BODY IMAGE, SELF-ESTEEM AND ACADEMIC ACHIEVEMENT OF 8TH and 11TH GRADES MALE AND FEMALE LEBANESE STUDENTS

By

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To my loving mother, Hala
Body Image, Self-esteem and Academic Achievement of 8th and 11th Grades Male and Female Lebanese Students

Diala Itani

Abstract

The purpose of this study is to examine the relationships between body image, self-esteem and academic achievements of 8th and 11th grades male and female Lebanese students. A survey was administered on a sample of 120 students from two private schools in Beirut using two instruments: the 34-item Multidimensional Body Self-Relations Questionnaire, MBSRQ (Cash, 2000) composed of five subscales, and the 10-item Rosenberg Self-Esteem Scale, RSE (Rosenberg, 1965). Students wrote their trimesters’ GPAs that represent their academic achievement. The study’s findings supported by the comprehensive review of literature confirmed the influence of body image and self-esteem on adolescents’ academic achievement. The results revealed that body image and self-esteem, and body image and academic achievement are positively and equally correlated in both genders. However, the relationship between self-esteem and academic achievement was only apparent in females. The study contributes to a wider appreciation of the educators’ importance in addressing the factors that influence body image and self-esteem, such as social comparison and media, and offers recommendations, such as preventative and interventional programs, to be implemented in schools in order to help students improve their body image.

Keywords: Body image, Self-esteem, Academic achievement
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Purpose</td>
<td>2</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>3</td>
</tr>
<tr>
<td>Rationale of the Study</td>
<td>3</td>
</tr>
<tr>
<td>Significance and Educational Implications</td>
<td>4</td>
</tr>
<tr>
<td>Definitions</td>
<td>4</td>
</tr>
<tr>
<td>II - Literature Review</td>
<td>6</td>
</tr>
<tr>
<td>Body Image</td>
<td>7</td>
</tr>
<tr>
<td>Body Image and Gender</td>
<td>8</td>
</tr>
<tr>
<td>Body Image and Social Comparison - Middle and Secondary School Students</td>
<td>9</td>
</tr>
<tr>
<td>Body Image in Adolescence</td>
<td>11</td>
</tr>
<tr>
<td>Body Image and Self-Esteem in Adolescence</td>
<td>13</td>
</tr>
<tr>
<td>Body Image and Body Types</td>
<td>13</td>
</tr>
<tr>
<td>Body Image and Family Influences</td>
<td>16</td>
</tr>
<tr>
<td>Effects of Media on Body Image</td>
<td>16</td>
</tr>
<tr>
<td>Body Image, Self-Esteem, Academic Achievement and Cultures</td>
<td>18</td>
</tr>
<tr>
<td>Childhood’s Teasing Effects on Adolescents’ Body Image</td>
<td>19</td>
</tr>
<tr>
<td>School’s Role in Enhancing Body Image</td>
<td>19</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>21</td>
</tr>
<tr>
<td>Self-Esteem Definitions</td>
<td>21</td>
</tr>
<tr>
<td>Importance of Self-Esteem</td>
<td>22</td>
</tr>
</tbody>
</table>
Self-esteem and Academic Achievement 23

The Relationship between Physical Activity, Body Image, Self-Esteem, and Academic Achievement 24

Teacher’s Role in Enhancing Self-Esteem 26

Family Influence and Self-Esteem 26

Self-help Techniques to Improve Body Image and Self-Esteem 27

Conclusion 28

III - Research Design and Methodology 30

Participants 30

Procedure 31

Piloting 32

Measurement Tools 33

Multidimensional Body Self-Relations Questionnaire (MBSRQ) 33

Rosenberg Self-Esteem Scale (RSE) 35

Assumptions 35

Research Design 36

Data Analysis 36

IV - Findings and Results 37

V - Analysis, Synthesis and Discussion 48

Introduction 48

Analysis of Findings 48

Body Image as Related to Academic Achievement and Self-Esteem 48

Body Image, Self-esteem, Academic Achievement and Gender Differences 49
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Distribution of Participants by Gender and Grade Level</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>MBSRQ Subscales and Their Descriptions</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>Distribution of Participants by Grade and Gender</td>
<td>36</td>
</tr>
<tr>
<td>4</td>
<td>Descriptive Statistics on Variables of Body Image, Self-Esteem and Academic Achievement</td>
<td>37</td>
</tr>
<tr>
<td>5</td>
<td>Results of Regression for Prediction of Self-Esteem by Body Image</td>
<td>38</td>
</tr>
<tr>
<td>6</td>
<td>Results of Regression for Prediction of Self-Esteem by Academic Achievement</td>
<td>40</td>
</tr>
<tr>
<td>7</td>
<td>Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Both Genders</td>
<td>41</td>
</tr>
<tr>
<td>8</td>
<td>Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Females Only</td>
<td>42</td>
</tr>
<tr>
<td>9</td>
<td>Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Males Only</td>
<td>43</td>
</tr>
<tr>
<td>10</td>
<td>Results of Multiple Regression Analysis for Body Image and Self-Esteem Variables as Related to Academic Achievement According to Gender and Grade Level</td>
<td>44</td>
</tr>
<tr>
<td>11</td>
<td>Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Grade 11 Only</td>
<td>46</td>
</tr>
<tr>
<td>12</td>
<td>Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Grade 8 Only</td>
<td>46</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

“Beauty is not in the face; beauty is a light in the heart” (Kahlil Gibran, 1923). Does society agree with Gibran? Did it ever think like him?

According to research, every year, the number of adolescents who dislike their physique is increasing. The statistics of the Canadian Learning Company (2009) indicated that 50% of fourteen to sixteen years old American and Canadian boys and 75% of same age girls were not happy with their physical appearances. One student out of eighteen got into severe depression because of body image dissatisfaction that was aggravated by peer pressure and comparisons with the media models.

The destructive comparison is initiated in the early years of adolescence, a lifecycle that is characterized by many physiological, cognitive and emotional changes, in addition to an increased preoccupation with the physique (Continuing Professional Development, 2009). Adolescents view their physique as the center of their confidence. Their identity, well-being, academic achievement, interpersonal and intrapersonal relationships are affected by how they see, feel and talk about their bodies (Yuan, 2007).

Many young people from both genders expect their bodies to have a certain shape or meet certain criteria that they built from media’s beauty perceptions. While girls usually view themselves heavier than they are and are consistently in search of dietary plans, men tend to underestimate their weight and seek heavy muscular and athletic shapes (Goldfield, 2010). Teenagers try all grooming and cosmetic products and blindly follow new trends and fashion. When they still perceive a discrepancy between their perception of themselves and their expectations, they undergo plastic surgeries. Based on a report published by the
American Society of Plastic Surgery (2008), the number of plastic surgeries rose 7% in a year, 64% from year 2000 and tripled in one year for teens under eighteen.

Research has shown that teenagers develop positive or negative body images that affect their self-esteem and self-concepts. They start being socially active; connecting to their peers and disconnecting from their families (Rosenberg, 1965). It is also widely understood that the development of self-esteem in adolescents is crucial to academic functioning (Weinshenker, 2010). School community, teachers and counselors shall be aware of these types of problems students are facing during adolescence, and particularly during their transition from middle school to high school. Body image impacts students’ interpersonal and intrapersonal relationships, their self-evaluation, self-esteem and self-concept; hence their well-being and quality of their achievements.

**Purpose**

The purpose of this study is to extend past research by studying the relationship amongst body image and self-esteem of female and male teenagers and expand the knowledge about how academic achievement is related to body image and self-esteem. It examines the levels of body image and self-esteem in a sample of Lebanese adolescents and relating them to their academic achievement according to grade level and gender. While research has proven relationships between body image and self esteem, and self-esteem and academic achievement, few studies have examined the changing relationship amongst the three elements. Therefore, what is new in this paper is the study of the relationship between body image, self-esteem and academic achievement and its variation according to gender and grade level.
Hypotheses

H1: Self-esteem is positively correlated to body image in both genders.

H2: Self-esteem is positively correlated to academic achievement in both genders.

H3: The correlation between self-esteem and body image is stronger in females.

H4: The correlation between self-esteem and academic achievement is stronger in females.

H5: The relationship between body image, self-esteem and academic achievement is stronger in females than in males.

H6: The relationship between body image, self-esteem and academic achievement is stronger in grade 11 students than in grade 8 students.

Rationale of the Study

Research regarding body image has mostly been done from nutritional and psychological viewpoints, studying the relationships between body mass index, self-esteem and physical behavior. This study tackles body image and self-esteem from an educational perspective. Despite the growing concern about the level of self-esteem in adolescents as related to their body image, little research has demonstrated how they are related to academic achievement. Moreover, studies on body image among adolescents in the Middle East are limited, and none of the studies has related body image to academic achievement. Keeping these factors in mind, this research unveils the relationship between body image, self-esteem and academic achievement based on gender and grade level and attempts to understand how the relationship may vary according to gender, and from early to late adolescence. This study places a high importance on the educators’ roles. It intends to help
teachers see students “as a whole”, understand that students’ school achievements, self-esteem and well-beings are affected by the way they feel and think about themselves.

**Significance and Educational Implications**

The study has implications for teachers. Since body-image satisfaction is positively correlated to teenagers with successful personal, academic, and social life (Continuing Professional Development, 2009); workshops, health and psychological awareness programs, and morning meetings discussions can be incorporated in schools. In addition, preventative group activities and intervention programs can limit destructive habits such as comparison with ideal images and media figures. Journal writing and student-teacher conferences might also be beneficial for changing students’ wrong perceptions and feelings about themselves and enhancing positive relationships with themselves and their environment. Teachers are also advised to verify whether girls’ grades are affected by their perceptions about their bodies and their attitudes toward themselves. Educators’ teaching methods and classroom activities should tailor to the students’ needs that vary according to gender and grade levels.

**Definitions**

*Body image* is people’s perceptions, feelings and thoughts about their physical appearance (Cash & Pruzinsky, 2002). It is also how they talk about their bodies and how they sense the environment’s vision of and criticism about their appearance (Kostanski, & Gullone, 1998). Body image is not based on facts and is influenced by different biological, psychological and social factors (Durkin & Paxton, 2002).
*Self-esteem* has many brief and extended definitions. It is the way people perceive themselves, and their feelings of self worth that is affecting their self-evaluation (Mruck, 2006). According to Annamaria and Alesi (2006), self-esteem is referred to as the development of healthy feelings and attitudes toward the self that generate an inner strength and motivation. Self-esteem is measured along a continuum ranging from high to low and positive to negative. Self-esteem is mainly defined as “the attitude, whether positive or negative that people have toward themselves” (Rosenberg, 1965, p.30). According to Zeigler-Hill (2010), the Rosenberg scale (Rosenberg, 1965) is the most widely used scale that recognizes global self-esteem traits. Rosenberg’s self-esteem definition will be used and its measurement tool will also be administered in this study. 

*Academic Achievement:* In this study, academic achievement is students’ final outcome rather than a process. It is a numeric grade that measures the level of scholastic knowledge acquisition and comprehension (Veronneau & Dishion, 2011). The trimesters’ final averages will serve as an indicator of students’ academic achievement.

In chapter two, this study’s literature review reports and reflects on research, results and information regarding the importance of and factors influencing body image and the relationships between body image, self-esteem and academic achievement. The quantitative study reflects on past research and discusses the methodology, in chapter three, that attempts to study the relationships between the variables. The findings are then explained and analyzed in chapters four and five.
CHAPTER TWO
LITERATURE REVIEW

This chapter refers to previous studies’ findings, discussions, interpretations and analyses that are related to this study’s purpose, rationale and hypotheses. It also indicates the need for further research in some areas, especially when it comes to academic achievement, since no studies discussed the relationship between the three variables body image, self-esteem and academic achievement together. The attempt of this study is to shed light first on body image and self-esteem and academic achievement separately, and then focus on their relationship.

The current study looks at body image and self-esteem according to gender and grade level. It then furthers the understanding of how the two variables are related to academic achievement.

The ways media, body types, social comparison, childhood memories and adolescents’ cognitive distortions affect body image are also reviewed. They draw attention to the importance of school preventative and interventional programs that should tackle the body-image problem from different perspectives and should identify the causes and consequences of high body dissatisfactions and their relations with self-esteem and academic achievement.

Also of interest was to review the teachers’ roles in enhancing body image and self-esteem to further support this study’s purpose of tackling the topic from an educational perspective. This is also done in order to better implement ways in order to influence body image and self-esteem, such as including group discussions and personal writings in the curriculum. The attempt would be to improve students’ well-being, quality of life and
schools’ achievements and performances through enhancing students’ body image and self-esteem.

**Body Image**

Research tends to describe body image as people’s perceptions, feelings and thoughts about their physical appearance (Cash & Pruzinsky, 2002). It is also how they talk about their bodies and how they sense the environment’s vision of and criticism about their appearances. It is a personal belief about physical appearance that may not be true (Kostanski & Gullone, 1998).

Individuals usually compare the way they look with standards or ideals. The higher the discrepancy between people’s own image and the ideal image, the higher the body image dissatisfaction. Those who are pleased with their physique have a positive body image, which is a major aspect of the global self-image and self-concept (Sira & White, 2010).

People with a negative body image feel guilty, ashamed and anxious about their bodies, and have a distorted view about their looks (Ramachandran, 2004). Those with high body dissatisfaction label themselves as unworthy, unpopular and even unwanted in social groups. Because of their negative body image, they can suffer from isolation, depression, eating disorders, self-destructive talk and low self-esteem (Neumark-Sztainer, 2003). Personal negative perceptions get to lower self-esteem and create feelings of personal disappointment (Yuan, 2009).

Body image is influenced by personal experiences, biological, psychological, emotional and social factors (Durkin & Paxton, 2002). Different factors affect teenagers’
body image, such as gender, age, peer pressure, social comparison, familial support, body types, character traits, and childhood memories (Santrock, 2003).

**Body image and gender.**

It seems plausible that body image varies according to gender (Yuan, 2009). Females are usually more concerned with their looks, and their environment’s perception than men. They feel that they are judged based on their weight and height; and they evaluate themselves based on people’s opinions (Ricciardelli & McCabe, 2001). Girls invest more time perceiving and talking about their bodies and worrying about the comments and criticisms of the two genders (Yuan, 2009).

Research has shown that the girls’ body mass index (which is the weight in kilograms divided by the height squared in meters) is negatively related to the level of body satisfaction. Girls who consider themselves fat or overweight might engage in eating disorders, such as anorexia and bulimia or can follow certain dietary behaviors, such as crash or unbalanced diets. The desire of becoming thinner increases depressive and isolation symptoms (Barker & Galambos, 2003). Insights of being fat influence the girls’ attitudes and behaviors toward themselves from the early teenagers’ years; whereas boys’ behaviors start changing in the late adolescence (Jones, 2004).

Contrary to females who want to lose weight, males want to convert the fat in their bodies into muscles. They join a health fitness club and enroll in body building programs and follow high protein diets (Sira & White, 2010). Many articles are focusing more on men’s body images. Society is judging males based on the muscles they have, and is linking masculinity to their physical characteristics. Body image formation begins in early adolescence; therefore it is important to detect it from then (Ridgeway & Tylka, 2005).
Although a large literature exists on dissatisfaction of women with their bodies, men’s discontent with their bodies has increased in the last five years (Myers & Crowther, 2009). Men might not talk about how they feel or face emotional problems. However, they can get engaged into excessive body building, steroids consumptions or immoderate protein intake (Agliata & Tantleff-Dunn, 2004).

More girls, than boys, generalize their dissatisfaction with their bodies with their disappointment with themselves (Sira & White, 2010). Girls usually perceive themselves overweight more than boys do, even if they fit in the normal category of body mass index. They associate thinness and attractiveness to happiness more than men do (Davison & McCabe, 2006). Although studies showed that females’ dissatisfaction with their body images are higher than men’s, no significant difference was remarked between genders of eastern countries, such as China and Taiwan (Yang, Gray, & Harrison, 2005). The same adolescents, both males and females feel uncomfortable with their looks and dislike their bodies because of social pressure (Yuan, 2007). They view their physique as the center of their confidence and well-being (Yuan, 2009).

**Body image and social comparison - Middle and secondary school students.**

Comparisons with media and peers start in early classes of middle schools. They affect teenagers more than undergraduates. In adolescence, students are more exposed to media and social activities (Bessenoff, 2006). They are vulnerable and can be affected by what they see and listen more than both elementary and undergraduate students. The comparison that starts in middle school and that could lead to a negative body image needs to be identified from the early years, before it harms students’ well-being, their social and
personal lives, and especially their self-esteem and self-evaluation (Vander Wal & Thelen, 2000).

Adolescents compare themselves with their peers and “ideals”. From the early teenage years, both genders are concerned about their physique, which becomes a stronger apprehension during middle and late years of adolescence (Jones, 2004). In the important developmental period, middle school boys and girls spend more time with their peers, talk more about their looks, exert effort to impress the opposite sex and imitate actors and actresses. By conversing about their looks and comparing themselves to others, they are building a negative body image and subsequent low self-esteem (McCabe & Ricciardelli, 2005).

Thus, because of their biological, physical and emotional changes; and due to the increase in social comparison, and their need to “fit” in certain groups at school, and befriend more popular classmates, teenagers are more likely to create and develop body image dissatisfactions, unpleasant school memories and a pejorative attitude toward the self (Leahey, Crowther, & Mickelson, 2007).

Many teenagers reported that they frequently converse with their friends about their appearance, and would be more sociable if they were more attractive and good-looking (Ellis, 2009). Research showed a positive high correlation between the time spend talking about personal shapes, ideal silhouettes and beauty standards, and the level of body image dissatisfaction self discontentment (Darby, Hay, Mond, Rodgers, & Owen, 2007). This research claims that body image is not necessarily based on facts, and embellishing the physical appearance (such as losing weight or undergoing plastic surgery) does not automatically increase the body image satisfaction.
Body image in adolescence.

Adolescence is a stage in the lifecycle characterized by an increased preoccupation with physical appearance (Le Croy, 2004). Adolescents who are in a critical stage for physical and psychological changes seek satisfactory body image and peer praises in order to sense some level of social acceptance. Satisfaction of the body image was proven to be a reason for contentment and for personal, social and academic success. Eating disorders, depression, isolation or aggression are consequences of low body-image and disruptors of healthy self-images (Booth, Wilkenfeld, & Pagnini, 2008).

Teenagers are conscious about their bodies and their looks. They are susceptible to constructing negative personal images; they ignore their aptitudes and competences and base their self worth and self evaluation on their appearances (Jones, 2004). Their beauty becomes an indicative of who they think they are, and the focal point of their intrapersonal and intrapersonal relationships (Davison & McCabe, 2006).

In the early adolescence years, girls who feel that their bodies are developing at a slower pace than their friends are more prone to shyness, discomfort and dissatisfaction. While girls from private and public schools in the Southern Western United States showed a clear image frustration as they grew up, as for example, at the age of 15 girls are more worried about their bodies than at 13; boys did not demonstrate a remarkable increased dissatisfaction, as they progressed in years (Barker & Galambos, 2003).

During adolescence, teenagers start developing their personalities, their interests and talents. They feel the need to enhance their feeling of belonging to and fitting in a social group, and being accepted and appreciated by their peers. Although stubborn to find their own identities and uniqueness, teenagers discern standards from their small
environment: their families, their friends, and the media. Teenagers, and mostly girls, worry about others’ criticism and evaluation (Choate & Curry, 2009). Because of the media’s objectification of females and its association of beauty with success, girls as young as 13 or 14 become preoccupied with their physical appearances. During the middle years of adolescence, their self-worth and self-evaluation is more linked to their body image (Hinshaw, 2009). Not only a negative body image affects adolescents’ self-esteem and concern with academic achievements, but also a high body image can harm academic achievements (National Middle School Association, 2001)! Girls with a high body image, who are preoccupied with their looks, and find themselves pretty focus less on their studies. They even start building their careers based on their physical appearances. When media shows that attractive women are sociable, famous and successful and society provides opportunities for pretty young women, teenagers spend more time on embellishing themselves and less time on studying hard or thinking on earning university degrees or joining challenging professions (Lamb & Brown, 2006).

Physical appearance is a distinctive and major factor affecting adolescents’ self and peer evaluations (Ellis, 2009). According to Cafri and Thompson (2004) no correlation was found between the body image and self-esteem of individuals younger than fourteen years old, while a positive correlation was found at the age of fifteen and sixteen years old.

Brook and Tepper (1997) questioned German high school students about the way they perceive their bodies and their peers’ images. Out of hundred students, 48 perceived themselves as obese, while in fact, according to the body mass index, only ten percents were. 53 % replied that they want to become thinner, and 48% wish to lose weight and have already tried several dietary programs. 13% of the students named their friends
“handicapped” because they were obese. Students with a weight problem showed a lack of knowledge regarding food and healthy habits or false information that they got only from the media.

**Body image and self-esteem in adolescence.**

Given past research focusing primarily on body image and self esteem, it is suggested that the degree of relationship between body image and self-esteem among middle and late adolescence years should be further investigated in the current study. Past research has proven that teenagers between 14 and 18 years old worry the most about their physical appearances’ value and evaluate their self-worth and self-attitude based on the way they look (Knauss, Paxton, & Alsaker, 2008).

Yet the extent of relationship was not compared within the adolescence critical period (Olivardia, Pope, Borowiecki, & Cohane, 2004). Are teenagers in the late adolescence more concerned about their bodies than those of the middle adolescence? Is body image dissatisfaction greater at the age of 16 or 17 than at younger ages? Is the relationship between self-esteem and academic achievement stronger in the secondary grade levels than at the younger ages? The current study aims at finding answers to the previous questions and contributing to the research about body image and self-esteem in adolescent males and females.

**Body image and body types.**

In 1940s William Herbert Sheldon classified the human body into three categories, or three somatotypes: the Ectomorphic or the slim body, the Mesomorphic or the muscular type, and the Endomorphic or the body with the highest potential to fat storage. People tend
to associate the physical shapes with the personal traits (Hartl, Monnelly, & Elderkin, 1982).

Research has shown that men with Ectomorphic slim bodies are viewed as intelligent but solitary, those with muscular athletic types of bodies are perceived as persistent, energetic and popular, whereas men with the Endomorphic body type are labeled slow and lazy. So people are being judged by their genetically determined body shape! Some are born fit, others can easily stay slim, and many have to work hard to lose weight. Each type has its own characteristics, and cannot be compared to other shapes (Ramachandran, 2004).

Ectomorphs, or the supermodels’ types, are seen on the pages of the magazines. They are slim, tall, tube shapes with little fat and muscles and small body parts. They do not gain weight or muscles easily (Rideway & Tylka, 2005) and are most women’s ideal silhouette (Ryckman, Robbins, Kaczor, & Gold, 1989). Women with Mesomorphic body types and wide shoulders or with Endomorphic curved and round shapes should not compare themselves to the Ectomorphic individuals, because they will put themselves under stress, exert tremendous efforts to lose weight; and rather than looking like their ideal images, they will appear unhealthy. Also, the amount of food intake that causes people with the Endomorphic types to gain weight, will most probably not affect the Ectomorphic body’s weight (Ramachandran, 2004).

The naturally strong Mesomorphs have low levels of fat, wide shoulders and defined muscles. Body builder and sport players, who can easily gain muscles and respond to exercise, fit the most into this category, respond quickly to exercises, and can gain
muscles easily. With the shoulders wider than the hips, women’s bodies are named “hourglass”, and men’s shapes are called “V-shapes” or “rectangular bodies.”

Endomorphs have a broad waist, larges bone, curvy shapes, regional fat storage, and pear-shapes. They are vulnerable to becoming overweight due to the slow metabolism and have to exert a lot more effort than the other types in order to cut on weight. Even if they exercise daily, or undergo regional plastic surgeries such as liposuction, the Endomorphs will not obtain skinny arms or totally flat abdominals (Olivardia, Pope, Borowiecki, & Cohane, 2004).

Despite the body types differences, people still compare themselves to certain types and look down at themselves if they fail to obtain the physique they dream of. Women’s concerns about their bodies can impact their health. The lower their body image is, the more they will try to alter the way they look in ways such as dieting, taking medication or undergoing cosmetic surgery (Ramachandran, 2004).

Most girls have one ideal body type that they compare themselves with. The higher the discrepancy between the way they see their bodies and the model ideal body is, the higher the disappointments and stresses about the physical appearances are (Harrison & Hefner, 2006). Many females prefer the tube-like body silhouettes, even if they are unhealthy and hard to attain. The preference toward a particular body shape increases concerns of weight loss and plastic surgeries. Women and teenagers are willing to go into unhealthy eating habits, excessive physical activities and surgeries to resemble more to their ideal body shapes (Tiggeman & Kuring, 2004).

Men’s concerns are to have a body that looks like the v-shaped muscular ideal body type. Research found no differences between genders when comparing themselves to ideal
Body silhouettes (Cohane & Pope, 2001). Females tend to compare themselves to other body types and profiles and males aim at losing fat, gaining muscles and resembling to stars and athletic figures (Botta, 2003). According to Smolak, Levine and Thompson (2001), adolescent males’ obstinacy to reach muscular bodies push them to take protein supplements, shakes and steroid pills to gain and increase the muscles’ volume. Whereas girls may take fat burning, weight watching and appetite reducer pills.

**Body image and family influences.**

Parents tend to praise or criticize their kids’ physical appearances and whether directly or indirectly, they can affect their teenagers’ perceptions about their bodies. Although parents can have good intentions, they can be perceived pejoratively when they emphasize the importance of physical beauty and attractiveness (Neumark-Sztainer, 2003). Teenagers might worry more about their appearances, and build the idea that society judges them based on their appearances. They tend to stress about the way they look, and feel the need to put more efforts to meet others’ expectations. At school, they wonder if their peers, and especially those of the opposite sex, find them good-looking. Worrying about appearances can lead to a lower quality of school caused by a lack of familial support (Yanover & Thompson, 2008).

**Effects of media on body image.**

Many teenagers like to read articles that prompt new crash diets, weight-loss exercises and interviews with models about the ways they maintain their physique. Everything in the magazines revolve about certain beauty criteria, such as pictures of models and stars, advertisements of new medications that help weight loss, fat burning and
beauty products; as if everyone should attain their standards to be considered good-looking (Botta, 2003). Women envy the stars and associate attractiveness with happiness (Harrison & Hefner, 2006). Television, images in magazines and advertisements give girls the illusion that thinness and beauty will lead to happiness, success and fame (Yuan, 2009). They ignore that many Hollywood actresses and models have their wrinkles and cellulites airbrushed by Photoshop and other new computer programs (Harrison & Hefner, 2006). They have no idea that their “role models” live a stressful life, because if they gain weight or if any of their facial traits changes, their contracts with television directors and modeling companies will be annulled (Barker & Galambos, 2003).

The literature indicates that media usually presents customers with unattainable images that they consider standards for beauty and perfection. Still, the higher the exposure to television and magazines is, the lower the confidence and self-evaluation (Davison & McCabe, 2006). Researchers and psychologists explain that even if people know that the media images present only a minority, and are not realistic most of the time, they can embark on an upward comparison with their targeted goals, and ideal models that will end up decreasing their satisfaction with their bodies (Baird & Grieve, 2006). According to the Social Comparison Theory discussed by Morrisson, Kalin and Morrison (2004), an upward comparison might have negative consequences; people might feel greatly inferior to their ideals, and their dissatisfaction with their bodies will increase.

Teenagers constantly compared themselves to stars and media figures. For them being “good looking” means to look like the models they see on the magazine covers and in the advertisements. 79% of European students responded positively when asked if they would like to incorporate a nutrition class in the curriculum that tackles the importance of
balanced food intake habits and building a positive body image. They believe that such information will help them build and maintain positive and healthy relationships with themselves and with their friends. Middle and secondary school students declared that they read fashion, sport, and health and fitness magazines way more than books (Botta, 2003). When asked about the way they act after their comparison with the media, middle school girls answered that they follow weight loss plans, and middle school boys acknowledge that they body building exercises (Smolak, Levine, & Thompson, 2001).

Research has shown that the wider the discrepancy between the personal image and the ideal body, the higher the body image dissatisfaction (Kurman, 2003).

**Body image, self-esteem, academic achievement and cultures.**

Many studies have demonstrated that body image dissatisfaction is a major problem reported by American, Australian, Canadian, and European adolescents. However, further research is needed to provide both genders with guidelines on how to decrease the comparison with media body ideals and peers, in order to reduce the feeling of inferiority and incompetence (Knauss, Paxton, & Alsaker, 2008).

According to Lamb and Brown (2006), both genders from American, Canadian and European nationalities with different socioeconomic status, educational level, and family backgrounds can be highly affected by what they see and hear in the media.

When tests were administered to Asian and American students, they revealed that men from eastern countries showed less negative emotions associated with their body dissatisfaction than Western ones. According to Yang, it is the culture that places emphasis on muscle as a measure of masculinity (Yang, Gray, & Harrison, 2005).
Childhood’s teasing effects on adolescents’ body image.

Children who were frequently teased about their physical appearances, their weight or their facial traits had high body image dissatisfaction in adolescence. Peers’ mockery during childhood can harm body image at a later stage, mostly in adolescence. Childhood negative experiences hinders, whether consciously or unconsciously, teenagers self and body image. Research has shown that girls are more sensitive to teasing and are easily hurt when their peers or family members criticized or made fun of their bodies or looks (Datar & Sturm, 2006).

Middle and secondary school educators and counselors need to look back into their students’ childhood school experiences and memories. Negative body image can be originated in earlier years and the level of dissatisfaction can increase with each grade level. Students who are not comfortable with themselves and are conscious about their appearances may focus less in class. They usually isolate themselves and prefer not to contribute to classroom discussions nor participate in award earning contests (Gleason, Alexander, & Somers, 2000).

School’s role in enhancing body image.

Body image should be a major concern for middle school counselors and teachers. For students to achieve and perform well in class, they should be at ease in an inviting environment in which they can focus on learning (National Middle School Association, 2001). The school community should be aware of the students’ development, and the way they are affected by their thoughts about their bodies and their vulnerability to the media models. Adolescents spend the majority of their afternoon watching television or flipping through magazines (Hinshaw, 2009). Thus, with the big amount of exposure to media’s
unrealistic and harming messages, students, and especially girls, are prone to upward comparisons that automatically lower confidence and self-esteem and increases the stress and anxiety levels (Lamb & Brown, 2006).

Schools can enhance students’ awareness about their bodies and the consequences of eating disorders and the construction of negative images. Medical and psychological workshops can be run in order to explain the dangers of focusing and exerting much effort on being thin or muscular (Vander Wal & Thelen, 2000). Principals can provide their libraries with books, literatures, and audio materials about body image distortions, and the significance of positive personal perceptions (O’Dea, 2007).

Discussions about individual’s uniqueness and value and worth regardless of the appearances; the importance of feeling at ease with oneself, respecting others, and reducing negative talks can enhance students’ body image and self-esteem. Educators can monitor how destructive feelings and thoughts affect students’ academic performances and achievements, their participation in class discussions and group work activities, and their behaviors with their classmates during recess (Weinshenker, 2010). Interactive website activities, sketches, short movies and short lectures about the importance of a positive high self-esteem level and ways to boost the self-esteem can be easily implemented in the information technology, language, civic education and elective periods (O’Dea, 2007).

Since students who are teased about their physical appearances may have problems related to self-esteem, the school community can find ways to control peers’ criticisms and mockeries. The influence of students’ network on their self-esteem increases is very powerful in the middle and secondary schools (Davison &McCabe, 2006). Furthermore, sincere friendships can boost self-esteem. Therefore, debates, text discussions and group
works about the importance of positive relations might improve students’ social well-being, comfort and happiness at school, and consequently affect their ways of studying and hence improve their grades (Rouse, 2010).

Educators can provide students with supportive environment in which they feel loved, appreciated and at ease to express their thoughts and feelings. During recess, they can provide special attentions to teenagers who isolate themselves, those who are constantly anxious about trying to fit into group but afraid of being teased or rejected (Rouse, 2010).

Clay, Vignoles and Dittmar (2005) request schools to implement short lessons about media literacy, and help students perceive media with a critical eye instead of easily being influenced by the clichés they see or hear; and educators can work separately with each gender.

Fifty grade eleven students asserted that they benefited from their school’s administration of a weekly media and cultural literacy class. Many girls reduced the internalization of the thin ideals and boys understood the danger of trying to look like the v-shaped body builders. They also benefited from the information about appearances’ perceptions and global self-esteem. The lectures and discussions allowed them to understand and respect themselves and their peers and focus on positive self-talk and self-appraisal (Clay, Vignoles, & Dittmar, 2005).

**Self-Esteem**

**Self-esteem definitions**

Because of its importance, and its use in various contexts, such as in social, psychological, and educational situations, “self-esteem’ has many short and extended
definitions in past research. Rosenberg defined self-esteem as a “positive or negative attitude toward the self” (Rosenberg, 1965, p. 30).

More recently, self-esteem was defined as the way people perceive and feel about themselves, their positive or negative attitudes that is affecting their self-evaluation (Mruck, 2006). It is in how competence and the feeling of self-worthiness come to be combined and in how self-concept and self-confidence are aligned. Self-esteem is an important factor that helps attain positive thinking which in turn leads to a happy life (Schiraldi & Brown, 2001).

Self-esteem is highly related to quality of life, personal characteristics, academic performances and body image. Parents and teachers can assist in promoting and maintaining a healthy level of self esteem (Lin, Tang, & Yen, 2008).

**Importance of self-esteem.**

A high level of self-esteem helps people feel proud regardless of their status and achievements (Smith, 2006). It also creates the courage in individuals to try out new things and possess the power to believe in oneself propelling above goals or expectations. People with acceptable levels of self-esteem respect themselves and believe in how important they are to others in their talents and capabilities (Grumm, Nestler, & von Collani, 2009).

People with high self-esteem live a balanced and healthy life, and they focus their attention on their strengths. They do not turn to their weaknesses and their true self is almost always secure. They also accept others with encouragement (Scianguola & Morry, 2009). As opposed to people with low levels of self-esteem, they do not anticipate being criticized and take comments that come their way as constructive feedback. Typically, those with high level of self-esteem are on good terms with themselves and others
(Baumeister, Campbell, Krueger, & Vohs, 2003). By loving themselves individuals with high self-esteem gain the admiration of others. They are less likely to gossip and make fun of situations than those who are confident and who have a negative self image (Hall & Torres, 2002).

**Self-esteem and academic achievement**

It was of interest for the purpose of the current study to investigate the relationship between self-esteem and academic achievement. School success does not depend solely on IQ levels, learning habits or long term memory of students. In fact, the relationship between success and self-esteem is higher than that with IQ level and memory’s capacity (Malhi, 2010). Those who have a positive attitude toward themselves uncover masked potentials, and work toward personal improvement. Studies have shown a positive correlation between self-esteem and academic achievement (Annamaria & Alesi, 2006).

Individuals with low levels of self esteem are more likely to be self-destructive and engage in irrational behaviors, they also are more likely to neglect their work and keep on postponing it. They recurrently underestimate their potentials as they are lacking a realistic knowledge of their capacities and are afraid from failing. Past research shows that the lower the level of children’s self-esteem, the less they have preferences for challenging tasks. They target non-challenging activities that reduce their efforts and negatively affect their path toward achievement (Schiraldi, 2001).

On the other hand, students who possess high levels of self-esteem tend to have clear goals, and they are more focused, they study diligently and demonstrate higher levels of success at schools. When students are short of self-approval they are likely to be confused, feel depressed and give up on their personal growth. Since those with high self-
esteem are more confident, they develop an ambition and are motivated to work more than those with low levels of self-esteem. They also establish challenging tasks, take on higher risks and are stimulated to sustain them (Mruck, 2006). Learners with sufficient self-esteem perform better after failing a first time than those who are short on self-esteem and who are more likely to overcome difficulties. In parallel, intellectual efforts, persistent work and practice enhance good performance and achievement. As a consequence students who achieve better are rewarded by their parents, teachers and peers through admiration. They feel proud of what they have achieved; hence become even more confident (Branden, 2004). According to Ferkani (2008), self-esteem is a major element in students’ motivation driving them to study more, get better grades, and later pursue higher education. Some research on self-esteem and gender points out that self-esteem decreases considerably among girls between the ages of 13 and 17 (Clay, Vignoles, & Dittmar, 2005).

The Relationship between Physical Activity, Body Image, Self-Esteem, and Academic Achievement

While not pertinent to our current study, past researchers have related physical activity to body image, self-esteem and academic achievement. It was worth mentioning this research since it is one of the few that discussed body image, self esteem and academic achievement concurrently. Tremblay, Inman, and Willms (2000) studied the relationship between physical activity, self-esteem and academic achievement and had implications for middle school students. They found a positive correlation between physical activity and self-esteem. Students who joined a sport activity at school were more confident in class. First, body movements increase the neurotransmitters’ levels in the brain, and hence
enhance a positive mood and attitude toward the self and the people around. Moreover, students who were engaged in a physical activity had a better image about their bodies. Twelve-year old children and young teenagers were satisfied that they were putting a weekly effort in order to stay in good shape or improve their bodies. Thus, students’ physical activity influenced their body image (Trudeau & Shephard, 2008).

Past research has proven the positive correlation between self-esteem and academic achievement rather than a causation relation. In fact, there was no evidence of a cause and consequence relationship: are students getting good grades because they have a high level of self-esteem or is their attitude toward themselves positive because of their achievements (Datar & Sturm, 2006)? Yet, a weak relationship remains between physical activity and academic achievement (Tremblay, Inman, & Willms, 2000), even studies showed that the enrolment in physical activities does not take away from the time spent on studying and so it does not harm school achievements (Ahamed et al., 2007).

Nevertheless, when physical activity is related to body image, it shows a positive association with school satisfaction. Physical activity boosts the self-esteem; and students with high level of self-esteem are more likely to have positive relations with their peers, enjoy their times at school and participate in classroom discussions and activities. Those who are happy at school are less likely to drop-out, and are more likely to exuberate more efforts in order to stay away from academic failures or problems. The relations indicated a relationship between physical activity, body image and academic achievement. Accordingly, physical activity enhances body image, improves self-esteem and motivates students to work toward improving their academic achievement (Coe, Pivarnik, Womack, Reeves, & Malina, 2008).
Teacher’s Role in Enhancing Self-Esteem

Past research has suggested techniques that can best enhance self-esteem. The current study will further support these methods and introduce new elements that improve body image and self-esteem.

Teachers should keep an encouraging classroom atmosphere that helps students build and sustain positive self-esteem. Educators need to listen to their students without having to underestimate their dreams. Through setting high expectations on their students and in believing in them they will be demonstrating how important it is to have high self-esteem for academic achievement (Hannell, 2004). Educators should create cooperative environments as a substitute to competitive ones. They can motivate students by not penalizing wrong answers, and by incorporating cooperative activities (Charles, 2008).

Family Influence and Self-Esteem

Family is the main organization that influences children and adolescent social and psychological well-being. The quality of the relationships between the parents and the children is crucial for teenagers’ self-concepts’ developments. Self-esteem increases with parental care, with the strong and friendly mother-and–daughter and father-and-son relationships; yet, it decreases with paternal and maternal control. Adolescents who feel pressured by their parents tend to ignore their advice, and they feel offended if their food intake is controlled. Many teenagers might eat more and feel worthless because their parents have criticized their weight or simply assigned a dietary plan for them (Sira & White, 2010).
Parents can talk with their children about the discrepancies between their perception about themselves and their expectations of how they want to become. They can help the adolescents be critical about the media and be less influenced by peer pressure, fashion and society. They can try to befriend their kids and monitor their talks and let them realize the negative distortions and self-destructive vocabulary they use. They can praise their children’s abilities and talents, focus on their positive skills and characteristics and help them improve their body images and their attitudes toward themselves (Weinshenker, 2010). Thus, a healthy way of parenting is reducing the critical stance towards the kids and helping them reveal the positive in them rather than what is negative. Parents are catalysts in helping their kids not follow perfectionist behaviors (Knightley & Whitelock, 2007).

**Self-Help Techniques to Improve Body Image and Self-Esteem**

Little change in every day’s habits will enhance body image and self-esteem. Counselors have often said that when people smile more often or stand up straight, they engage in building upon their attitude (Walker, 2010).

From the social perspective, it is important to be surrounded by supportive friends who believe and help one another feel a positive energy (Schiraldi, 2010).

Teenagers are also encouraged to give compliments to each other, and always remember what they have been blessed with (Hannell, 2004). They need to stop defining themselves by their appearances, and instead focus on their inner beauty, and nurture their abilities and skills. Adolescents should stop focusing on their weight and body shapes, they should deviate the aesthetic thinking into a health concern. They can decide to find a
physical activity that they enjoy and a healthy nutritional plan in order to feel good (Neumark-Sztainer, 2003).

Coaches suggest increasing the level of activity per week in order to release stress serotonin and dopamine that are neurotransmitters that enhance good mood and positive feelings (Walker, 2010). Adolescent’s participation in health clubs and physical activities increase self esteem simply through their involvement. Teenagers’ engagement in community service programs helps them feel good about themselves and appreciate their lives more. When helping others, they can feel better about themselves. Instead of focusing on the way they look, they might compliment themselves on their actions, feel proud about their roles in society and boost their personal respect (Neumark-Sztainer, 2003). The role of educators in promoting extracurricular participation from a young age has proven long-term effects on adolescents in improving their ego-identity and developing a better well-being (Charles, 2008).

**Conclusion**

In past research, much focus was on body image and self esteem, their implications and degree of relationship in adolescents; however researchers did not evaluate the relationship between body image and academic achievement. Many adolescents are neither pleased nor satisfied with their physical appearances, and have negative thoughts, feelings and attitudes about their bodies, themselves and their lives. They feel helpless and worthless, and become less capable and competent to achieve their academic objectives. They spin in a vicious circle of self-destructive behaviors and build negative habits that
primarily impact their academic achievement in addition to daunting their emotional and psychological well-being, which in turn also deters their academic motivation.

Understanding factors that affect adolescents’ self-esteem and body image supports the study’s findings of the relationship between the two variables, according to gender and grade level. Middle and late adolescence, gender, cultures, society and media are important notions for the analysis in the Lebanese society. Research helps this study find answers to whether late adolescents, males or females, are more concerned about their bodies than in middle adolescents, and whether their grade level affects the degree of the relationship between body image, self-esteem and academic achievement.

This chapter mentioned schools’ roles in addressing and trying to solve the problem of body image. Further techniques and teaching methods are suggested to help students love and appreciate regardless of their body types or shapes.
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY

The quantitative research design attempts to identify the relationship between students’ body image, self-esteem and academic achievement. It establishes relationships between variables and allows inferences about and generalizations for the population based on the sample’s findings. In this study, body image, self-esteem and academic achievements were the dependent variables; and grade levels and gender were the independent variables.

Participants
Participants were 120 students from 8th and 11th grades in two private schools in Beirut in which the language of instruction is English. According to research, at the 8th grade level, adolescents start worrying more about their body image that is highly influenced and related to identity and self-esteem development and is aggravated in the upper grades (Youth affairs council of South Australia, 2004). The students from the schools, named A and B, for confidentiality issues, come from middle to high socioeconomic backgrounds. Since the study’s purpose is to compare gender and grade levels, language barriers and family and socioeconomic status differences were minimized by choosing two private schools - (60 students from each school, 65 females and 55 males, from which 60 were in grade 8 and 60 in grade 11) - known for their comparable English proficiency level and their students’ backgrounds (Table 1).
Table 1

Distribution of Participants by Gender and Grade Level

<table>
<thead>
<tr>
<th>Gender</th>
<th>Grade 8</th>
<th>Grade 11</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>34</td>
<td>65</td>
</tr>
<tr>
<td>Female</td>
<td>29</td>
<td>26</td>
<td>55</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>60</td>
<td>120</td>
</tr>
</tbody>
</table>

Procedure

Approval to conduct the study was obtained from the two schools’ principals who signed the consent forms after reading the questionnaires. The English teachers were contacted in order to agree on a set date to have the measurement tools administered in the classroom, during their class period. Students were first informed about the purpose of the study and were assured that the data collected is confidential (they were not asked to write their names), and that their names and their schools’ names were to remain anonymous. They received a handout enclosing a demographic sheet, the MBSRQ of 34 items, a definition sheet of the ambiguous or non frequent words (such as grooming, physique, crash diets,) and the 10-item RSE scale. All students approved that they were Lebanese; and wrote their grade level, gender, and GPA for the first and second term, which is a numerical value over hundred. Students were asked to take their time to answer the questions honestly and thoroughly and were notified that they can ask questions when needed, and that they have the right to withdraw from participating at any time.
Piloting

A pilot study was first conducted on fifteen students to test the suitability and feasibility of both instruments in terms of length and clarity, and to make sure that all terms are comprehensible. It allowed the identification of the terms that needed to be defined or explained and enhanced the validity of the scale and questionnaire in the Lebanese culture as well as the assumption that students can understand the tools’ language and content.

The two schools’ eighth and eleventh grades’ teachers read the forty four questions of the two questionnaires before they asked some students to stay during the second break (50 minutes) or after school in order to answer them. Two grade 8 teachers of school B were not comfortable with the question number 12 “I like the way I look without my clothes on.” They went back to the school’s director who asked that the question be deleted.

Dr. Thomas Cash, the MBSRQ developer, was contacted to grant the permission of removing a question, while keeping the results of the scores reliable. He explained that the cultural differences are understandable, and removing question 12 will not affect the questionnaire’s validity and reliability, however the question should be deleted for the two schools even if school A students answered the question (Cash, personal contact, February, 2011)

The pilot study tested the suitability and feasibility of both instruments in terms of length, questions’ formulations and terms, concepts and content. It enhanced the questionnaires’ agreement with the schools’ rules and their validity in the Lebanese culture.
Measurement Tools

Multidimensional body self-relations questionnaire (MBSRQ).

The MBSRQ is a self-reported inventory that assesses cognitive, behavioral and affective components of body image (Cash, 2000). The 34-item scale evaluates body image attitudes and satisfaction and is composed of five subscales: Appearance Evaluation, Appearance Orientation, Body Areas Satisfaction Scale, Overweight Preoccupation, and Self-classified weight. This is a multidimensional assessment, and the five subscales, while independent, constitute body-image evaluation indices. The five subscales are defined according to Dr. Thomas Cash (Cash, 2000) as follows:

Appearance Evaluation (AE): Feelings of physical attractiveness or unattractiveness; satisfaction or dissatisfaction with one's looks. High scorers feel mostly positive and satisfied with their appearance; low scorers have a general unhappiness with their physical appearance. Appearance Orientation (AO) is the extent of investment in one's appearance. High scorers place more importance on how they look, pay attention to their appearance, and engage in extensive grooming behaviors. Low scorers are apathetic about their appearance; their looks are not especially important and they do not expend much effort to “look good”. Overweight Preoccupation (OP): This scale assesses a construct reflecting fat anxiety, weight vigilance, dieting, and eating restraint. Self-classified weight (SW) reflects how one perceives and labels one's weight, from very underweight to very overweight. Body areas satisfaction scale (BASS): Similar to the Appearance Evaluation subscale, except that the BASS taps satisfaction with discrete aspects of one's appearance. High composite scorers are generally content with most areas of their body. Low scorers are
unhappy with the size or appearance of several areas. This subscale, according to the instrument’s developer, is a direct measure of body image (Cash, 2000).

In computing the scores, responses from questions 1 to 22 were made on a five-point-type scale, from 0 (definitely disagree) to 5 (definitely agree). Responses from questions 23 to 25 were made using a scale specific to the response (see questionnaire). Responses from questions 26 to 34 were made on a five-point type scale from 0 (very dissatisfied) to 5 (very satisfied).

Table 2 separates the subscales according to the questionnaire’s items and provides the number of items used to compute their respective scores. Each subscale score was calculated according to a formula obtained from the manual. The items denoted with a star, showed that they are contra-indicative items, meaning that their scores were reversed when computed (Cash, 2000).

<table>
<thead>
<tr>
<th>MBSRQ Subscales and Their Descriptions</th>
<th>N</th>
<th>Items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Evaluation</td>
<td>7</td>
<td>3-5-9-12-15-18*-19*</td>
<td>Body image evaluation</td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>12</td>
<td>1-2-6-7-10-11*-13-14*-16*-17-20*-21</td>
<td>Extent of investment in one’s appearance</td>
</tr>
<tr>
<td>Body Areas Satisfaction</td>
<td>9</td>
<td>26-27-28-29-30-31-32-33-34</td>
<td>High values indicate greater body satisfaction</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>4</td>
<td>4-8-22-23</td>
<td>High scores reflect greater overweight preoccupation.</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>2</td>
<td>24-25</td>
<td>Reflects how one perceives &amp; labels one’s weight.</td>
</tr>
</tbody>
</table>

* Contra-indicative items
Rosenberg's Self-esteem Scale (RSE).

Rosenberg's Self-esteem Scale (1965) is a general scale measure of self-esteem. It is known to be the most widely used measure of global self-esteem and has been determined to be reliable from the seventh to the twelfth grade levels (McCarthy & Hoge, 1982). It was used in numerous studies to measure self-esteem with consistent high validity and reliability. It is a 10-item scale measuring overall self-esteem (such as how much respect one has for oneself and to others). Five items in the scale are worded positively and five other items are worded negatively. Such examples are “I feel that I have a number of good qualities,” and “At times I feel that I am no good at all.” Responses were evaluated on a four-point scale (items 1, 2, 4, 6, and 7: Strongly Agree=3, Agree=2, Disagree=1, Strongly Disagree=0, and items 3, 5, 8, 9, and 10 are reversed in valence such as Strongly Agree=0, Agree=1, Disagree=2, and Strongly Disagree=3).

Self-esteem scores were calculated by summing up all item responses, after reverse coding items that are negatively worded. The range of the scale is from 0 to 30, where a higher score would indicate a higher level of self-esteem and with 30 being the highest possible score.

Assumptions

The study assumed that the participants understood the questionnaire, responded truthfully and honestly to the questions, and reported their term grades accurately.
Research Design

Data analysis

Students’ answers of the 43 questions (33 questions for MBRSQ and 10 questions for RSE) were entered into the SPSS 17\textsuperscript{th} version. Descriptive statistics for the MBSRQ’s five subscales and the self-esteem score and separate means and standard deviations were calculated for males and females and for eighth and eleventh graders.

The data gathered were analyzed using Pearson’s $r$ coefficient and regression analyses. Pearson’s $r$ summarized the nature and strength of the relationship between two variables.

Regression analysis was performed for every two variables separately, resulting in a beta coefficient and standardized coefficient, which is the Pearson $r$ in this case. The p-values and $R^2$ were used to measure the statistical significance of the relationship between the five body image variables, self esteem, and academic achievement among the gender variables. Multiple regression analysis identified the relatedness of body image, self-esteem and academic achievement.
CHAPTER FOUR
FINDINGS AND RESULTS

The purpose of the present study was to investigate the relationship between body image, self esteem and academic achievement. The variables are reported based on gender and two grade levels (8 & 11). Characteristics of the student sample including the descriptive statistics are presented. The regression analyses and Pearson’s r correlation coefficients findings are separately tabulated in order to measure the predictability of: 1) self esteem with body image variables, and, 2) academic achievement with self-esteem and body image variables. The statistical significance for the relationship is set at the p<0.05 level. The analysis of data collected from the students is based on the demographics presented in Table 3.

Table 3
Distribution of Participants by Grade and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Grade</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
<th>All</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade 8</td>
<td>31</td>
<td>26</td>
<td>29</td>
<td>24</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Grade 11</td>
<td>34</td>
<td>28</td>
<td>26</td>
<td>22</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>All</td>
<td>65</td>
<td>54</td>
<td>55</td>
<td>46</td>
<td>120</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4 presents the means and standard deviations of student scores for the five body image subscales, the self esteem and the self-reported GPA. The mean for the GPA’s was 74.77%. The self-esteem mean was 16 and the students’ answers ranged between 10 and 21. The results on the Rosenberg Self-Esteem scale, (which runs from 0 -30) were normally distributed with no extreme values found. The means for the five subscales of
body image were constantly close to 3.00. These values were consistent with the adolescents’ norms provided in Dr. Cash’s MBSRQ manual.

Table 4
Descriptive Statistics on Variables of Body Image, Self-Esteem and Academic Achievement

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Evaluation</td>
<td>120</td>
<td>2.00</td>
<td>4.00</td>
<td>3.06</td>
<td>.44</td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>120</td>
<td>1.42</td>
<td>4.17</td>
<td>3.18</td>
<td>.50</td>
</tr>
<tr>
<td>Body Areas Satisfaction</td>
<td>120</td>
<td>1.78</td>
<td>5.00</td>
<td>3.29</td>
<td>.68</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>120</td>
<td>1.00</td>
<td>12.00</td>
<td>2.74</td>
<td>1.35</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>120</td>
<td>1.50</td>
<td>5.00</td>
<td>3.14</td>
<td>.86</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>120</td>
<td>10.00</td>
<td>21.00</td>
<td>16.19</td>
<td>2.06</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>120</td>
<td>54.00</td>
<td>95.00</td>
<td>74.77</td>
<td>9.31</td>
</tr>
</tbody>
</table>

Regression analysis was used to determine which of the body image subscales best predict levels of self-esteem. For each body image subscale, the regression method was repeated in three iterations: 1) for both genders and both grade levels 2) for all males and 3) for all females. The study was done following this pattern in order to determine whether gender affects predictability of self-esteem based on body image.

The results tabulated in Table 5 included the statistical significance measures, R-square, p-value, and the Beta and the standardized coefficient which are a measure of the strength of the relationship and correlation, respectively. (The standardized coefficient is the same as the Pearson r coefficient).
Table 5

*Results of Regression Analysis for Prediction of Self-Esteem by Body Image*

Results for both Genders

<table>
<thead>
<tr>
<th>Body Image Subscale</th>
<th>$R^2$</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Evaluation</td>
<td>0.024</td>
<td>0.705</td>
<td>0.154</td>
<td>0.93</td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>0.102</td>
<td>1.219</td>
<td>0.303</td>
<td>0</td>
</tr>
<tr>
<td>Body Areas Satisfaction</td>
<td>0.112</td>
<td>1.016</td>
<td>0.335</td>
<td>0</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>0.002</td>
<td>-0.065</td>
<td>-0.043</td>
<td>0.64</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>0.337</td>
<td>-0.803</td>
<td>-0.3882</td>
<td>0</td>
</tr>
</tbody>
</table>

Results for Males

<table>
<thead>
<tr>
<th>Body Image Subscale</th>
<th>$R^2$</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Evaluation</td>
<td>0.044</td>
<td>1.021</td>
<td>0.211</td>
<td>0.09</td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>0.235</td>
<td>1.997</td>
<td>0.484</td>
<td>0</td>
</tr>
<tr>
<td>Body Areas Satisfaction</td>
<td>0.091</td>
<td>0.945</td>
<td>0.301</td>
<td>0.01</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>0.006</td>
<td>-0.102</td>
<td>-0.077</td>
<td>0.54</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>0.158</td>
<td>-0.975</td>
<td>-0.398</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Results for Females

<table>
<thead>
<tr>
<th>Body Image Subscale</th>
<th>$R^2$</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Evaluation</td>
<td>0.003</td>
<td>0.227</td>
<td>0.053</td>
<td>0.70</td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>0.002</td>
<td>-0.184</td>
<td>-0.041</td>
<td>0.77</td>
</tr>
<tr>
<td>Body Areas Satisfaction</td>
<td>0.104</td>
<td>0.973</td>
<td>0.322</td>
<td>0.01</td>
</tr>
<tr>
<td>Overweight preoccupation</td>
<td>0.004</td>
<td>-0.13</td>
<td>-0.65</td>
<td>0.63</td>
</tr>
<tr>
<td>Self-classified weight</td>
<td>0.053</td>
<td>-0.534</td>
<td>-0.231</td>
<td>0.09</td>
</tr>
</tbody>
</table>

When both genders were taken together, the relationship between body image and self-esteem was significant (Table 5). For both genders, Body Area Satisfaction, Appearance Orientation and Self Classified Weight were statistically significant in predicting self-esteem ($p<0.05$ and $R$-square $> 0.1$). The remaining two subscales did not demonstrate any statistical significance for both genders. When the variables were measured for each gender separately to predict self-esteem, Body Area Satisfaction was
statistically significant in both males and females when either gender was examined separately. However, Appearance Orientation and Self-Classified weight was statistically significant with males only when measured to predict self-esteem (p<0.05 and R-square > 0.1). Of the five body image subscales, Body Area Satisfaction is in fact described, according to Cash (2000) as a direct measure of body image, and was the only subscale to predict self-esteem in all three analyses.

Appearance Evaluation did not demonstrate a strong predictability of self-esteem as a variable. It is unclear whether the omission of the 12th question “I like the way I look without my clothes on” contributed to this outcome.

In this regression to predict self-esteem in both genders, the beta for Body Area Satisfaction, Appearance Orientation and Self Classified Weight for all genders was respectively 1, 1.2 and -0.8 showing a proportional relationship; when the body image subscale score increases by one point, the self esteem score increases accordingly. The relationship is negative for self-classified weight. The beta for Appearance Orientation in males only was approximately 2.0 showing a strong relationship between the body image subscale and self-esteem scores.

Regression was also used in order to determine the predictability of academic achievement by self-esteem. The regression was repeated: 1) for both genders and at the two grade levels, 2) for males and 3) for females, in order to determine whether gender affects predictability. The results are tabulated in Table 6.
Table 6
*Results of Regression Analysis for Prediction of Self-Esteem by Academic Achievement*

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results for both Genders</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.047</td>
<td>0.979</td>
<td>0.216</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results for Males</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.016</td>
<td>0.55</td>
<td>0.128</td>
<td>0.311</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Results for Females</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>0.054</td>
<td>0.946</td>
<td>0.232</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Based on the results, there is no predictability of academic achievement with self-esteem for both genders. It is nonetheless notable that when females are analyzed separately, there is a self esteem showed statistical significance with academic achievement (p-value = 0.04). The relationship between the variables tested was examined and the Pearson r coefficients were tabulated into a correlation matrix in Tables 7, 8 and 9. To better understand the relationships between all variables small effect size is equal to 0.1 < r <0.3, medium effect size is equal to 0.3 < r <0.5 and large effect size is equal to r > 0.5.
### Table 7

*Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Both Genders*

<table>
<thead>
<tr>
<th></th>
<th>Appearance Evaluation</th>
<th>Appearance Orientation</th>
<th>Body Area Satisfaction</th>
<th>Overweight Preoccupation</th>
<th>Self-Classified Weight</th>
<th>Self Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Orientation</td>
<td>0.38**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Area Satisfaction</td>
<td>0.40**</td>
<td>0.40**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight Preoccupation</td>
<td>-0.02</td>
<td>0.21*</td>
<td>-0.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Classified Weight</td>
<td>-0.02**</td>
<td>-0.28**</td>
<td>-0.53**</td>
<td>-0.04</td>
<td>-0.34**</td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.15</td>
<td>0.30**</td>
<td>0.33**</td>
<td>-0.04</td>
<td>-0.35**</td>
<td>0.13</td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>0.29**</td>
<td>0.29</td>
<td>0.53**</td>
<td>-0.45</td>
<td>-0.35**</td>
<td>0.13</td>
</tr>
</tbody>
</table>

**p < 0.01  
*p < 0.05

In Table 7, amongst the five body image subscales, in many cases, subscales were positively correlated with one another (Appearance Orientation and Appearance Evaluation $r=0.38$, Body Area Satisfaction and Appearance Evaluation $r=0.40$, Body Area Satisfaction and Appearance Orientation $r=0.40$). Self-esteem showed a positive and medium effect size with Appearance Orientation, Body Area Satisfaction and a negative and medium effect size with Self-Classified Weight ($r=-0.34$). Academic achievement and Body Area Satisfaction were positively correlated ($r=0.53$) with a large effect size. Appearance Evaluation and Self-Classified Weight were both correlated with academic achievement ($r = 0.29$ positive with a medium effect size and $-0.35$ – negative with a medium effect size).
Table 8
Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Females Only

<table>
<thead>
<tr>
<th></th>
<th>Appearance Evaluation</th>
<th>Appearance Orientation</th>
<th>Body Area Satisfaction</th>
<th>Overweight Preoccupation</th>
<th>Self-Classified Weight</th>
<th>Self Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Orientation</td>
<td>0.33*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Area Satisfaction</td>
<td>0.35**</td>
<td>0.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight Preoccupation</td>
<td>0.07</td>
<td>0.42**</td>
<td>-0.11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Classified Weight</td>
<td>-0.27*</td>
<td>-0.06</td>
<td>-0.43**</td>
<td>0.34**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.05</td>
<td>-0.04</td>
<td>0.32**</td>
<td>-0.06</td>
<td>-0.23</td>
<td></td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>0.14</td>
<td>0.01</td>
<td>0.48**</td>
<td>-0.35</td>
<td>-0.35**</td>
<td>0.23*</td>
</tr>
</tbody>
</table>

**p < 0.01
*p < 0.05

In Table 8, when analysis was restricted to females only, the correlations involving body image variables changed slightly. For instance, the relationship between Body Area Satisfaction and Appearance Orientation was no longer significant. Consistent with the regression findings, self-esteem and Body Area Satisfaction were positively correlated with a medium effect size (r=0.32). With regards to the predictability of academic achievement in females, three variables resulted in a statistical significance (Body Area satisfaction, Self-Classified weight and Self-Esteem). Body Area satisfaction was positively correlated with a medium to large effect size (r=0.49), Self-Classified Weight was negatively correlated with a medium effect size (r=-0.351) and Self-esteem was positively correlated with a medium effect size (r=0.23).
Looking at the males sample correlation matrix in Table 9, the results showed a stronger relationship amongst body image subscales than in females. Self-esteem has a positive relationship in males with Appearance Orientation with a medium to large effect size ($r=0.49$). Self-esteem and Body Area Satisfaction are positively correlated with a medium effect size ($r=0.30$). Self-esteem and self-classified weight are negatively correlated with a medium effect size ($r=-0.40$). The relationship between self-esteem and Body Area Satisfaction is positively correlated with a medium effect size ($r=0.30$), which was very similar to the correlation effect found in females ($r=0.32$).

On the other hand, academic achievement in males had a positive correlation with a large effect size with each of the three variables: Appearance Evaluation, $r=0.35$, Appearance orientation, $r=0.29$, and Body Area Satisfaction, $r=0.49$). No relationship between academic achievement and self-esteem was found in males. The relationship of Body Area Satisfaction with academic achievement seemed to be very close to that in the female sample ($r=0.49$).

The introduction of body image subscales along with the self-esteem variables in a multiple regression analysis indicated the interaction of the variables as related to academic
achievement. When each of the variables: Body Area Satisfaction, Appearance Orientation, Appearance Evaluation, Self Classified Weight and Self-esteem is introduced into the multiple regression, the results of significance as related to academic achievement produce a different result until all variables are introduced. The results were provided in Table 10 and the samples were restricted according to gender and grade level.

Table 10

Results of Multiple Regression Analysis for Body Image and Self-Esteem Variables as Related to Academic Achievement According to Gender and Grade Level

<table>
<thead>
<tr>
<th>Results for Females</th>
<th>R²</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Area Satisfaction</td>
<td>0.315</td>
<td>6.150</td>
<td>0.496</td>
<td>0.002</td>
</tr>
<tr>
<td>Appearance Evaluation</td>
<td>-1.993</td>
<td>-0.112</td>
<td>0.419</td>
<td></td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>-0.855</td>
<td>-0.044</td>
<td>0.729</td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.561</td>
<td>0.132</td>
<td>0.306</td>
<td></td>
</tr>
<tr>
<td>Self Classified Weight</td>
<td>-0.870</td>
<td>-0.092</td>
<td>0.511</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results for Males</th>
<th>R²</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Area Satisfaction</td>
<td>0.268</td>
<td>6.113</td>
<td>0.456</td>
<td>0.005</td>
</tr>
<tr>
<td>Appearance Evaluation</td>
<td>3.257</td>
<td>0.158</td>
<td>0.221</td>
<td></td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>1.383</td>
<td>0.080</td>
<td>0.585</td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>-0.204</td>
<td>-0.490</td>
<td>0.720</td>
<td></td>
</tr>
<tr>
<td>Self Classified Weight</td>
<td>-1.145</td>
<td>0.111</td>
<td>0.455</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results for Grade 8</th>
<th>R²</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Area Satisfaction</td>
<td>0.273</td>
<td>3.719</td>
<td>0.300</td>
<td>0.111</td>
</tr>
<tr>
<td>Appearance Evaluation</td>
<td>3.021</td>
<td>0.152</td>
<td>0.287</td>
<td></td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>1.571</td>
<td>0.089</td>
<td>0.556</td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.551</td>
<td>0.129</td>
<td>0.368</td>
<td></td>
</tr>
<tr>
<td>Self Classified Weight</td>
<td>0.073</td>
<td>0.007</td>
<td>0.965</td>
<td></td>
</tr>
</tbody>
</table>
Table 10 (Continued)

Results for Grade 11

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>Beta</th>
<th>Std. Coefficient</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Area Satisfaction</td>
<td>0.444</td>
<td>11.653</td>
<td>0.695</td>
<td>0.000</td>
</tr>
<tr>
<td>Appearance Evaluation</td>
<td>-2.643</td>
<td>-0.114</td>
<td>0.313</td>
<td></td>
</tr>
<tr>
<td>Appearance Orientation</td>
<td>2.575</td>
<td>0.124</td>
<td>0.257</td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>-0.3</td>
<td>-0.059</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Self Classified Weight</td>
<td>0.623</td>
<td>0.053</td>
<td>0.647</td>
<td></td>
</tr>
</tbody>
</table>

The findings of the multiple regression analysis indicated that when the variables of body image and self-esteem were combined in one regression to measure academic achievement, one subscale: Body Area Satisfaction is found significant across male, female and the eleventh grade samples. For females vs. males, R-square was higher (0.315 vs. 0.268) and p-values lower (0.002 vs. 0.005). Beta for females was 6.15 vs. 6.11 for males, and Pearson r was 0.496 vs. 0.45 indicating a positive relationship with a medium to large effect size.

The findings also revealed that no variables were significant with academic achievement at the eighth grade level. This result indicated that the relationship between academic achievement and the variables tested cannot be predicted at the eighth grade. On the other hand, for the Grade 11 sample, a very strong relationship existed between the Body Area Satisfaction and academic achievement with a positive strong effect (R-square = 0.444, p-value <0.01, Beta = 11.67, Pearson r = 0.695).

This result explains the importance of driving the analysis toward understanding if any relationship between self esteem and academic achievement also existed at the eleventh grade. The findings were tabulated in tables 11 and 12.
Table 11
Pearson Correlation Matrix Among Body Image, Self-Esteem and Academic Achievement Variables for Grade 11 Only

<table>
<thead>
<tr>
<th></th>
<th>Appearance Evaluation</th>
<th>Appearance Orientation</th>
<th>Body Area Satisfaction</th>
<th>Overweight Preoccupation</th>
<th>Self-Classified Weight</th>
<th>Self Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance Orientation</td>
<td>0.40**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Area Satisfaction</td>
<td>0.50**</td>
<td>0.57**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight Preoccupation</td>
<td>-0.05</td>
<td>0.17</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Classified Weight</td>
<td>-0.35**</td>
<td>-0.36**</td>
<td>-0.60**</td>
<td>-0.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self Esteem</td>
<td>0.21</td>
<td>0.39**</td>
<td>0.41**</td>
<td>0.01</td>
<td>-0.44**</td>
<td></td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>0.40**</td>
<td>0.37**</td>
<td>0.48**</td>
<td>-0.03</td>
<td>-0.34**</td>
<td>0.29*</td>
</tr>
</tbody>
</table>

**p < 0.01
*p < 0.05

The results in Table 11 demonstrate that at the eleventh grade level, body image subscales kept strong relationship amongst each other, such as between Appearance Orientation and Body Area Satisfaction (r=0.57). Self-esteem and body image subscales kept positive relationships at a medium effect size with a strong significance as well (Self-esteem and Appearance Orientation r=0.39, Self-esteem and Body Area Satisfaction...
Self-esteem and Self-Classified Weight showed strong significance with a negative medium relationship ($r=-0.44$).

The results in Table 12 indicated that the relationships between the self-esteem, body image variable and of academic achievement did not exist at the eighth grade. The one exception was the relationship between academic achievement and Body Area Satisfaction, denoting a positive relationship with a large effect size ($r=0.65$). This relationship was also larger than that found at the eleventh grade level ($r=0.48$).

To conclude, an important finding of the analysis is revealing strong correlations at the eleventh grade as opposed to the eighth grade. Four body image subscales and self-esteem were correlated to academic achievement at the eleventh grade. In addition, a strong correlation was found at the eleventh grade between the body image variables and self-esteem, self esteem and academic achievement and body image and academic achievement.
CHAPTER FIVE

ANALYSIS, SYNTHESIS AND DISCUSSION

This chapter critically analyzes the study’s findings, relates them to previous theories, issues, and research. Findings are discussed based on the Lebanese culture, compared to and contrasted with main ideas of the literature review, and are related to the study’s hypotheses. The quantitative study used regression analyses and Pearson’s r correlation coefficient. The variables analyzed were the five subscales of body image, self-esteem and academic achievement. The study’s general results indicated that three body image subscales are correlated with self-esteem, with no gender differences. Academic achievement was correlated with self-esteem only in female adolescents, and was correlated with body image in both genders.

Analysis of Findings

Findings are discussed according to the study’s hypotheses, and are compared to previous literature in order to examine how they are tied with past results. What is similar between this study and the previous ones, what does this study add to the discussions about body image and self-esteem, how does the relationship with academic achievement emphasize the role of educators, what are the exclusive details in this study, are the main questions that the analysis section attempts to answer.

Body image, Self-esteem and Academic Achievement

This study showed that since three body image subscales and self-esteem are correlated, Lebanese students’ well-being and confidence are affected by their perceptions
about their looks and people’s judgments of their appearances. According to Knauss, Paxton and Alsaker (2008), teenagers between 14 and 18 years old worry the most about their physical appearances; value and evaluate their self-worth and self-attitude based on the way they look. When students over think and worry about their physical appearances, they tend to concentrate less on their studies at home, and when they compare themselves with their peers, they focus less in class (Nauert, 2009). This finding validates the finding that body image and academic achievement are positively correlated.

Body image is related to academic achievement and to self-esteem. Adolescents from both genders who scored low on body image had also a lower self-esteem; and those from both genders who scored poorly on body image had lower GPAs, hence a lower level of academic achievement. The findings corroborate previous research in literature suggesting that body image can harm academic achievements (National Middle School Association, 2001) and negatively influence self-esteem which also affects academic achievement (Ferkani, 2008). The relationship amongst the variables is also affected by environmental and societal factors (Datar & Sturm, 2006).

**Body image, Self-esteem, Academic Achievement and Gender Differences**

In the current study, different patterns emerged according to gender. The findings offered partial support to the hypothesis that the relationship between body image, self esteem and academic achievement is stronger in females. First, the relationship between body image and self-esteem was found almost identical across genders. It was consistent with past research that there is no significant proof that body image is more important for girls than boys Yuan (2009). Additionally, men are discontent with their bodies, even if they do not talk about it as much as girls do; they face emotional problems because of their
body image dissatisfaction (Gulas & McKeager, 2000). They express discontent with their bodies and have done so increasingly over the last five years (Myers & Crowther, 2009).

However, the study suggested that the relationship between body image and self esteem varied in some ways according to gender based on the variety of measures employed for body image (Appearance Evaluation, Appearance Orientation, Body Area Satisfaction, Overweight Pre-occupation and Self-Classified Weight). Body Area Satisfaction, which is the satisfaction with most areas of the body, revealed a consistent relationship with self-esteem and academic achievement in females and males, with a correlation of a medium (0.3 < r < 0.5) to high (r > 0.5) level and a slightly stronger relationship for females. This finding is consistent with the literature suggesting that women have the tendency to compare themselves to ideal body shapes and exert tremendous efforts in order to look like them (Ramachandran, 2004).

Appearance Orientation, a subscale measure of body image that describes how much time people invest in their looks and engage in grooming behaviors, such as joining fitness centers, was also found to be related to self-esteem and academic achievement for both genders, yet was stronger for males. This finding partially rejects the hypotheses that the body image relationship with self-esteem and academic achievement is stronger in females. Appearance orientation might be more important in males because they start joining health clubs from a younger age (Agliata & Tantleff-Dunn, 2004). Males spend time and effort in order to become muscular (Sira & White, 2001). They also invest in their appearances because they think they can become more popular if they have athletic bodies (Ellis, 2009).
Self-classified weight, a subscale measure of body image involving perceptions of weight, was negatively correlated to self-esteem in both genders (with a negative relationship at a medium effect). The negative correlation between self-classified weight and self-esteem is validated in past research; when girls found themselves overweight, they had a lower self-esteem (Davison, & McCabe, 2006). The increasing relationship in males is supported in past research that men strive to reach lower levels of fat, gaining wide shoulders and defined muscles; and they feel uncomfortable when they do not reach their results (Olivardia, Pope, Borowiecki & Cohane, 2004). They are more affected by the media in the past years, and want to have the v-shaped body (Sira & White, 2010).

**Body image, Self-esteem, Academic Achievement and Grade Level Differences**

The current study looked at equal samples of grade 8 and grade 11 students both of groups comprising males and females. The results offered a strong support to the hypothesis that there is a pronounced relationship between body image, self-esteem and academic achievement in grade 11 students (late adolescence), as opposed to grade 8 students (early adolescence). Findings revealed a relationship at grade 11 between body image and self-esteem in the three measures (Body Area Satisfaction, Appearance Orientation and Self-Classified weight) with a medium to large effect (r > 0.5). Body image also predicted academic achievement in grade 11 with a medium effect (0.3 < r < 0.5) in the majority of its measures used in the study. The fact that the relationship between body image and self-esteem is more apparent in grade 11 than in grade 8 supports past research developed by Cafri and Thompson (2004) suggesting that no correlation was found between the body image and self-esteem of individuals younger than fifteen years old, while a positive correlation was found at the age of fifteen to seventeen years old. Only
one body image measure was found to be related to academic achievement at the 8th grade (body area satisfaction), as opposed to four measures of body image predicting academic achievement at the 11th grade (body area satisfaction, appearance evaluation, appearance orientation and self-classified weight). The finding was consistent with the literature suggesting that, while social comparison with peers start in early classes of middle school (Bessenoff, 2006), certain behaviors only start changing in late adolescence (Jones, 2004).

**Self-esteem and academic achievement**

The results revealed that the relationship between self-esteem and academic achievement was strong in females and non-existent in males. A relationship between self-esteem and academic achievement was also apparent in the eleventh grade students as opposed to the eighth graders. While the literature highlighted that self-esteem is highly correlated to academic performance (Lin, Tang, & Yen, 2008) and that a low self-esteem level can affect academic results (O’Dea, 2007), the current study reveals a more specific finding regarding this relationship noting that it is more influential in females and at higher grade levels.

The findings are consistent with past research that the quality of academic achievement in girls is affected by their peers and friends (Ricciardelli, & McCabe, 2001). When girls do not feel comfortable with themselves, they lose focus in their studies (Santrock, 2003). They most probably achieve less when they give attention to their peer’s criticism that decreases their self-esteem. Academic achievement also showed a positive relationship with self-esteem at a medium effect, in grade 11, as opposed to no significant relationship at the grade 8 level. It is suggested that the new forms of socialization in secondary school as opposed to middle school, comprise the need to “fit” in certain groups
at school and befriend popular classmates, leading teenagers to more likely develop certain dissatisfactions with their “selves”, and turning them away from their academic focus (Leahey, Crowther, & Mickelson, 2007).

**Body image, self-esteem, academic achievement and the ethnic/cultural context**

Given that the current study was conducted on Lebanese adolescents, it is important to discuss the findings from a cultural perspective. Lebanese society is diverse in terms of social structure, cultural orientation, language dominance and religious beliefs (Sidani & Safieddine, 2005). A previous study conducted on Lebanese youth found that, irrespective of gender, Lebanese youth reported lower levels of self-esteem than their counterparts in other collectivistic cultures (Ayyash-Abdo & Alamuddin, 2007). It is therefore likely that culture may play a critical role in the development of the adolescents’ body image and its relation to self-esteem and academic achievement.

Further, it is expected that the cultural role has a strong gender-related facet since gender inequality exists in Lebanon (Faour, 1998). The findings from the present study highlight gender-related differences concerning the relationship between self-esteem and academic achievement; a relationship that is found significant in female adolescents and insignificant in male adolescents. However, the results suggest that body image as related to self-esteem and academic achievement does not vary significantly according to gender. Past studies indicate that both males and females in Lebanon exhibited high levels of negative emotions such as being anxious or tense (Ayyash-Abdo & Alamuddin, 2007). Yet, males experienced higher levels of positive emotions such as being enthusiastic, optimistic, determined and active. This finding suggests that positive emotions could explain why males’ levels of self-esteem are higher than that of females and why they are not related to
academic achievement. Moreover, the result that no significant gender-related differences was found in body image as related to self-esteem and academic achievement might be supported by the fact that Lebanese men and women have equal levels of negative emotions. The findings were also consistent with past research found in literature that shows that females’ dissatisfaction with their body images are higher than men’s in many western countries, but no significant differences were remarked between genders of eastern countries (Yang, Gray, & Harrison, 2005).

Lebanese social scientists have also found that young people in Lebanon are becoming increasingly individualistic, irrespective of their gender (Khalaf, 2002). Further, there is increased participation of women in society in Lebanon and many Arab countries (Salloum, 2003). The results of the current study may be a valuable contribution to the scarce research on the path toward increasing gender equality in the Lebanese society (Tlaiss, 2010). While it is acceptable to attribute cultural factors to the results of the current study, further comparative studies at the socio-cultural level are required to validate the suggestions about the role of culture in body image, self-esteem and academic achievement in Lebanon.

**Media and peer approval.**

Past research suggests that adolescents spend most of their time engaging in non-academic activities (Hinshaw, 2009). This problem is furthered exacerbated by the increasingly image-conscious society in Lebanon, and influenced by the role that the various media play, leading adolescents from both genders into a high pre-occupation with television, beauty pageants and fashion trends. This type of pre-occupation might turn adolescents’ focus away from their academics into their body image (Morrisson, Kalin, &
Morrison, 2004). It is highly likely that the media influences such factors as social comparisons, which in turn can increase the positive relationship between body image, self-esteem and academic achievement (Baid & Grieve, 2006). Most adolescent males and females in Lebanon misguidedly look up to the wrong role models. Males are usually preoccupied with improving their body image (such as engaging in body building), which turns their focus away from their studies (Gleason, Alexander, & Somers, 2000).

Females are mainly concerned with their bodies and want to improve the way they look (Harrison & Hefner, 2006). They can also think of undergoing plastic surgery (Tiggeman & Kuring, 2004). Yet, rather than looking like their ideal images, they appear unhealthy and lose their self-esteem (Ryckman, Robbins, Kaczor & Gold, 1989). In turn, their academic results suffer. Many teenagers might eat more and feel worthless because their parents have criticized their weight or simply assigned a dietary plan for them (Sira & Parker, 2010). Also, constant peer criticism of their looks could lead them to lose faith in themselves, which also affects their academic results (Yanover & Thompson, 2008). It is conceivable to relate this suggestion to the study’s results revealing parental influence and peer approval to be possible factors leading to the strong relationship between body image, self-esteem and academic achievement at grade 11 levels.

**Body image, self-esteem and academic achievement and adolescent development**

The results of the study showed that, at the eleventh grade level, academic results are related to body image measure and to self-esteem. Females and males start to become increasingly concerned with their body image between grades 8 and 11. At this stage, certain elements of body image start affecting self-esteem differently. In females, it is both
their body satisfaction and weight perceptions that affect their self-esteem and academic results. However, in males, no relationship appears to exist between academic achievement and self-esteem. Eleventh grade males are also more focused on their appearances and less concerned with their school achievements. The findings showed that, unlike in females, the relationship between body image and self-esteem in males may not be the one that predominantly drives the level of academic achievement during the transitional stage into late adolescence (Clay, Vignoles & Dittmar, 2005).

The correlation between body image and academic achievement is the same in both genders, while the correlation between self-esteem and academic achievement is more pronounced in females and non-existent in males since men can usually compartmentalize emotions and academic focus and are more likely to be preoccupied with their looks and social life without affecting their academic performances and achievements (Vander Wal & Thelen, 2000). Also, both males and females typically attribute making friends to be more important in secondary school than in middle school (Dolgin, 2010), which explains why body image is more related to academic achievement in the eleventh grade.

**Educational Recommendations**

**The Role of Educators**

It is suggested, based on past research, that for students to achieve and perform well in class, they should be at ease in a friendly environment (National Middle School Association, 2001), and have a good relationship with their parents, teachers and counselors who can assist them in increasing their level of self-esteem (Lin, Tang, & Yen,
The findings of the current study highlight the importance of school preventative and interventional programs that should approach body image and self-esteem as related to academic achievement. Educators, teachers and counselors should be aware of such relationships that the school adolescent community faces, particularly between middle and secondary schools. Based on literature, it was suggested that during the transition from middle to high school, some adolescent students tend to isolate themselves and prefer not to contribute to classroom discussions, nor participate in learning activities (Gleason, Alexander & Somers, 2000). In order for students to feel safe, at ease and have confidence and faith in themselves, teachers should start to better grasp the idea of accepting the background of their students and understanding what their beliefs and behaviors are about. Teachers shall pinpoint their students’ strengths and assist in fulfilling their needs on the social, psychological and academic levels (Hannell, 2004).

Also as discussed in the literature review, because body image results in poor self-esteem, less participation in physical activities, withdrawal from school and extracurricular activities, eating disorders, anxiety, and barriers to learning; it should be approached from different perspectives and several learning methods. While further research is required to determine the best timing for preventative programs, it is likely that the introduction of such programs is appropriate between the eighth and eleventh grades. Moreover, based on the results, it is appropriate to suggest that a higher focus of self-esteem improvement activities shall be directed toward females while more activities identifying the importance of academic achievement as opposed to pre-occupation with the body image shall be addressed to males more than females.
Preventative programs and literacy classes

Schools need to educate students from both genders about self-esteem and body image, since based on the regression analysis results; body image is significantly and equally related to self-esteem in both genders. Teachers should take the time to praise their students’ strengths, and help them understand and reach their goals especially that students in the critical period of adolescence are usually confused about their identities, capabilities and needs (Goldfield, 2010). Preventative programs should help teenagers find the adequate tools that enhance their body images and their self-esteem. As also suggested by Young-Hyman, Schlundt and Wenderoth (2003), students could start by knowing more about themselves, explore their purpose in life, look at the positive sides and get rid of the self-defeating behaviors in order to become more confident about their looks, enhance their self-esteem and feel motivated to persevere academically. Students’ answers to the questions related to the self-classified weight subscale showed that many students perceived themselves as overweight. Therefore, school counselors and even nutritionists can train students to love their bodies as they are, and to objectively evaluate their weights based on health and scientific measures, instead of subjective and destructive comparisons with peers and media (National Eating Disorders Association, 2005).

Students can benefit weekly from media and cultural literacy class in order to help girls decrease their overweight preoccupation that builds anxiety, frustration and reduce the internalization of the thin ideals that push them into following crash diets and having eating disorders (Booth, Wilkenfeld, & Pagnini, 2008). Workshops can also help boys become less preoccupied with their appearances, and better understand the danger of trying to look like the v-shaped body builders (Olivardia, Pope, Borowiecki, & Cohane, 2004).
Media and psychological literacy programs, lectures, discussions, activities and home tasks, allow students to respect themselves and their peers and focus on positive self-talk and self-appraisal. With the connection between body image among adolescents and the media, it is vital for schools to help students critically view the ads, the television and magazine (Botta, 2003).

**Reading and writing activities**

Nutritionist can help decrease body mass index, surgeons can improve body shapes, and trainers can write plans on how to attain a target shape, but they cannot change the body image. No research has proven that if physical appearance changes, the image will change too (Durkin & Paxton, 2002). As discussed, body image is a thought or judgment (Cash & Pruzinsky, 2002), and enhancing the body does not mean improving the image. According to Cox (2005) who explained the importance of the student-centered active learning methods, teachers can provide students with argumentative, descriptive, and informative texts and help them identify what is based on facts and what is subjective. They can link the fiction to their own body image and ask them to write about the way they see themselves and think others describe them.

Students need to learn to avoid comparison with others and they should learn to direct their attention on their own qualities. As suggested by Clay, Vignoles and Dittmar (2005), students can have a journal or a diary where they should be encouraged to write what they like about themselves, the good things people say about them and what they feel they have achieved; and they can also add positive, inspirational quotes and motivating quotations.
Educational workshops

Multi-media workshops can provide overviews of the problem of unhealthy body images, eating patterns and destructive social comparison behaviors of the Lebanese adolescents. Since the findings of the current study revealed a significant correlation between the body area satisfaction measure and academic achievement, students need to be aware that the more they are dissatisfied with several areas in their bodies, the lower their grades will be. They can also practice talking positively about their physique and complimenting themselves in order to increase their level of appearance evaluation. Students will also be aware that negative body images inhibit them from a healthy social, psychological and academic development. Students should know that their attitudes toward their bodies affect their well-being in the short and long run (Knightly & Whitelock, 2007). If they stop the upward comparison and the negative self-destructive talk, or if they view media with a critical and objective eye, then they can decrease the external factors that harm their body image and their self-esteem (Weinshenker, 2010)

Interactive activities

Morning meetings and circle times can encourage students to talk about the way they feel and think about their bodies, the reasons why they compare themselves to others, and the ways their ideas are harming their well-being. Students’ learning is related to their proactive engagement and interactive discussions in an environment where students feel secure (Cox, 2005). Girls can be asked to work on projects and presentations in order to forge a stronger personality that contributes to increasing their confidence, personality and self-image. Furthermore, they can actively work in homogeneous or heterogeneous groups in order to enhance their communication skills (Gage & Belina, 2000) that help them
overcome their shyness caused by their looks, increase their appearance evaluation, build confidence and enhance classroom daily performances and achievements.

Community service activities, outings and projects enhance students’ quality of life. The study’s participants showed that Lebanese students are preoccupied with their appearances and concerned about their weights and body areas. Some adolescents compare themselves to thinner or more muscular people and think that those are happier than they are. Their life is centered on their looks, and their main goal is to become more attractive. Therefore, community service programs can show students that life has different aspects, and students can feel proud and confident if they help others. Adolescents can devote their time to help needed people and can feel proud about themselves and increase their level of self-esteem. Also, if they are kept busy, they might spend less time focusing on their body areas that they dislike. Parents can also be closely involved in these activities and understand the purpose behind promoting them, as the role of parents is found to have long-term effects on young adults (Charles, 2008).

Discussions can be incorporated in academic school subjects (O’Dea, 2007), such as languages, when talking about media and advertising; health and science classes, when talking about the dangers of excess dieting and body types; and in the physical education classes, when encouraging all students to participate in physical teamwork games in order to enhance peer relations and self-esteem related to physical capacities (Tremblay, Inman, & Willms, 2000)

**Teaching kits**

Teaching kits allow students to identify and discuss factors that influence their body images within their culture. They can include lesson plans, interactive activities and fiction
and non-fiction stories (Cox, 2005). Short DVDs that discuss body acceptance issues, body differences, adolescence physical and emotional changes and the importance of friendly environments and supporting friends can also be watched and discussed once a week.

Additionally, teachers can include hands-on brief activities (Gage & Berlina, 2000) that can help boys and girls take positive action against the unrealistic ideals portrayed in the media, create positive messages for them to feel good about themselves and stop judging or criticizing their peers (Baker & Gerler, 2008).

**School body image website**

In order to spread the word beyond schools, and as suggested by O’Dea (2007), websites, based on materials taken from books and the classroom discussions about body image curriculum can be developed. They can relate to several existing websites and link to resources that are useful for teenagers. Websites can be targeted for both males and females since the results of the study revealed that both genders are concerned about their appearances, and body image is also almost equally related to academic achievements. Therefore, activities and topics need to interest both boys and girls, but also customized based on grade levels, since interests change from middle to secondary school (Rouse, 2010).

Students can also take online tests to check their levels of body images and self-esteem, read others advice that help them improve their well-being, and write in their classes’ blogs their personal experiences, feelings and personal improvements.
CHAPTER SIX
CONCLUSION

Body image and self-esteem are crucial elements in young teenagers transitioning from early to late adolescence stage. Based on the current study and as evidenced in literature review, body image and self-esteem influence teenagers’ academic achievement. The study aimed at examining the relationships amongst body image, self-esteem and academic achievement in Lebanese adolescents, and its variation based on gender and grade level.

The valid and reliable measurement tools administered, the Multiple Body Self-Relations Questionnaire (MBSRQ) and the Rosenberg Self-esteem Scale (RSE) generated significant findings. They supported past research that a significant relationship exists between body image and self-esteem, self-esteem and academic achievement and that no significant gender-related differences exist regarding the relationship between body image and self-esteem. The results also demonstrated that relationships amongst the variables are stronger in the eleventh grade students (late adolescence) than in the eighth graders (early adolescence).

While the degree of relationship between body image, self-esteem and academic achievement was somewhat equivalent across males and females, some body image measures used in the study demonstrated certain gender related differences when measured against self-esteem and academic achievement. First, in Body Area Satisfaction, females’ self-esteem and academic achievement is slightly more affected by their preoccupation with their body shapes. Then, in Appearance Orientation, males’ self-esteem is more affected by their time investment in their looks and their concerns with their body shapes.
The educational environment, peer approval, media, social comparison, parental guidance and cultural context are major factors that can affect the relationship between body image, self-esteem and academic achievement.

This study confirmed that the relationship between body image, self-esteem and academic achievement is stronger in the eleventh grade level as opposed to the eighth grade level. It also showed that females do not exhibit a stronger correlation between body image and self-esteem than males do. Yet, only females’ academic achievement is related to self-esteem. Educators should understand their students and find adequate methods to enhance their body image because it affects their academic achievements, social and psychological well-being.

Limitations

Students’ attitudes might have affected the study’s internal or external validity. Some students may not have taken the questionnaires seriously. They could have carelessly or dishonestly answered the questions. Others might have over-valued or underestimated their feelings. Additionally, the generalizations of the results could be affected since students come only from middle to high socioeconomic surroundings. Students’ answers from other schools or areas may differ due to the background and individual differences.

Recommendations

Further research is needed to extend the findings and include factors beyond gender and grade level. Variables such as socio-economic status, public and private schools, urban
and rural areas, quality of life, age and students’ lifestyles are important to be related to self-esteem, body image and academic achievement.

Larger samples and other grade levels are suggested to be studied in order to increase the results’ reliability. It would also be important to conduct further qualitative research on the topic in which students, teachers and counselors could be interviewed.

Longitudinal studies could analyze adolescents’ behavioral changes over time through the transition from early to late adolescence and the influence of body image on self-esteem and academic achievement. Finally, research is needed to study the feasibility and reliability of preventative and interventional programs that concentrate on appeasing the influence of body image and self-esteem on academic performances and achievements.
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APPENDIX A

MBSRQ Questionnaire

THE MBSRQ-AS

INSTRUCTIONS--PLEASE READ CAREFULLY

The following pages contain a series of statements about how people might think, feel, or behave. You are asked to indicate the extent to which each statement pertains to you personally.

Your answers to the items in the questionnaire are anonymous, so please do not write your name on any of the materials. In order to complete the questionnaire, read each statement carefully and decide how much it pertains to you personally. Using a scale like the one below, indicate your answer by entering it to the left of the number of the statement.

EXAMPLE:

I am usually in a good mood.

In the blank space, enter a 1 if you definitely disagree with the statement; enter a 2 if you mostly disagree; enter a 3 if you neither agree nor disagree; enter a 4 if you mostly agree; or enter a 5 if you definitely agree with the statement.

There are no right or wrong answers. Just give the answer that is most accurate for you. Remember, your responses are confidential, so please be completely honest and answer all items.

(Duplication and use of the MBSRQ-AS only by permission of Thomas F. Cash, Ph.D., Department of Psychology, Old Dominion University, Norfolk, VA 23529)
Here is a list of statements related to appearance and grooming. Please indicate your level of agreement using the following scale:

1: Definitely Disagree
2: Mostly Disagree
3: Neither Agree Nor Disagree
4: Mostly Agree
5: Definitely Agree

_____ 2. I am careful to buy clothes that will make me look my best.
_____ 3. My body is sexually appealing.
_____ 4. I constantly worry about being or becoming fat.
_____ 5. I like my looks just the way they are.
_____ 6. I check my appearance in a mirror whenever I can.
_____ 7. Before going out, I usually spend a lot of time getting ready.
_____ 8. I am very conscious of even small changes in my weight.
_____ 9. Most people would consider me good-looking.
_____ 10. It is important that I always look good.
_____ 11. I use very few grooming products.
_____ 12. I like the way I look without my clothes on.
_____ 13. I am self-conscious if my grooming isn't right.
_____ 14. I usually wear whatever is handy without caring how it looks.
_____ 15. I like the way my clothes fit me.
_____ 16. I don't care what people think about my appearance.
_____ 17. I take special care with my hair grooming.
_____ 18. I dislike my physique.
19. I am physically unattractive.

20. I never think about my appearance.

21. I am always trying to improve my physical appearance.

22. I am on a weight-loss diet.

For the remainder of the items use the response scale given with the item, and enter your answer in the space beside the item.

23. I have tried to lose weight by fasting or going on crash diets.

1. Never
2. Rarely
3. Sometimes
4. Often
5. Very Often

24. I think I am:

1. Very Underweight
2. Somewhat Underweight
3. Normal Weight
4. Somewhat Overweight
5. Very Overweight

25. From looking at me, most other people would think I am:

1. Very Underweight
2. Somewhat Underweight
3. Normal Weight
4. Somewhat Overweight

26-34. Use this 1 to 5 scale to indicate how dissatisfied or satisfied you are with each of the following areas or aspects of your body:

1: Very Dissatisfied
2: Mostly Dissatisfied
 Neither Satisfied Nor Dissatisfied
 Mostly Satisfied
 Very Satisfied

 26. Face (facial features, complexion)
 27. Hair (color, thickness, texture)
 28. Lower torso (buttocks, hips, thighs, legs)
 29. Mid torso (waist, stomach)
 30. Upper torso (chest or breasts, shoulders, arms)
 31. Muscle tone
 32. Weight
 33. Height
 34. Overall appearance

MBSRQ-AS Thomas F. Cash, Ph.D.

MBRSQ terms – Clarifications on Survey Terms provided to Students from Lebanese Schools

Question 3: sexually appealing: attractive, good looking, nice
Question 11: Grooming products (beauty products, creams, make ups, hair gel)
Question 13: Grooming: preparation, preparations,
Question 14: whatever is handy:
Question 17: my hair grooming: the look of my hair
Question 18: my physique: how I look
Question 23: Crash diets: severe diets
APPENDIX B

Demographic Question & Academic Achievement

Demographic Questions

Kindly fill in your answer in the blank or circle the answer that describes you.

1. Are you Lebanese? Circle Yes or No

2. School:_______________

3. Grade Level : (Class/ Section)____________

4. Gender: Female or Male? Circle
   F or M

Academic Achievement

Write your averages for
   Term 1:____________
   Term 2:___________
**APPENDIX C**

RSE Questionnaire

**Rosenberg Self-Esteem Scale** (Rosenberg, 1965)

The scale is a ten item Likert scale with items answered on a four point scale - from strongly agree to strongly disagree. The original sample for which the scale was developed consisted of 5,024 High School Juniors and Seniors from 10 randomly selected schools in New York State. Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>On the whole, I am satisfied with myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.*</td>
<td>At times, I think I am no good at all.</td>
<td></td>
<td></td>
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<td>3.</td>
<td>I feel that I have a number of good qualities.</td>
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<td>4.</td>
<td>I am able to do things as well as most other people.</td>
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<td>5.*</td>
<td>I feel I do not have much to be proud of.</td>
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<td>6.*</td>
<td>I certainly feel useless at times.</td>
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<td>7.</td>
<td>I feel that I’m a person of worth, at least on an equal plane with</td>
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</table>
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. 

Scoring: SA=3, A=2, D=1, SD=0. Items with an asterisk are reverse scored, that is, SA=0, A=1, D=2, SD=3. Sum the scores for the 10 items. The higher the score, the higher the self esteem.
APPENDIX D

Consent Form

My name is Diala Itani. I am a graduate student in the Education Program at the Lebanese American University. I am collecting data for my thesis study about body image, self-esteem and academic achievement of female and male students of 8th and 11th grades.

Students will answer general demographics questions and will complete two questionnaires, The Multidimensional Body self-relation questionnaire of 34 items and the Rosenberg’s self-esteem 10-item scale. The questionnaires take about maximum 40 minutes to complete (10-15 minutes for instructions and explanation of terms, 12-15 minutes for the body image test and 5-8 minutes for Rosenberg’s).

Students’ participation is completely voluntary, and the responses will be completely anonymous. Participants are free to decline to answer and withdraw from the study at any time. Questions are expected to be answered truthfully. The data collected will be analyzed at the grade and gender levels only. By answering the questionnaires, students are consenting to participate.

The research aims to study the relationship between body image, self-esteem and academic achievement of 8th and 11th grades male and female students. It is supervised by Dr. Hiam EL Zein, Dr. Ahmad Oueini and Dr. Tamer Amin. Professors can be contacted at the Lebanese American University. For any questions, kindly email me at diala.itani@lau.edu.lb.

Agreement completed by the principal

I, ___________________________, principal of ________________________school, understand the purpose of the study and data collection; what it requires of the students and that students’ privacy and confidentiality will be protected.

I grant permission to the researcher to conduct the above named research in my school as described in the proposal.

Researcher’s name and signature

_________________________

Principal’s name and signature

_________________________

Date:____________