., & Rosenberg, M. (1973). Disturbances in the self-image at adolescence. *American Sociological Review*, *38*, 553-568.
- Smolak, L., Levine, M. P., & Shermer, F. (1998). A controlled evaluation of an elementary school primary prevention program for eating problems. *Journal of Psychosomatic Research*, *44*(3-4). 339-353.

- Spencer, M. B., Dupree, D., Swanson, D. P., & Cunningham, M. (2007). The influence of physical maturation and hassles on African American adolescents' learning behaviours. *Journal of Comparative Family Studies*, 189-200.
- Stringer, R. W. & Heath, N. (2008). Academic self-perception and its relationship to academic performance. *Canadian Journal of education*, 31 (2). 327-345.
- Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting beauty: Theory, assessment and treatment of body image disturbance*. Washington, DC: American Psychological Association.
- Tiggemann, M. (2005). Body dissatisfaction and adolescent self-esteem: Prospective findings. *Body Image*, 2. 129–135. DOI:10.1016/j.bodyim.2005.03.006
- U.S. Department of Health and Human Services. (2008). Fact Sheet: Childhood overweight and obesity prevention initiative - Healthy youth for a healthy future. *Office of the Surgeon General Fact Sheet*. Retrieved from <http://www.surgeongeneral.gov/obesityprevention/factsheet>
- Wojtowicz, A.E., & Ranson, K.M. (2012). Weighing in on risk factors for body dissatisfaction: A one-year prospective study of middle-adolescent girls. *Body Image* (9). 20-30.
- Yanover, T., & Thompson, J. K. (2008). Eating problems, body image disturbances, and academic achievement: Preliminary evaluation of the eating and body image disturbances academic interference scale. *International Journal of Eating Disorders*, 41(2). 184–187. DOI 10.1002/eat

Appendix A

Body Image Satisfaction Scale

1. Look at the picture below and answer the next 3 questions by looking at the picture.

Remember there is only one answer.

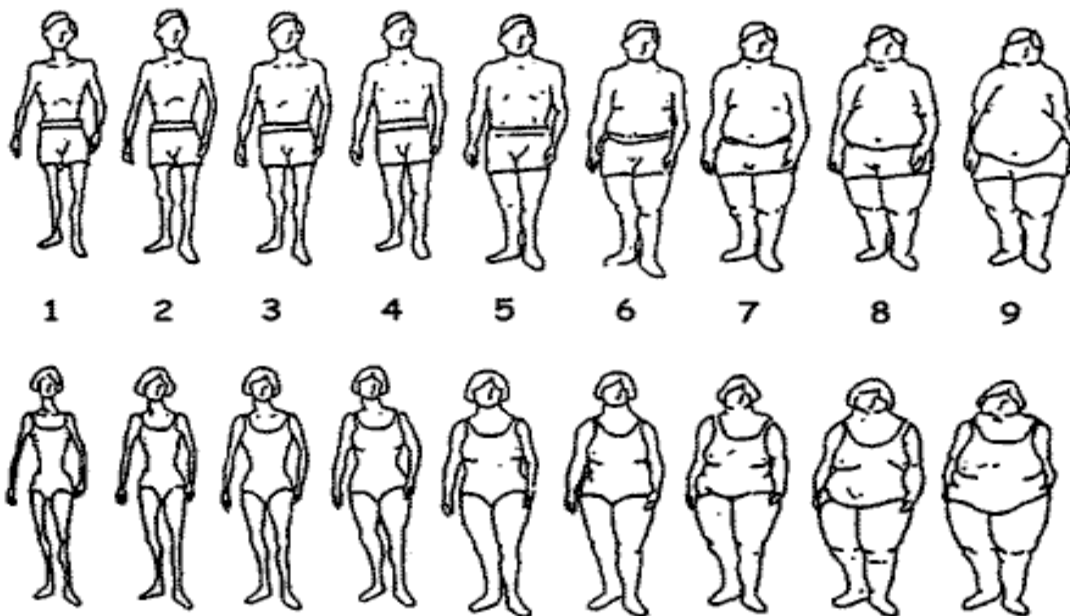


Image Ref: Bulik et.a l (2001)

Retrieved from: <http://www.halls.md/bmi/figures.htm>

A. Which of the above image you feel looks the **most like you**? _____

(Please write only the number)

B. Which of the above image you feel looks the way **you would want to look**? _____

(Please write only the number)

C. Which of the above image you feel is the **perfect** image? _____

(Please write only the number)

2. Mark each of the statement with a check mark (✓) in the box that best reflects how honestly you feel about it.

Remember there is only one answer.

No.	Questions	Never (0)	Sometimes (1)	Often (2)	Always (3)
1.	I am proud of my body.				
2.	I am proud of the way I look.				
3.	I like myself when I look in the mirror.				
4.	I feel I weigh the right amount for my height.				
5.	I feel I need to lose weight.				
6.	I think of changing my weight.				
7.	I think my looks would help me get smarter.				
8.	I wish I looked like someone else (For example: my friend or a movie star).				
9.	My friends think that I am good looking.				
10.	My weight makes me feel unhappy.				
11.	I feel ashamed of how I look.				
12.	I wish I looked prettier / buff.				
13.	My friends think that I am too thin.				
14.	My parents think that I am too thin.				
15.	My friends think that I am too fat.				
16.	My parents think that I am too fat.				

Appendix B

Rosenberg Self-Esteem Scale

Mark each of the statements with a check mark (✓) in the box that best reflects how honestly you feel about it.

Remember there is only one answer.

No.	Questions	Strongly agree (3)	Agree (2)	Disagree (1)	Strongly disagree (0)
1	On the whole, I am satisfied with myself.				
2.	At times, I think I am no good at all.				
3.	I feel that I have a number of good qualities.				
4.	I am able to do things as well as most other people.				
5.	I feel I do not have much to be proud of.				
6.	I certainly feel useless at times.				
7.	I feel that I'm a person of worth, at least on an equal plane with others.				
8.	I wish I could have more respect for myself.				
9.	All in all, I am inclined to feel that I am a failure.				
10.	I take a positive attitude toward myself.				

Appendix C

Academic Behaviour Scale

Mark each of the statement with a check mark (✓) in the box that best reflects how honestly you feel about it.

Remember there is only one answer.

No	Questions	Never (0)	Sometimes (1)	Often (2)	Always (3)
1.	I use my agenda to keep track of deadlines.				
2.	I complete my school work on time.				
3.	I use resources (library, computer) to get information for my assignments.				
4.	I ask questions in class because I want to learn new things.				
5.	I bring my supplies to class.				
6.	I do not keep my notebook or binder organized.				
7.	I do not go over my notes and text book to prepare for a test.				
8.	I like to learn new things on my own that interest me.				
9.	I feel motivated to do better when I understand an assignment.				
10.	I just do the minimum in order to pass.				
11.	I do not ask questions in class when I do not understand an assignment.				

No.	Questions	Never (0)	Sometimes (1)	Often (2)	Always (3)
12.	I can figure out whether I am doing well or not before report cards are due.				
13.	I set a goal at the beginning of each term.				
14.	I help my friend/s on an assignment if they are having a hard time with it.				
15.	I go on to new work that is at a more difficult level.				
16.	I work hard because I see it as a challenge.				
17.	I get distracted easily when I am studying.				
18.	I finish my school work before moving on to social activities.				

Appendix D

Letter of Ethical Waiver from University of Manitoba



Human Ethics
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October 29, 2012

TO: Faculty of Graduate Studies

FROM: Wayne Taylor, Chair 
Joint-Faculty Research Ethics Board (JFREB)

Re: Charulata Gupta

This will confirm that the thesis research of Charulata Gupta, titled *The Relation between Body Image Satisfaction and Self-esteem to Academic Behaviour in Pre-adolescent and Adolescent Girls and Boys*, involves secondary data analysis, (collected during the 2011-2012 academic year, and stripped of all identifiers), and does not require human ethics review.

/mab