BODY IMAGE AND DATING RELATIONSHIPS AMONGST FEMALE ADOLESCENTS

MINETTE DE VILLIERS

Thesis presented in partial fulfilment of the requirements for the degree of Master of Arts (Psychology) at the University of Stellenbosch.

Supervisor: Dr. J. W. Wait
April 2006
DECLARATION

I, the undersigned, hereby declare that the work contained in this thesis is my own original work, and that I have not previously in its entirety or in part submitted it at any university for a degree.

__________________________   __________________________
Signature       Date
SUMMARY

Body image and dating relationships are two of the most important topics in the lives of the female adolescents. Yet, not much South African research has been done on either of these themes with adolescent populations and no research could be found to investigate a possible relationship between these two important aspects, both internationally and locally.

Therefore, the primary aim of this study was to investigate the potential relationship between female adolescents’ body image and their romantic relationships. Specifically, the aim was to determine if a relationship existed between participants’ self-rated attractiveness and body dissatisfaction, and their relationship status and romantic relationship satisfaction.

There were two secondary aims. The first was to investigate how aspects like participants’ culture, age and body size were related to their body image and the second was to determine if aspects like participants’ culture, age and body size were related to their relationship status and satisfaction with their romantic relationships.

Questionnaires were distributed to Afrikaans- and English- speaking White girls, Afrikaans-speaking Coloured girls and isiXhosaspeaking girls at four urban, co-educational, secondary schools and 511 questionnaires were completed. Participants self-reported their height and weight, self-rated their facial and bodily attractiveness on a 7-point scale, and completed two measures of body dissatisfaction: the Eating Disorder Inventory (EDI) Body Dissatisfaction subscale (Garner, Olmstead, & Polivy, 1983) and the Body Cathexis Scale (BCS) (Secord & Jourard, 1953). Participants also indicated their current relationship status using five categories: has never dated anyone, not dating anyone currently, casually dating one or more people, dating one person exclusively, and engaged or planning to marry, and completed the Relationship Assessment Scale (RAS) (Hendrick, 1988), a measure of relationship satisfaction.
With regard to the primary aim of the study, results show that there were significant relationships between some of the measures of body image and relationship status for the total sample. In general, it was found that the girls who were involved in exclusive relationships at the time of the study had better body image than the girls who were not. Yet, results for this relationship were different for the different cultural and body mass index groups.

With regard to the relationship between body image and relationship satisfaction, the Body Cathexis Scale scores significantly predicted participants’ satisfaction with their romantic relationships. Yet both weight and culture were also found to play a role in the relationship between body image and relationship satisfaction.

With regard to the secondary aims of the study, culture was found to be related to body image, body mass index, relationship status and relationship satisfaction, while age played a role in participants’ body mass index and relationship status, and body mass index was related to body image, but not to relationship status and relationship satisfaction. Therefore, participants’ culture and body mass index were significant with regard to body image and romantic relationships, but was also found to play a significant role in the relationship between these two.
OPSOMMING

Liggaamsbeeld en romantiese verhoudings is van die belangrikste ontwikkelingstake in
die lewens van adolessente meisies. Desnieteenstaande bestaan daar min Suid-Afrikaanse
navorsing oor die twee onderwerpe. Geen navorsing kon gevind word vir beide
internasionale en plaaslike steekproewe oor ’n moontlike verband tussen die twee
belangrike temas nie.

Daarom was die primêre doelstelling van dié studie om die moontlike verband tussen
adolessente meisies se liggaamsbeeld en hulle romantiese verhoudings te ondersoek.
Meer spesifiek was die doel om te bepaal of daar ’n verband bestaan tussen deelnemers
se eie beoordeling van hulle aantreklikheid en hulle verhoudingsstatus en
verhoudingstevredenheid, maar ook tussen hulle liggaamstevredenheid en hulle
verhoudingsstatus en verhoudingstevredenheid.

Daar was twee sekondêre doelstellings. Die eerste doel was om die verband tussen
deelnemers se kultuur, ouderdom en liggaamsindeks en hulle liggaamsbeeld te
ondersoek. Die tweede doel was om te bepaal of daar ’n verband bestaan tussen
deelnemers se kulturele groep, ouderdom en liggaamsindeks en hulle verhoudingsstatus
en tevredenheid met hulle romantiese verhoudings.

Vraelyste is uitgedeel aan Afrikaans- en Engelssprekende Wit meisies,
Afrikaanssprekende Kleurling meisies en isiXhosasprekende Swart meisies by vier
stedelike, koëd hoërskole in die Wes-Kaap en 511 vraelyste is voltooi. Deelnemers het
hulle lengte en gewig gerapporteer, hulle gesig en liggaam se aantreklikheid op ’n 7-punt
skaal beoordeel, en twee liggaamstevredenheid meetinstrumente voltooi: die Eating
Disorder Inventory (EDI) Body Dissatisfaction subscale (Garner, Olmstead, & Polivy,
1983) en die Body Cathexis Scale (BCS) (Secord & Jourard, 1953). Deelnemers het ook
hulle huidige verhoudingsstatus aangedui deur een van vyf kategorieë te selekteer: het
nog nooit ’n verhouding gehad nie, is huidiglik nie in ’n verhouding nie, is huidiglik in ’n
nie-vaste verhouding met een of meer persone, huidiglik in ’n vaste verhouding, en
verloof of beplan om te trou. Deelnemers het ook die Relationship Assessment Scale (RAS) (Hendrick, 1988), ’n meetinstrument wat verhoudingstevredenheid meet, voltooi.

Die resultate van die primêre doel van die studie wys dat daar ’n beduidende verband vir die totale steekproef gevind is tussen liggaamsbeeld meetings en verhoudingsstatus. Oor die algemeen het meisies wat in vaste verhoudings betrokke was ‘n beter liggaamsbeeld gehad as meisies wat nie in verhoudings betrokke was nie. Die resultate van die verschillende kultuur- en liggaamsindeks groepe het egter van mekaar verskil vir die verhouding.

Wat die verhouding tussen liggaamsbeeld en verhoudingstevredenheid betref, is gevind dat die Body Cathexis Scale punte die deelnemers se tevredenheid met hulle romantiese verhoudings beduidend voorspel het. Daar is ook gevind dat beide gewig en kultuur ’n rol gespeel het in die verhouding tussen liggaamsbeeld en verhoudingstevredenheid.

Die ondersoek na die sekondêre doel van die studie het getoon dat daar ’n verband was tussen kultuur en liggaamsbeeld, liggaamsindeks, verhoudingsstatus en verhoudingstevredenheid. ’n Verband het ook bestaan tussen ouderdom en deelnemers se liggaamsindeks en verhoudingsstatus, en tussen deelnemers se liggaamsindeks en liggaamsbeeld, maar nie tussen liggaamsindeks en verhoudingsstatus, en tussen liggaamsindeks en verhoudingstevredenheid nie. Deelnemers se kultuur en liggaamsindeks het dus ’n belangrike rol gespeel in hulle liggaamsbeeld en romantiese verhoudings en ook in die verhouding tussen die twee faktore.
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CHAPTER 1
INTRODUCTION

1.1 Introduction

Two of the most important topics and the root of many of the problems in the lives of adolescent females are body image and romantic or “dating” relationships (Jensen cited in Mostert, 1995). Research has found that both these topics are central to adolescents’ lives (Ferron, 1997; Furman, 2002). Firstly, they are both named as developmental tasks in the adolescent period (Havighurst, 1972; Newman & Newman, 1997) and secondly both have been linked to identity development (Daniluk, 1993; Douvan & Adelson cited in Biehler & Hudson, 1986; Erikson cited in Furman, 2002; Lerner, Orlos, & Knapp, 1976; Potash, 2002). Pipher (1994) describes adolescent girls’ relationship with their bodies like this:

The preoccupation with bodies at this age cannot be overstated. The body is a compelling mystery, a constant focus of attention. At thirteen, I thought more about my acne than I did about God or world peace. At thirteen, many girls spend more time in front of a mirror than they do on their studies. Small flaws become obsessions. Bad hair can ruin a day. A broken fingernail can feel tragic. (p. 55)

Adolescence is a difficult period in the sense that it is a time when great physical, emotional, intellectual, academic, social and spiritual changes and development take place (Pipher, 1994; Williams, 2001). According to Pipher (1994), while adolescence has always been difficult, it has become even more so over the last two decades because of cultural changes. Pipher (1994) describes today’s culture as “girl-poisoning” and she also has the following to say about it: “girls today … are coming of age in a more dangerous, sexualized and media-saturated culture” and “They face incredible pressures to be beautiful and sophisticated…..” (p. 12). Mostert (1995) also believes that western society’s emphasis on physical appearance has increased in recent years and that the media plays a large role in this state of affairs by constantly presenting the public with
idealized images of beauty. Many studies name the mass media as the single strongest influencing factor on adolescent body image (Hargreaves & Tiggemann, 2004), while peers become the other most important authority on appearance during early adolescence (Smolak & Levine, 2001).

A lot of research indicates that in the Western world the current idealized female body is very thin (Cash & Henry, 1995; Fallon & Rozin, 1985; Furnham, Badmin, & Sneade, 2002; Garner, Garfinkel, Schwartz, & Thompson, 1980; Grogan, 1999; Kallen & Doughty, 1984; Monteath & McCabe, 1997; Morris, Cooper, & Cooper, 1989; Parkinson, Tovée, & Cohen-Tovée, 1998; Rosenblum & Lewis, 1999; Silverstein, Perdue, Peterson, & Kelly, 1986; Striegel-Moore, Silberstein, & Rodin, 1986; Thompson, 1990; Webster & Tiggemann, 2003), while the overweight body is viewed very negatively and is also stigmatized (Clayson & Klassen, 1989). Therefore, there exists a very strong relationship between a woman’s weight and her body image (Banfield & McCabe, 2002; Garner, 1997; Muth & Cash, 1997; Thompson & Smolak, 2001).

The current overemphasis on superficial physical appearance has a great influence on people’s lives and especially on adolescents (Mostert, 1995). Adolescents seem to be more vulnerable to societal influences regarding body image, because of the drastic psychological and physical changes associated with puberty and because their body image is therefore particularly ‘elastic’ during this time (Grogan, 1999). Adolescents are at a stage of life when conformity to their peer group and to societal ideals is of the utmost importance. Mostert (1995) believes that adolescents imitate these popularized ideal images because of a strong desire to belong and conform to the group. Physical appearance is so important to this group because it is one of the strongest influences on their popularity, peer acceptance, and self-evaluation (Jensen, 1985; Jones, 2001; Littrell, Damhorst, & Littrell, 1990). It is ironic that it is exactly at this point in time when their appearance becomes so important to them that they also start moving away from this ideal figure. Puberty is associated with a normative increase in weight, which is in contrast which the slim ideal and this causes girls to be progressively more dissatisfied.
with their bodies (Blyth, Simmons, & Zakin, 1985; Levine, 1987; Nolen-Hoeksema & Gigrus, 1994; Richards, Boxer, Petersen, & Albrecht, 1990; Striegel-Moore et al., 2001; Thompson, 1990). An adolescent’s body image thus changes to accommodate the physical changes due to puberty and usually becomes increasingly negative (Rosenblum & Lewis, 1999).

As a result of this dissatisfaction, the majority of adolescent girls want a thinner body and many engage in weight loss behaviours in order to achieve this ideal (Ricciardelli & McCabe, 2001). Many females come to internalize these cultural ideals and assess their physical and personal self-worth in relation to these unrealistic and extreme standards (Thompson & Stice, 2001). The closer the person’s subjective body image is to this internalized ideal, the greater their chances of having a high self-esteem and healthy body image (Monteath & McCabe, 1997; Mostert, 1995). Even though many women try to attain this ideal appearance, very few people achieve this goal (Corey & Corey cited in Mostert, 1995) as the current ideal body according to Western culture is unrealistically thin and so very difficult for most women to achieve (Pliner, Chaiken, & Flett, 1990; Thompson & Stice, 2001; Williams, 2001). Therefore, it is no wonder that the prevalence of body image dissatisfaction among adolescent and adult women has been found to be so high that it is now viewed as a normative part of life in Western society (Rodin, Silberstein, & Striegel-Moore cited in Kostanski, Fisher, & Gullone, 2004). This also seems to be the case in South Africa as Wenhold (2000) in a study of female university students found more than 67% of the sample to express body dissatisfaction. Research has found adolescents to place more importance on and feel more negative about their bodies than older Americans (Cash, Winstead, & Janda, 1986).

Yet the cultural focus on appearance doesn’t only influence adolescent body image, it also influences the other topic of great importance to this group: romantic relationships. Many studies have found men to consider attractive women more desirable romantic partners (Berscheid, Dion, Walster, & Walster cited in Stelzer, Desmond, & Price, 1987; Brislin & Lewis, 1968; Hoyt & Kogan, 2001; Singh & Young, 1995; Smith, Waldorf, &
A girl’s appearance was found to be more important than intelligence, femininity, extroversion, personality and character in men’s choice of a dating partner (Jensen, 1985; Spreadbury & Reeves, 1979; Walster, Aronson, & Abrahams, 1966). Studies have indicated that heavier women (higher body mass index) are less likely to be involved in a steady dating relationship and to have sexual experience (Sheets & Ajmere, 2005; Stake & Lauer, 1987; Wiederman & Hurst, 1998).

Women know of this preference for a thin partner and prejudice against heavier women, so they try to fit the male ideal physically to increase their chances of finding a partner. As the media states that one has to fit the cultural ideal to be attractive to the other sex, girls frequently believe that success in heterosexual dating is dependent upon their body shape and especially on being thin (Gershon, Gowen, Compian, & Hayward, 2004). Attractiveness often translates into an emphasis on thinness (Lamb, Jackson, Cassiday, & Priest, 1993). Women receive the message that thinness equals attractiveness and are therefore prone to pursue the ideal image shown in the media to increase the chances of acquiring a partner (Hoyt & Kogan, 2001; Sobal, Nicolopoulos, & Lee, 1995). The media takes the ideal image that the opposite sex prefers and pushes it as far as possible to make money (Hoyt & Kogan, 2001; Mostert, 1995). The media promotes a multitude of items to change and “improve” appearance, and these are mostly meant to increase the person’s desirability to the other sex (Mostert, 1995).

Therefore, it is exactly at this time in their lives when girls’ bodies are changing rapidly and they have to deal with multiple changes in their lives that they become aware of pressure from the most important sources, their peers, parents, the media and potential romantic partners, to be attractive. Girls are under a lot of pressure to be beautiful (Piper, 1994) and in the Western world this means attaining a level of thinness that is very difficult for most women to reach and maintain. This leads their body image to suffer and according to Simone De Beauvoir, “to lose confidence in one’s body is to lose confidence in oneself” (cited in Pipher, 1994, p. 57).
1.2 Motivation for Research

From the previous section it is clear that body image is an important part of adolescents’ lives. Body image problems seem to be a widespread problem that affects the lives of many female adolescents. If problems like these are not resolved, they carry over into adulthood (Thompson & Smolak, 2001). Yet, not much research has been done on the body image of South African adolescents and the little which has been done, focused on university students. Thus, as the research with female university students shows a high frequency of body dissatisfaction (Wenhold, 2000), research is definitely needed with high-school-aged females who, due to puberty, are subject to changing bodies which leaves them especially vulnerable to body image problems which may hamper identity development (Potash, 2002).

Another reason why it is important to investigate the body image of South African adolescents, is because this country has adolescents from a variety of cultural and racial groups who may greatly differ from each other regarding body image. American research generally shows White females to have higher levels of body dissatisfaction than Black females of all ages, including adolescents (Abrams, Allen, & Gray, 1993; Cash & Henry, 1995; Franko & Striegel-Moore, 2002; Grogan, 1999; Harris, Walters, & Waschull, 1991; Henriques & Calhoun, 1999; Kumanyika, 1987; Rucker & Cash, 1992; Schreiber et al., 1996; Smolak & Levine, 2001; Striegel-Moore et al., 2000). And this seems to be the case despite the fact that Black females have on average significantly higher body mass indexes across all ages (Franko & Striegel-Moore, 2002; Harris et al., 1991; Kumanyika, 1987; Rand & Kaldua, 1990; Rosner, Pineas, Loggie, & Daniels, 1998; Smolak & Levine, 2001; Striegel-Moore et al., 2000). The few studies that could be found which study South African women’s body dissatisfaction, also found Black women to have more satisfaction with their bodies than did White women1 (Geach, 1995; Haynes, 1995; Senekal, Steyn, Mashego, & Nel, 2001), while the Black women’s body mass indexes

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1 Designation of race in terms of White and Black groups should be understood as referring to dominant sub-groups existing in South Africa.
were also higher than the White women’s body mass indexes (Geach, 1995; Haynes, 1995; Sheward, 1994; Zahoul, 1996). However, all of these studies were conducted with university-aged women who are generally in the late adolescent phase.

Yet, because little research has been done in this field, these few studies should not cause us to be unconcerned with the body images of Black and Coloured females.\(^2\) Acculturation has been found to influence people from a non-Western culture’s level of body satisfaction (Bowen, Tomoyasu, & Cauce cited in Molloy & Herzberger, 1998; Dounchis Hayden, & Wilfley, 2001; Furnham & Alibhai, 1983; Molloy & Herzberger, 1998). Therefore, in our society where people are increasingly westernizing, it is important to find out what the current body image situation is among our youth. Haynes (1995) found increased Westernization to be positively associated with more body image dissatisfaction, while Edwards (2000) found that only 43% of a sample of mainly isiXhosa female students strongly identified with traditional Black culture. Furthermore, recent studies show a rise in the body image disturbance and disordered eating in ethnically diverse groups (Koff & Benavage, 1998) while Szabo and Hollands (1997) found that 20% of the sample of Black and White schoolgirls in Johannesburg had abnormal attitudes to eating and were at risk for eating-related problems. Additionally, the number of Black patients with bulimia has steadily increased in South Africa (Szabo, 1998). These are all good indications that body dissatisfaction in Black cultures is, at least to a degree, already an important problem and thus a topic to be studied.

Although romantic relationships is a very significant part of adolescents’ lives (Furman, 2002; Shulman & Kipnis, 2001), this is a research field that has only started expanding in the last decade (Furman, 2002) and in which little research has been done (Shulman & Kipnis, 2001; Shulman & Seiffge-Krenke, 2001). Almost no South African research could be found regarding adolescents’ dating relationships. Research has shown that teenage dating serves as a learning school for adult relationships (Lloyd cited in Carlson, 2002).

\(^2\) Designation of race in terms of Black and Coloured groups should be understood as referring to dominant sub-groups existing in South Africa.
1999) and it is also believed to play a significant role in the development of later, more important romantic relationships (Brown, Feiring, & Furman cited in Shulman & Kipnis, 2001). It is therefore important to learn as much as possible about the nature of and influences on adolescent relationships in order to help adolescents to build healthy relationships both during adolescence and in adulthood.

Few studies have focused on the relationship between body image and romantic relationships. The studies that have investigated this relationship focused on sexual behaviour and satisfaction and ignore the overall happiness of or satisfaction with the relationship. The establishment and maintaining of romantic relationships is clearly an important part of normal adolescent development and is therefore an occurrence that influences the lives of the majority of adolescents (Biehler & Hudson, 1986). It is thus important to investigate the relationship between body image dissatisfaction and adolescents’ romantic relationships, because this is a field that potentially affects a large number of South Africa’s residents.

1.3 Broad Aims of the Study

In general the study aims to investigate body image and romantic relationships in a sample of South African female adolescents from four different cultural groups: Afrikaansspeaking White girls, Englishspeaking White girls, Afrikaansspeaking Coloured girls and isiXhosaspeaking girls. Specifically, there are three broad aims.

1.3.1 Primary Aim

The primary aim of this study is to investigate the potential relationship between female adolescents’ body image and their relationships. Specifically:

• to determine if a relationship exists between participants’ body image, as measured by four different measures, and their relationship status.
to establish if a relationship exists between participants’ body image, as measured by four different measures, and participants’ satisfaction with their romantic relationships.

Furthermore, additionally, to determine if participants’ cultural group or body mass index had any influence on the above relationships. Therefore, the research will focus on whether an adolescent’s body dissatisfaction and own appearance evaluation are related to her ability to have a dating relationship and her satisfaction with this relationship.

1.3.2 Secondary Aim One
The first secondary aim of the study is to investigate aspects of the body image of the current sample by measuring four aspects of body image and establishing how they are influenced by the following factors:
• participants’ cultural group
• participants’ age
• participants’ body size

1.3.3 Secondary Aim Two
The second secondary aim of the study is to investigate aspects of the relationship status and also relationship satisfaction of the current sample by establishing how they are influenced by the following factors:
• participants’ cultural group
• participants’ age
• participants’ body size

1.4 Outline of the Area of Research

As already mentioned, the current study focuses on the adolescent. Although body image has been found to be a problem for both male and female adolescents, it seems to be more problematic for females (as discussed in detail in section 2.4, Body Image and Sex Differences) and therefore the focus of this study was exclusively on adolescent females.
Although early adolescence ranges from age 12 to 18 (Newman & Newman, 1997; Pienaar, 1988), it was decided to sample only high school girls, thus ages 13 to 18, for the current study, because of the focus on dating relationships which from a developmental perspective become important during the high school years.

The decision was made to sample girls from different cultural or racial groups, as previous research has shown racial and ethnic groups to differ from each other regarding both body image and relationship factors (discussed in detail in sections 2.6, Race and Ethnicity, and 3.2, Attractiveness and Relationships). From here on the participating groups will be referred to as “cultural groups” and not “racial groups” as race was not the only characteristic used in selecting the participants. The term “culture”, as it is understood in the present study, is discussed in the next section.

1.5 Conceptual Analysis

Body Image

As the nature of body image as it is used in the current study is discussed in great detail in sections 2.2 and 2.3, here it will only be defined briefly. Body image is operationally defined as individuals’ feelings and attitudes towards their bodies as indicated by their level of body satisfaction and their evaluation of their appearance.

Relationship Status

Relationship status is operationally defined as the nature of an individual’s involvement in romantic dating relationships. This will be assessed by asking participants to indicate their current level of involvement in romantic relationships by selecting one of the following five options:

• has never dated anyone
• not dating anyone currently
• casually dating one or more people
• dating one person exclusively
• engaged or planning to marry

Relationship Satisfaction

Relationship satisfaction is operationally defined as how satisfied an individual is with her current romantic relationship.

Adolescence

As the adolescent period is discussed in detail in chapter four, here it will only be defined shortly. Adolescence is the period between childhood and adulthood (Krech, Crutchfield, Livson, & Krech cited in Pienaar, 1988). Early adolescence is viewed by Newman and Newman (1997) as stretching from ages 12 to 18. Pipher (1994) believes that adolescence refers to the social and personal experience that go together with puberty.

Culture

It is defined as “the belief systems and value orientations that influence customs, norms, practices, and social institutions, including psychological processes … and organizations” (p. 1, Fiske, Kitayama, Markus, & Nisbett cited in American Psychological Association, 2002). Four cultural groups were sampled in the current study.

Afrikaansspeaking White group

This group consisted of adolescent females who identified themselves as White, whose first language preferences were Afrikaans, and who lived in an urban area in the Western Cape.

Englishspeaking White group

This group consisted of adolescent females who identified themselves as White, whose first language preferences were English, and who lived in an urban area in the Western Cape.
Afrikaans-speaking Coloured group
This group consisted of adolescent females who identified themselves as Coloured, whose first language preferences were Afrikaans, and who lived in an urban area in the Western Cape.

isiXhosa-speaking girls
This group consisted of adolescent females who identified themselves as Black, whose first language preferences were isiXhosa, and who lived in an urban area in the Western Cape.
CHAPTER 2
BODY IMAGE

2.1 Introduction

Over the past two decades quite a large amount of research has been done on the body image of children and adolescents (Ricciardelli & McCabe, 2001; Smolak, 2004; Smolak & Levine, 2001). The motivation for this new surge of interest in the body image of younger people is the concern about how negative body image affects children and adolescents, not only in the present, but also during adulthood (Smolak, 2004). There is a belief that body dissatisfaction in the childhood and adolescent stages of life could put the person at risk for the development of negative body image, eating disturbances and also depression in adulthood (Smolak, 2004; Thompson & Smolak, 2001). It is therefore important to study body image disturbance in children and adolescents in order to prevent it in this life stage, but also to find a way to prevent these issues from negatively influencing the person later in life.

2.2 Definition

2.2.1 Introduction

Even though an enormous interest has developed in the field of body image in recent years which in turn led to a lot of research being done in this area (Brown, Cash, & Mikulka, 1990; Cash cited in Sondhaus, Kurtz, & Strube, 2001; Furnham et al., 2002; Grogan, 1999; Keeton, Cash, & Brown, 1990; Koff & Benavage, 1998; Smolak, 2004; Thompson, 1990), there is still no consensus in the literature on what exactly body image is (Garner & Garfinkel, 1981; Grogan, 1999; Keeton, et al., 1990; Mostert, 1995). The following are a few of the more popular definitions:

• “Body image is a multifaceted construct that refers to individuals’ perceptions of and attitudes toward their own body, especially its appearance” (Cash, Fleming, Alindogan, Steadman, & Whitehead, 2002, p. 103).
Body image “encompasses one’s body-related self-perceptions and self-attitudes, including thoughts, beliefs, feelings, and behaviours” (Cash, 2004, p. 2).

“Although body image is a multidimensional construct, it is most frequently defined as the degree of satisfaction with one’s current physical self (size, shape, general appearance)” (Cash & Deagle cited in Jones, 2001, p. 645).

Body image is the “internal, subjective representation of physical appearance and bodily experience” (Cash & Pruzinsky, 1990, p. xi).

“The essential feature of the physical appearance definition of body image is an evaluation of one’s size, weight, or any other aspect of the body that determines physical appearance” (Thompson, 1990, p. 1).

“Body image is the mental picture which an individual has of the physical appearance of his or her body” (Meermann & Vandereycken, 1988, p. 158).

2.2.2 Overview of the Literature
Currently body image is viewed and is measured as a multidimensional construct (Banfield & McCabe, 2002; Brown et al., 1990; Cash, 1994; Cash & Deagle, 1997; Cash et al., 2002; Cash, Morrow, Hrabosky, & Perry, 2004; Cash & Pruzinsky, 1990; Keeton et al., 1990; Koff & Benavage, 1998). However, there is still no consensus on what these dimensions are (Koff & Benavage, 1998). In an overview of the literature Banfield and McCabe (2002) name perception, attitude, cognition, affect, behaviour, fear of fatness, body dissatisfaction, body distortion, body evaluation, cognitive-behavioural investment, preference for thinness, and restrictive eating as examples of possible dimensions of body image.

Banfield and McCabe’s (2002) study revealed three underlying body image factors: Cognitions and affect regarding body, body importance and dieting behaviour, and
perceptual body image (Banfield & McCabe, 2002). Thompson (1990) also believes the physical appearance construct to have three components: a perceptual component (estimation of body size), a subjective component (which deals with aspects like satisfaction, concern, cognitive evaluation, and anxiety) and a behavioural component which concentrates on avoiding situations that can lead to the person experiencing physical appearance-related discomfort. These two models are clearly, conceptually very similar with each consisting of a subjective- (feelings and thoughts), a perceptual-, and a behavioural component. According to a few authors cited in Banfield and McCabe (2002) the behavioural aspect of body image is a questionable inclusion in a body image model, as it could be argued that it is an expression or a result of the other dimensions.

A few researchers support a model that identifies perceptual and subjective/attitudinal/affective body image as the two central dimensions of body image (Brown et al., 1990; Cash & Brown, 1987; Cash & Deagle, 1997; Cash et al., 2004; Gardner, 2001; Garner & Garfinkel, 1981; Monteath & McCabe, 1997; Rucker & Cash, 1992; Thompson, 1990).

Perceptual body image is defined as how accurate or distorted an individual’s judgement of his or her size, shape, and weight is relative to his or her actual proportions (Cash, Wood, Phelps, & Boyd, 1991; Monteath & McCabe, 1997). The perceptual body image dimension includes aspects like body size, estimation of body size, distortion of body size, and the discrepancy between self-perceived and ideal body size (the so-called “feel minus ideal” discrepancy) (Gardner, 2001; Garner & Garfinkel, 1981; Rosen, Srebnik, Saltzberg, & Wendt, 1991; Rucker & Cash, 1992; Thompson & Altabe, 1991). According to Cash et al. (1991) the study of perceptual body image involves assessing the accuracy of body size estimations, either at the level of individual body parts or the body as a whole.

Subjective/attitudinal body image includes self-perceptions, cognitions, behaviours and feelings relating to one’s physical attributes such as appearance and size (Cash & Henry, 1995; Koff & Benavage, 1998; Rucker & Cash, 1992). Attitudinal body image is
conceptually the same as affective body image (Banfield & McCabe, 2002) and is often referred to as body dissatisfaction (Cash & Deagle, 1997).

According to Keeton et al. (1990) the perceptual component of body image has been studied the most frequently. Yet they state that most of the investigation of the body-image construct focusing on the perceptual dimension has produced inconsistent results, while studies of body attitude produced more consistent findings (Cash & Brown, 1987; Keeton et al., 1990). Monteath and McCabe (1997) state that research in the field of perceptual size distortion is fraught with contradictions and inconsistencies, while Cash and Brown (1987) ascribe the inconsistent findings in the eating disorders literature to a large extent to the studies using size-estimation (perceptual) measures of body image. According to Cash and Deagle (1997) attitudinal body image measures discriminated better between women with clinical eating disorders and women without than did perceptual measures of body image. They also found attitudinal body image to discriminate between bulimic and anorexic subjects, while perceptual distortion did not.

Another telling factor is the fact that research has shown little connection between perceptual size overestimation and clinically significant variables like psychosocial adjustment (Thompson, Penner, & Altabe, 1990) and eating disturbance (Coovert, Thompson, & Kinder, 1988). Furthermore, most studies have found little relationship between perceptual and subjective measures of disturbance (Cash & Brown, 1987; Thompson et al., 1990). Monteath and McCabe found that attitudes had a more pervasive influence on a woman’s body image than perception (1997).

Therefore the focus of the current study will be on the subjective/affective/attitudinal aspect of body image from here on referred to as subjective body image. This aspect of body image will be discussed in more detail in the next section (2.3 Subjective Body Image).
2.3 Subjective Body Image

2.3.1 Introduction
Some theorists merely define the subjective part of body image as dissatisfaction with one’s body size, form, or some other aspect of the body’s appearance or functional capacity (Gardner, 2001; Monteath & McCabe, 1997). Yet, others believe that researchers should not view body image, even subjective body image, as a unitary concept (Cash, 1994; Cash & Pruzinsky, 1990). Cash (cited in Smolak, 2004) believes that negative body image cannot simply be defined as dissatisfaction and calls it an “insufficient criterion” as he believes that the emotional and behavioural effects of this dissatisfaction must also be taken into account.

Cash and his colleagues (Brown et al., 1990; Cash, 1994; Cash & Deagle, 1997; Cash & Henry, 1995) propose that attitudinal or subjective body image consists of three components: evaluation, affect, and cognitive-behavioural investment.

- The evaluation component of body image has to do with how satisfied or dissatisfied a person is with his or her physical attributes and also includes evaluative thoughts and beliefs regarding one’s appearance (Cash, 1994; Muth & Cash, 1997). Cash and Deagle (1997) state that body dissatisfaction is the aspect that most researchers focus on, while according to Smolak (2004) this is the aspect of body image that is also most frequently measured in children.
- Body image affect is related to the evaluative component, yet is not identical to it. This aspect of body-image has to do with discrete emotional experiences that a person’s self-evaluations may bring forth in specific situational environments (Cash, 1994; Szymanski & Cash, 1995).
- The third component, cognitive-behavioural investment, is the amount of attention paid to one’s appearance, its importance with reference to one’s sense of self, and behaviours involving the management or improvement of appearance (Cash, 1994; Muth & Cash, 1997).
The present study will focus on the evaluative component of body image. Quite a few theorists support a distinction between overall or generalized satisfaction with physical appearance and more differentiated satisfaction with specific body parts (Ben-Tovim & Walker, 1991; Cash, 1989; Cash, Cash, & Butters, 1983; Hoyt & Kogan, 2001; Rosenblum & Lewis, 1999). Therefore evaluative body image will be measured by using measures of dissatisfaction with specific body parts and general appearance evaluation to include both these types of dissatisfaction. The next two sections will look at the prevalence of both types of negative body image evaluation.

### 2.3.2 Appearance Evaluation

Hoyt and Kogan (2001) found overall body appearance and physical attractiveness to be two of the main aspects of their bodies with which college women were dissatisfied. Sixteen percent of the college women in that study were dissatisfied with their overall body appearance while 40% of the female college students in a study by Muth and Cash (1997) reported a negative overall body evaluation. Thirty-nine percent of female university students in a study by Monteath and McCabe (1997) expressed moderate to strong negative feelings about their bodies as a whole. Ackard, Kearney-Cooke, and Peterson (2000) found that most of the 3,627 women who responded to their survey reported dissatisfaction with their overall appearance while 56% of the female participants in the 1997 *Psychology Today* survey (Garner, 1997) and almost half of the female participants aged 18 to 70 in a survey by Cash and Henry (1995) reported dissatisfaction with their overall appearance. Negative appearance evaluation thus seems to be a significant problem for women of all ages.

Almost 50% of women in Cash and Henry’s study were also quite worried about being or becoming overweight (1995). Hoyt and Kogan (2001) found that weight had an influence on satisfaction with general body appearance. Satisfaction was highest for the normal weight participants, followed by the underweight, then the overweight and lastly the obese participants. Stake and Lauer (1987) found overweight women to rate themselves as less attractive than did normal weight women. In fact, Showers and Larson (cited in
Lokken, Ferraro, Kirchner, & Bowling, 2003) state that degree of body dissatisfaction is frequently measured as the discrepancy between self-perceived real and ideal body size.

2.3.3 Body Image Dissatisfaction

According to Rodin, Silberstein, and Striegel-Moore (cited in Kostanski et al., 2004) the prevalence of body image dissatisfaction among adolescent and adult women has been found to be so high that it is now viewed as a normative part of life in Western society. Grogan (1999) also claims that most women are dissatisfied with their bodies while a study by Markey, Markey, and Birch (2004) lends further support to this statement. Cash and Henry (1995) found that more than 33% of the women, aged 18 to 70, used in their study, indicated body-image dissatisfaction averaged across eight specific physical areas or aspects, while 44% of Monteath and McCabe’s (1997) sample, aged 18 to 55, indicated moderate to strong negative feelings about different parts of their bodies.

Across a variety of studies a few specific body parts or aspects come to the fore as issues with which the majority of the women express dissatisfaction. The middle or lower torso (buttocks, thighs, hips, waist, and stomach), weight, and muscle tone are mentioned frequently in this regard (Cash & Henry, 1995; Cash et al., 1986; Garner, 1997; Grogan, 1999; Hoyt & Kogan, 2001; Rosenblum & Lewis, 1999). The *Psychology Today* survey found 71% of women to be dissatisfied with their abdomens, 60% with their hips, and 58% with their muscle tone so this is clearly a problem that affects a large number of women (Garner, 1997). An interesting point is that these are mostly the middle and lower parts of the body, which are also the areas which are commonly affected by weight gain in women (Cash et al., 1986). They are also the precise areas (abdomen, waist, buttocks, & thighs) most frequently referred to by women with eating disorders as their “fat” areas (Hoyt & Kogan, 2001).

Berscheid, Walster, and Bohmstedt (cited in Banfield & McCabe, 2002) found that dissatisfaction with weight-related aspects of one’s body was a predictor of dissatisfaction with the body as a whole. Society stigmatizes those who are overweight (Banfield & McCabe, 2002). This may create an awareness of fatness in people who do
not conform to the societal ideal for females, and the more a woman departs from this ideal, in the direction of becoming heavier, the more dissatisfied she becomes (Banfield & McCabe, 2002). According to this societal stereotype the ideal female is very thin, with slim hips, buttocks, and thighs (Furnham et al., 2002). Coincidentally, these are the same aspects of the body that women indicated most dissatisfaction with in previous studies (e.g., Cash & Henry, 1995; Cash et al., 1986; Garner, 1997; Grogan, 1999; Hoyt & Kogan, 2001). Stake and Lauer (1987) found that overweight women rated their waist, abdomen, hips and buttocks more negatively than did normal-weight women. There thus, seems to be a relationship between body image dissatisfaction (both with overall appearance and discrete body parts) and weight.

2.3.4 Negative Body Image and Weight

According to Abell and Richards (1996) a woman’s feelings about her weight may be an especially important part of her body image. Dissatisfaction with body image in women is normally shown by their desire to lose weight (Furnham et al., 2002). Research indicates a significant relationship between dissatisfaction with weight and dissatisfaction with the entire body (Banfield & McCabe, 2002; Garner, 1997; Muth & Cash, 1997; Thompson & Smolak, 2001).

Research findings show a significant negative relationship between body mass index (BMI) and body dissatisfaction for female adults and adolescents, with overweight women constantly reporting the highest levels of body dissatisfaction (Annis, Cash, & Hrabosky, 2004; Byely, Archibald, Graber, & Brooks-Gunn, 2000; Demarest & Langer, 1996; Jones, 2001; Kostanski et al., 2004; Monteath & McCabe, 1997; Muth & Cash, 1997; Schwartz & Brownell, 2004; Smolak, 2004). A South African study by Senekal et al. (2001) with university students also found a significant relationship between body dissatisfaction and body mass index. Brodie and Slade (1988) found body-dissatisfaction to be positively associated with all three measures of body fat they used (underwater weighing, electrical impedance, and surface anthropometry).
A substantial literature points to more negative body image experiences among overweight or obese persons, especially women (Cash & Roy cited in Cash et al., 2002; Milkewicz & Cash cited in Cash et al., 2002). There is strong evidence for a link between obesity (BMI larger than 30) and poor body image (Schwartz & Brownell, 2004). Some evidence supports the idea that body dissatisfaction (dissatisfaction with body weight, shape and appearance) would increase as degree of obesity rises (Hill & Williams, 1998). According to a study by Banfield and McCabe (2002) individuals whose weight was above average had more negative thoughts and feelings about their bodies than those whose weight was below average. Actual body mass and ideal body mass are significant predictors of adolescents’ dissatisfaction with body/figure/shape (Furnham et al., 2002; Kostanski, Fisher, & Gullone, 2003). Indeed, women’s general body dissatisfaction is usually measured according to perceptions of being too heavy or having certain body parts that are “too large” (Wiederman, 2000). Monteath and McCabe (1997) found that BMI affects a woman’s satisfaction with her body in its entirety but not specific body parts. They found that women in the normal weight range had an equal amount of dissatisfaction with specific body parts as heavier women, which suggests that it isn’t just body weight or size that women take into account when they form their body attitudes.

Yet, it seems women of all ages and from a variety of countries are frequently dissatisfied with their weight. Field, Cheung, et al. (1999) found that the majority of the preadolescent and adolescent girls in their study were unhappy with their weight and shape. Studies on adolescent females from a variety of countries (America, Australia, England, and Spain) have found that between 50% and 70% indicated dissatisfaction with their weight and a desire to lose weight (Furnham et al., 2002; Garner, 1997; Huon, 1994; Raich et al., 1992; Sobal et al., 1995). More than half of female college students in Sheets and Ajmere’s (2005) study were trying to lose weight at the time of the study. Monteath and McCabe found that 94% of their sample, consisting of females aged 18 to 55, expressed a strong desire to be smaller. According to the 1997 Psychology Today survey 89% of all women want to lose weight (Garner, 1997). Grogan (1999) believes that most women would like to be thinner than their current shape.
According to Jackson women’s dissatisfaction with their bodies over the lifespan is mostly caused by the belief that they are overweight even when their weight is normal or below average (cited in Hoyt & Kogan, 2001). This statement was supported by findings from quite a few studies (Garner, 1997; McCaulay, Mintz, & Glenn, 1988; Mintz & Bentz, 1986). Studies on body perception among underweight, average-weight, overweight and obese women, found that normal weight participants were most satisfied with their weight, followed by the underweight, overweight, and obese participants (Hoyt & Kogan, 2001; Muth & Cash, 1997). Richards, Boxer, et al. (1990) and Kostanski et al. (2004) found that adolescent females who self-reported themselves as underweight were most satisfied with their weight, followed by those who categorized themselves as average weight, with a large drop in satisfaction for those who rated themselves as overweight. Cash and Green (1986) found that overweight women were significantly more dissatisfied with the appearance of their bodies than women from other weight categories were. This finding could suggest that women who fit the societal ideal for female appearance are more satisfied with their appearance (Hoyt & Kogan, 2001).

### 2.4 Body Image and Sex Differences

Smolak (2004) believes body image to be a deeply gendered phenomenon and that its nature, risk factors, outcomes, and possibly its developmental course are different for each sex. Rozin and Fallon (1988) found that sex was even more influential in attitudes toward weight and eating than generational differences, while according to Ferron (1997) cross-cultural studies indicate that body image depends more on sex differences than on cultural differences among adolescents who have different ethnic origins but who reside in the same country. Therefore, gender is a prominent factor in body image development (Cash & Pruzinsky, 1990; Fisher, 1986; Jackson, 1992; Thompson, 1996).

Body image dissatisfaction is of concern for males as well as females (Cash et al., 1986; Kostanski et al., 2003; Muth & Cash, 1997). Garner (1997) found body dissatisfaction to be increasing at a faster rate than ever before among both women and men. Yet, women in general are significantly more dissatisfied with their bodies than men are, and therefore
simply being female is a risk factor for body image distress in our culture (Cash & Roy cited in Schwartz & Brownell, 2004). The results of the great majority of research summarized in Thompson’s book (1990) strongly indicate that women as a group is most at risk for developing body image disturbance. Negative body image is a problem that affects women to a greater extent than men (Cash, 1990; Muth & Cash, 1997; Pliner et al., 1990) and in many respects, women have more negative body-image attitudes than do men (Cash & Brown, 1989; Faith & Schare, 1993; Muth & Cash, 1997). Tiggemann and Wilson-Barrett (1998) believe the prevailing view of researchers is that body dissatisfaction is an aspect of normative discontent for females, regardless of age.

Research with children has shown that this discrepancy between the sexes regarding body image starts at an early age (Duncan, Al-Nakeeb, & Nevill, 2004; Fisher, 1986; Parkinson et al., 1998; Tobin-Richards, Boxer, & Petersen, 1983) and continues in adolescence and adulthood (Altabe & Thompson, 1993; Cash et al., 2004; Faith & Schare, 1993; Fallon & Rozin, 1985; Frost & McKelvie, 2004; Furnham et al., 2002; Grogan, 1999; Hargreaves & Tiggemann, 2004; Hesse-Beber, Clayton-Matthews, & Downey cited in Thompson, 1990; Hoyt & Kogan, 2001; Lokken et al., 2003; McCaulay et al., 1988; Mintz & Bentz, 1986; Muth & Cash, 1997; Siever, 1994; Sondhaus et al., 2001; Thompson, 1990). Yet, although these sex differences have been found to occur across the life span, the adolescent years may be notably associated with a more negative body image (Cash et al., 1986; Pliner et al., 1990).

Studies have shown that body image dissatisfaction is a concern for both male and female adolescents (Kostanski et al., 2003, 2004), yet it seems to be more of a concern for female adolescents (Thompson, 1990). Research from the past few decades has generally shown that adolescent girls have more dissatisfaction with their bodies than boys (Furnham et al., 2002; Kostanski et al., 2004; Rauste-von Wright, 1989; Thompson, 1990). Potash (2002) in her study of 14 and 15-year-old South African adolescents also found the girls to express higher body image dissatisfaction than males of the same age.
A person’s real weight and ideal weight were found to be significant predictors of
dissatisfaction with his or her body/figure/shape (Furnham et al., 2002). A number of
studies have shown that although feelings about weight are central to overall body
satisfaction for men and women, weight has particular psychological importance for
women (Berscheid, Walster, & Bohnstedt cited in Cash & Green, 1986; Cash cited in
Cash & Green, 1986; Fallon & Rozin, 1985). Wooley and Wooley (cited in Thompson,
1990) found that 63% of the women sampled stated that weight frequently influenced
how they felt about themselves; 33% reported that it sometimes influenced their feelings,
and just 4% stated that it never had any effect on how they felt about themselves.
Research has suggested that adolescents’ perceptions of and satisfaction with their weight
are more significant variables for girls’ body image than for boys’ (Tobin-Richards et al.,
1983). Some studies found that females of all ages are more dissatisfied with their weight
or size than are males (Cash et al., 1986; Ferron, 1997; Furnham, et al., 2002; Hoyt &
Kogan, 2001; Richards, Boxer, et al., 1990; Rozin & Fallon, 1988; Smolak & Levine
2001; Sobal et al., 1995; Wood, Becker, & Thompson, 1996).

Others believe that the sexes are equally dissatisfied but that the direction of the
dissatisfaction is different for each sex (Cohn et al., 1987; Drewnowski & Yee, 1987;
Rosenblum & Lewis, 1999; Silberstein, Striegel-Moore, Timko, & Rodin, 1988). Many
studies have found that females’ (of all ages) body image dissatisfaction is predominantly
related to perceptions of being too fat and a desire to lose weight (Drewnowski & Yee,
1987; Furnham et al., 2002; Kostanski et al., 2003; Muth & Cash, 1997; Parkinson et al.,
1998; Serdula et al., 1993; Sobal et al., 1995; Thompson & Smolak, 2001; Wardle &
Marsland, 1990). Very few women desire a weight increase (Furnham et al., 2002;
Serdula et al., 1993; Silberstein et al., 1988; Wardle & Marsland, 1990). Yet, as many
males view themselves as too fat and want to lose weight as males who perceive
themselves as too thin and want to be larger (Drewnowski & Yee, 1987; Furnham, et al.,
2002; Furnham & Calnan, 1998; Kostanski et al., 2003; Muth & Cash, 1997; Serdula et
al., 1993; Silberstein et al., 1988; Smolak & Levine, 2001; Sobal et al., 1995; Wardle &
Marsland, 1990). McCabe and Ricciardelli (2004) believe that if the boys who are
dissatisfied with their bodies because they are too fat are combined with those who are
unhappy because their muscles are too small, then the frequency of body dissatisfaction is similar among adolescent boys and girls.

This difference between the sexes in desired weight loss or weight gain could be due to the different ideals for the sexes. For females the ideal is to be very thin, with slim hips, bottom, and thighs (Furnham et al., 2002), while the male ideal is a mesomorphic V-shaped figure with the emphasis placed on large biceps, chest, and shoulders (Abell & Richards, 1996; Furnham et al., 2002; Grogan, 1999). Men’s desire for weight gain would fit with the desire to achieve the male ideal V-shaped figure and to gain additional muscle (Furnham et al., 2002). Especially in adolescence, girls want to be thinner and boys want to be bigger (Cohn et al., 1987). Many studies have found males, especially adolescent boys, to be more likely to want to be bigger/heavier/more muscled and are trying to gain weight (Garner, 1997; Parkinson et al., 1998; Thompson & Smolak, 2001) while girls were more likely to want a leaner body shape or were trying to lose weight (Garner, 1997; Hesse-Beber et al. cited in Thompson, 1990; Thompson & Smolak, 2001) which is in line with the cultural ideal.

There is evidence that suggests that girls are more likely to act on their body dissatisfaction (Field, Camargo, et al., 1999; Kelly, Ricciardelli, & Clarke, 1999; Serdula et al., 1993; Smolak & Levine cited in Smolak, 2004; Smolak, Levine, & Thompson, 2001) by dieting or using extreme measures (e.g. self-induced vomiting, laxative abuse, diuretics, diet pills) to control their weight (Cash et al., 1986; Field, Camargo, et al., 1999; Garner, 1997; Polivy & Herman cited in Pliner et al., 1990; Serdula et al., 1993; Smolak & Levine, 2001; Wardle & Marsland, 1990).

According to Nezlek (1999) research on body image has shown women to be more concerned about physical appearance than men, and Pliner et al. (1990) also found the importance of appearance to be greater for females of all ages. Women reported stronger investment in their physical appearance than men in a number of studies (Cash & Brown, 1989; Jackson, 1992; Muth & Cash, 1997; Siever, 1994; Tiggemann & Rothblum, 1988). There also seems to be significant sex difference with relation to appearance evaluation.
Muth and Cash (1997) and Cash et al. (1986) found that compared to men, women reported more negative body-image evaluation, yet this sex difference in evaluation was greatest for adolescent respondents. This means that, while women feel less positive about their bodies than men, they view their appearance as more important than do men. Men of all ages are more satisfied with their appearance and physical attractiveness than women are (Calden, Lundy, & Schlafer, 1959; Garner, 1997; Hoyt & Kogan, 2001).

2.5 Body Image and Age

Large numbers of people of all ages are dissatisfied with their bodies and are either trying to lose or gain weight (Thompson & Smolak, 2001; Webster & Tiggemann, 2003). Dissatisfaction with body shape and weight seems to be a problem among people of all ages including younger children (Kostanski et al., 2004). Children as young as 5 or 6 express body dissatisfaction and weight concerns (Davison, Markey, & Birch, 2000; Flannery-Schroeder & Chrisler cited in Smolak & Levine, 2001; Smolak & Levine cited in Smolak & Levine, 2001), while Grogan and Wainwright (1996) found 8-year-olds to show a preference for a socially acceptably slim body. It seems that elementary school children already know about the societal preference for a thin body. A large number of studies have consistently shown that across a variety of different countries 30 to 50% of female children and adolescents are body- and weight-dissatisfied, often worried about being fat or trying to lose weight (Grogan & Wainwright, 1996; Gustafson-Larson & Terry, 1992; Schreiber et al., 1996; Smolak, Levine & Schermer cited in Smolak, 2004; Thompson & Smolak, 2001; Wood et al., 1996).

Many studies using samples consisting of people from all age groups, from young children to the elderly, have found no change with age in terms of body satisfaction in women (Altabe & Thompson, 1993; Garner, 1997; Grogan, 1999; Pliner et al., 1990; Webster & Tiggemann, 2003). Grogan (1999) states that the areas of the body that caused concern did not differ in relation to the age of the women and women consistently reported dissatisfaction with stomach, hips, and thighs.
Yet, Cash et al.’s 1986 *Psychology Today* survey found that when comparing people across all age categories women in their teens and 20’s were the most concerned about their appearance. People did not report a poorer body image as they get older; but young women were the most dissatisfied of all with their bodies. They found that adolescents place more importance on and feel more negatively about their bodies than older Americans (Cash et al., 1986). Appearance self-esteem increased with age throughout the lifespan, but was at an all time low in middle adolescence (Pliner et al., 1990). According to Levine and Smolak body dissatisfaction, although common among women of all ages, is especially prevalent during adolescence when body image is the most important part of adolescent girls’ self-esteem (cited in Hargreaves & Tiggemann, 2004).

Although body image dissatisfaction and weight dissatisfaction were found to be present in childhood and adolescence, during the former developmental period, it appears to be less pronounced (Field, Camargo, et al., 1999; Frost & McKelvie, 2004; Kostanski et al., 2003, 2004). Adolescence is a time when body image concern in young women is at its greatest because of physical changes which may cause them to move away from a thin ideal (Carruth & Goldberg cited in Grogan, 1999; Simmons, Blyth, & McKinney, 1983). According to Grogan (1999) research has consistently shown that the majority of young women between 13 and 16 years of age are dissatisfied with their body shape and size. A number of studies also show marked weight dissatisfaction in this population. Studies by both Davies and Furnham (1986b), and Eisele, Hertsgaard, and Light (1986) found that while the overwhelming minority of adolescent females are overweight according to standard weight charts, the majority want to lose weight and many erroneously consider themselves overweight. Serdula et al. (1993) found that between 30.4% and 47.4% of grade 9 to 12 girls in their sample were trying to lose weight.

For girls body dissatisfaction seems to increase with age (Smolak & Levine, 2001). Gardner, Sorter, and Friedman (1997) found body dissatisfaction to be greater among 12-year-old girls than among 9-year-old girls, whose dissatisfaction, in turn, was greater than that of 6-year-olds. There seems to be a continued decrease in body satisfaction for girls after puberty (Abramowitz, Petersen, & Schulenberg, 1984; Gardner, Friedman, Stark, &
Jackson, 1999; Kostanski et al., 2004; Richards, Casper, & Larson, 1990; Wichstrom, 1999) which suggests that growth may be perceived negatively for some girls.

Rosenblum and Lewis (1999) name several studies that have demonstrated that body image undergoes change during adolescence. Body image also becomes more negative as adolescence moves along with increasing body dissatisfaction (Byely et al., 2000; Hargreaves & Tiggemann, 2002; Rosenblum & Lewis, 1999) as the girls become older and especially dissatisfaction with specific body parts (e.g. hips, thighs, bottom) that change and become larger as a result of pubertal development (Davies & Furnham, 1986a; Rosenblum & Lewis, 1999; Salmons, Lewis, Rogers, Gatherer, & Booth, 1988, Wardle & Marshland, 1990). Yet, Byely et al. (2000) found that girls’ problematic dieting behaviours increased noticeably over time. Frost and McKelvie (2004) found that university students had more body satisfaction and better body image than adolescents. So high-school aged adolescents have more negative body image than both children and late adolescents. In Senekal et al.’s (2001) study on South African female University students a significant relationship was found between participants’ ages and their body mass indexes. Wenhold (2000) in a study of South African female university students found more than 67% of the sample to express body dissatisfaction.

2.6 Race and Culture

Adolescents of both sexes and all races have body image problems (Furnham et al., 2002; Kostanski et al., 2003). Although a seemingly global problem, Edwards stated that differences in race have been found to affect body attitudes, especially with respect to skin colour differences and therefore it is still important to relate findings to race (Sondhaus et al., 2001; Thompson & Smolak, 2001).

2.6.1 International Findings

Some research indicates that Black individuals have a more positive body image and greater body esteem than other racial groups (Duncan et al., 2004), while others found
that Black American women were more similar than different from White women on measures of body image (Caldwell, Brownell, & Wilfley, 1997).

Most studies of body image among girls have examined White samples and there is sparse data available concerning Black American girls (Smolak & Levine, 2001). The research that is available generally shows higher levels of body dissatisfaction in White American females than in Black American females. This finding is true for female children (Schreiber et al., 1996; Striegel-Moore et al., 2000), adolescents (Franko & Striegel-Moore, 2002; Smolak & Levine, 2001; Striegel-Moore et al., 2000), university students (Harris et al., 1991; Henriques & Calhoun, 1999; Rucker & Cash, 1992) and adults (Abrams et al., 1993; Cash & Henry, 1995; Grogan, 1999; Kumanyika, 1987). Black women also indicated less body shape dissatisfaction than both White and Coloured women in a South African sample (Sheward, 1994). And this seems to be the case despite the fact that Black females have on average significantly higher body mass indexes across all ages (Franko & Striegel-Moore, 2002; Harris et al., 1991; Kumanyika, 1987; Rand & Kaldua, 1990; Rosner et al., 1998; Smolak & Levine, 2001; Striegel-Moore et al., 2000). Sheward (1994) with a sample of South African male and female university students also found Black students to have significantly higher body mass indexes than both White and Coloured students who did not significantly differ from each other, while Haynes (1995), Zahoul (1996) and Geach (1995) using samples of late adolescent South African women all found Black women to have significantly higher BMIs than White women. Venter (2003) found more than 50% of the South African Black women in her sample to be overweight. According to Grogan (1999) body dissatisfaction occurs more frequently in American and British White women, and less often amongst other racial and ethnic groups, including British Asians, Hispanics and African Americans.

A lot of studies show that, as compared to other ethnic groups, White children are most likely to be dissatisfied with their weight (Dounchis et al., 2001). The situation seems to be the same with adolescents and college students. According to Neff, Sargent, McKeown, Jackson, and Valois (1997) White adolescent girls are significantly more
likely to consider themselves overweight, want to lose weight, and are more likely to engage in unhealthy weight management practices, compared with Black girls of the same age. Serdula et al. (1993) found 47.4% of White, and 30.4% of Black girls in grades 9 to 12 were trying to lose weight. Similar results have been found in British studies (Grogan, 1999). A British study by Wardle and Marshland (1990) found that fewer Afro-Caribbean and Asian British girls than White girls wanted to lose weight.

According to Franko and Striegel-Moore (2002) a review of the literature finds that Black adolescent girls diet a lot less often or engage in disordered eating than do White girls in the US. Studies on college women found that in comparison with Black college women, White college women reported more fear of fatness, a stronger drive to be thin, greater weight-fluctuation awareness, and higher weigh-in anxiety, more dieting concerns (Rucker & Cash, 1992), and overweight preoccupation (Cash & Henry, 1995; Cash et al. 2004; Rucker & Cash, 1992). Yet, in America, a larger number of Black adults (65.5%) are overweight than White adults (53.0%) according to the Centers for Disease Control and Prevention’s 1997-1998 study (Schoenborn, Adams, & Barnes, 2002). More Black (30%) South African women were found to be obese than White (26.3%) or Coloured (25.3%) women (CME, 2002). Quite a few studies indicate that Black American women had more positive global appearance evaluation than did White women (Cash & Henry, 1995; Cash et al., 2004; Rucker & Cash, 1992). Yet, there does not seem to be a difference in investment in appearance between these groups (Rucker & Cash, 1992).

Previous studies have shown a lower prevalence of eating disorders among the Black than the White population (Crago, Sisslak, & Estes, 1996; Rucker & Cash, 1992). According to Parker et al. (1995) White females are more vulnerable to developing eating disorders than women of other ethnic groups. Crago et al. (1996), after reviewing the available literature, came to the conclusion that this might be the case because of the Black women’s greater weight tolerance, less body dissatisfaction and less reliance on restrictive dieting and self-induced vomiting for weight control.
There seems to be a few possible explanations for these differences in body image and attitudes. This finding could be attributable to African American culture’s wider range of accepted body sizes for women (Fallon, Katzman, & Wooley cited in Cash & Henry, 1995; Rucker & Cash, 1992). According to Molloy and Herzberger (1998) Black and White American women have very different views of beauty. Parker et al. (1995) indicated that Black American girls’ perceptions of beauty were more “flexible” and less “rigid” than those of the White girls, which allows more room for variability in what is viewed as attractive. Some researchers believe that the criteria for attractiveness is different in other non-western countries and in non-Caucasian subcultures (Franko & Striegel-Moore, 2002; Rosenblum & Lewis, 1999). Research with Australian children has supported this view, reporting that Black children selected heavier body sizes as their current body size compared to White children (Thompson, Corwin, & Sargent, 1997). Rosenblum and Lewis (1999) name quite a few studies that show African, African American, and Caribbean men, women, and girls to value a larger body size. Grogan (1999) also mentions that variation in opinion about body size has been found amongst different ethnic groups in Western countries. British and American studies have suggested that Afro-Caribbean, Asian and Hispanic women are likely to desire higher body weights, larger body shapes and report fewer concerns about weight than White women (Abrams et al., 1993; Harris, 1994). Studies of female children and adolescents have produced similar results (Grogan, 1999).

Another possible reason for the discrepancy in body satisfaction between Black and White American women is the fact that Black women of all ages seem to support a less severely thin ideal body type than do White women. This is supported by a number of studies (Franko & Striegel-Moore, 2002; Lopez, Blix, & Blix cited in Dounchis et al., 2001; Molloy & Herzberger, 1998; Rucker & Cash, 1992; Smolak & Levine, 2001; Thomas & James, 1988; Thompson et al., 1997). Body type preference affects the degree of satisfaction with one’s body: The smaller the discrepancy between ideal and actual body image, the more body satisfaction (Dounchis et al., 2001). White women demonstrate a greater discrepancy between their actual and ideal body sizes while the perceived self and ideal were not significantly discrepant among Black women.
(Henriques & Calhoun, 1999; Rucker & Cash, 1992). This could to a certain degree offer Black girls some protection against developing eating problems (Smolak & Levine, 2001) and also gives the woman more protection of self-esteem in the face of greater levels of overweight, as 40% of the women who perceived themselves to be overweight also viewed their bodies as attractive (Kumanyika, Wilson, & Guilford-Davenport, 1993).

These more flexible cultural standards of attractiveness, and wider range of acceptable weights and body shapes is presumably the reason why overweight Black women generally have greater body satisfaction than overweight white women (Celio et al. cited in Schwartz & Brownell, 2004). According to Grogan (1999) there is evidence for differences in the ways that obesity and overweight are perceived in different ethnic groups. Harris et al. (1991) found Black male and female American participants to be more positive about overweight in women than were White Americans. Grogan (1999) believes that in ethnic groups where overweight is not stigmatised, healthier, more satisfied attitudes towards larger body shape and size may develop which was supported by Harris et al.’s (1991) finding that obese Black American women had a more positive body image than obese White American women, and were less likely to desire weight loss.

Black and White women partially base their judgments of their bodies on what men of their culture or race like (Parker et al., 1995). The discrepancy in body image may be caused by the fact that Black American women believe that Black men prefer bigger women and therefore have less need to lose weight and so feel more attractive, while White women believe White men favour very thin women and so feel pressured to conform to that ideal (Molloy & Herzberger, 1998). Black women may therefore decide not to conform to the dominant culture’s definition of beauty in part because of perceived and actual preferences of Black American men (Greenberg & Laporte, 1996; Powell & Kahn, 1995). Molloy and Herzberger (1998) cite studies showing that research on men’s preferences tend to support these perceptions and while the perceptions in certain cases may be inaccurate, they could still cause White women to feel less attractive.
Acculturation also seems to influence people from a non-Western culture’s level of body satisfaction. Body image development clearly occurs in a cultural context (Rucker & Cash, 1992) and cultures provide gender-specific standards for physical attractiveness, body weight, and body shape (Fallon, 1990). Obviously, not all women in a racial/ethnic group are the same (Molloy & Herzberger, 1998). Racial identity and identification with the dominant middle class culture may explain the variation within groups of Black and White American women (Molloy & Herzberger, 1998). If Black women identify more with the dominant White culture than with their racial/ethnic culture, they may be more vulnerable to body image distortions and eating disorders (Bowen, Tomoyasu, & Cauce cited in Molloy & Herzberger, 1998). According to Altabe and O’Garo, and Kawamura there is evidence that as women in Hispanic and Asian American cultures become progressively more acculturated into American culture, their body image distress and desire for thinness begin to emulate those among Whites (cited in Schwartz & Brownell, 2004). Douchis et al. (2001) also believes that level of exposure to American culture seems to affect preference for a thinner body type. Furnham and Alibhai (1983) found that Kenyans who had immigrated to Britain recently perceived thin female body figures less positively than did Kenyan Blacks who had already assumed English living standards. The former viewed heavier body figures more positively than did the English-cultured Blacks.

Franko and Striegel-Moore (2002) believe that Black girls may be protected from body dissatisfaction by strong familial and peer influences and the role of the culture in acceptance of larger body size. Black adolescent females may be influenced more strongly by immediate family members, significant others and adult role models (Parnell et al., 1996; Thomas, 1989), unlike White adolescent females who were influenced to a greater degree by peers and the media (Parnell et al., 1996). According to Franko and Striegel-Moore (2002) the influence of the media may be different for Black and White girls and Black girls may be less influenced by it to the extent that they do not identify with “White” media images.
Many recent studies have indicated that there has been an increase in body image disturbance and disordered eating in ethnically diverse groups (Koff & Benavage, 1998). Because of the discrepant nature of the present findings, it cannot be supposed that ethnicity acts as a protective factor against body dissatisfaction among ethnically diverse female youth (Dounchis et al., 2001).

2.6.2 Situation in South Africa
Due to the scarcity of research on body image in this country it cannot be said with certainty whether women from different cultural groups in South Africa differ from each other on level of body dissatisfaction and appearance evaluation. Senekal et al. (2001) found that Black university students had a greater degree of satisfaction with body weight and body shape than White university students from a previous study which had been tested with the same instrument. Geach (1995) found Black university students to be less dissatisfied with their bodies than White students. Haynes (1995) in a study of Black and White females between age 18 and 22 found White females to be most dissatisfied, Black university students less dissatisfied and Black rural females by far the least dissatisfied with their body shape.

One possible reason for South African Black women’s more positive body image, even though they are heavier, is a more positive view of a heavier body size. In Venter’s study (2003) almost a third of the participants believed the overweight body to be the healthiest while 40% believed that their community saw obese people as attractive and obesity was considered to be a sign of wealth. Most participants also believed that their community viewed thinner people as poor and unhealthy. Cultural factors thus clearly played a role in views of body size and also in attitudes towards weight control (Venter, 2003).

Yet, in a society where people are increasingly westernizing it is important to find out what the current body image situation is among our youth. Haynes (1995) found increased Westernization to be positively associated with more body image dissatisfaction. Edwards’ study (2000) of a sample of mainly isiXhosa female students found that only 43% of the participants strongly identified with traditional Black culture,
which may indicate that Black people in South Africa are increasingly identifying with Western culture. A weak association between body esteem and strength of identification with Black culture have also been found for South African women (Edwards, 2000).

According to Szabo (1998) the number of Black patients with bulimia has steadily increased in South Africa, while 11.1% of Senekal et al.’s (2001) sample of Black students were classified as having significant concerns about their body shape or as possible cases of bulimia nervosa. Almost 60% of Edwards’ (2000) sample of Black female university students indicated satisfaction with their current appearance. This is a good indication that body dissatisfaction in Black cultures is, at least to a degree, already an important problem.

2.7 Theories of Body Image

2.7.1 Introduction

Although there is a number of theories of body image disturbance (Heinberg, 1996), one theory seems to provide a better explanation for our society’s high level of body image disturbance. The sociocultural approach, especially in terms of subjective dissatisfaction, is by far the most supported theoretical explanation for this phenomenon (Cusumano & Thompson, 1997; Thompson, 1990). Yet, other theories do also make a valid, though smaller, contribution to our understanding of body image disturbance. Therefore an overview of some of the other theories is given, followed by a more in depth explanation of the sociocultural approach.

2.7.2 Overview

*Cortical Components of Body Image*

The first literature on the topic of body image came from the field of neurology (McCrea, Summerfield, & Rosen, 1982). Yet their notions of body image were very different from the physical appearance-related construct that is the focus of this study. Their initial writings were on the topic of the phantom limb phenomena and anosognosia (the inability to distinguish the left side of the body from the right) which is related to brain damage
(McCrea et al., 1982; Thompson, 1990). Little research has been done on cortical components of the physical appearance aspects of body image (Thompson, 1990).

Developmental Factors
A large body of research has been done on the significant role of puberty in the development of body image, particularly in women (Heinberg, 1996; Thompson, 1990). Pubertal development takes a few years and for the adolescent girl goes hand in hand with various physical, hormonal and psychological changes (Heinberg, 1996; Thompson, 1990).

A popular research topic is the relationship between body image and time of first menarche. In general, research found that girls who develop later (have their first menstrual period after age 14) have a more positive body image and less body dissatisfaction than those who experience menarche early (before age 11) or on time (O’Dea & Abraham, 1999; Franko & Striegel-Moore, 2002; Thompson, 1990). Other studies found that this was also the case for girls from other racial and cultural groups (Striegel-Moore et al., 2001; Williams & Currie, 2000). Striegel-Moore et al.’s (2001) analyses showed that when controlling for BMI, early, on-time and late-maturing girls no longer differed on body dissatisfaction. Thus, it appears that it is the increase in body weight associated with puberty that accounts for the relationship between pubertal timing and body dissatisfaction (Striegel-Moore et al., 2001). Ge, Elder, Regnerus, and Cox (2001) found that girls who were physically more mature viewed themselves as more overweight in comparison to their less mature peers and this finding was true for girls of different ethnicities (White, Black and Hispanic).

The normal increase in weight that happens with pubertal development, which results in a heavier but normal body weight, has been found to play a significant role in girls’ decreased satisfaction with their bodies (Blyth et al., 1985; Levine, 1987; Nolen-Hoeksema & Girmus, 1994). Richards, Boxer, et al. (1990) also found that for girls, greater pubertal development was significantly related to actual increases in weight, less satisfaction with weight and to perceptions of being overweight. Their dissatisfaction with this normative development could be because this weight gain is mainly adipose
tissue, a change which is in contrast with the thin, slim female figure that society currently idealizes (Richards, Boxer, et al., 1990; Thompson, 1990). The usual look of the prepubertal girl, longlegged with a slim body, matches the current cultural ideal (Byely et al., 2000; Richards, Boxer, et al., 1990). Puberty, with its associated increase in weight and redistribution of fat, makes it impossible for a lot of girls to maintain this ideal.

Nolen-Hoeksema & Girgus (1994) state that, although puberty is related to weight gain for both boys and girls, the increase in fat is significantly greater in girls. This biological difference for male and female adolescents may account for some of the sex differences in body dissatisfaction. Research indicates that there is no significant relationship between pubertal development and increased body dissatisfaction for boys (Richards, Boxer, et al., 1990; Rosenblum & Lewis, 1999). While females’ development is in contrast with the societal ideal, boys’ weight gain is mainly an increase in muscle and lean body tissue which is congruent with the societal ideal for men: increased size and a muscular body (Rosenblum & Lewis, 1999; Thompson, 1990).

Self-Ideal Discrepancy Theory
Numerous researchers have used a measure of dissatisfaction that consists of the comparison of a person’s ideal figure with an estimation of his or her current or real size (Thompson, 1990). In this manner, the propensity for people to compare their bodies like this can be conceptualized as a cause of the ensuing dissatisfaction with body size, form and/or appearance. According to Silberstein, Striegel-Moore, and Rodin this discrepancy leads to a “normative discontent” with body image (cited in Thompson, 1990). Yet, a lot of work still has to be done with this specific theory as the majority of the work so far has been correlational and there is no good reason for concluding that women comparing their own size with an imposed ideal size are responsible for their elevated levels of body image disturbance (Thompson, 1990).
Adaptive Failure Theory

This approach focuses exclusively on the possibility that people’s assessment of their size might not change simultaneously with their real size change (weight loss or gain) (Heinberg, 1996; Thompson, 1990). Yet, this theory has never been adequately tested.

2.7.3 Sociocultural Theory

2.7.3.1 Introduction

Body image should be contemplated in relation to development in a cultural context (Fallon, 1990). According to Smolak (2004) sociocultural factors are vital in understanding the development of body image. Many studies have confirmed that sociocultural influences play a major if not the most important role in the development of body image (Kostanski et al., 2004; Monteath & McCabe, 1997; Ricciardelli & McCabe, 2001; Smolak, 2004; Smolak & Levine, 2001). Grogan (1999) also believes that how an individual views his or her body is largely socially constructed and must therefore be explored and understood within its cultural context. Sociocultural theories of body image suggest that unrealistic societal beauty ideals are largely responsible for body dissatisfaction (Hargreaves & Tiggemann, 2004). The typical cultural standards of beauty in that specific society are important to physical self-perceptions (Simmons, Burgeson, Carlton-Ford, & Blyth cited in Richards, Boxer, et al., 1990).

Smolak et al.’s study (2001) suggests that both boys and girls are affected by sociocultural body ideals, but that the effect seems to be greater for girls. Hargreaves and Tiggemann (2004) found the media’s immediate impact on body image is both stronger and more normative for girls than boys. Their results indicated that exposure to muscular ideal television commercials did not cause boys to have greater body dissatisfaction. Harter (cited in Sondhaus et al., 2001) asserts that while the importance of men’s appearance is increasing in American popular culture, men still have greater leeway in the criterion for attractiveness. While for women physical attractiveness is still viewed as the main road to personal and interpersonal acceptance, men have a lot of other routes like intelligence, job competence, athletic ability, wealth, and power through which they
can attain self-esteem (Harter cited in Sondhaus et al., 2001). There is also general agreement that there is more pressure on women to conform to the societal ideal of slenderness (Grogan, 1999). The discrepancy in dissatisfaction (as discussed more fully in section 2.5) between the sexes is another one of the reasons why the focus in this study will be exclusively on the body image of females and therefore also in this section on theoretical approaches.

The media, peers, romantic partners and family play an important role in transmitting messages regarding what constitutes the ideal body to adolescents and can all be implicated in women’s body image dissatisfaction in adulthood (Cusumano & Thompson, 1997; Gerner, 2003; Grogan, 1999; Hargreaves & Tiggemann, 2004; Hoyt & Kogan, 2001; Murray, Touyz, & Beumont cited in Sheets & Ajmere, 2005; Polce-Lynch, Myers, Kliwer, & Kilmarin, 2001; Ricciardelli & McCabe, 2001; Smolak, 2004; Smolak & Levine, 2001; Van den Berg, Thompson, Obremski-Brandon, & Coover, 2002; Williams, 2001; Wiseman, Gray, Mosimann, & Ahrens, 1992). Grogan (1999) believes that some people are more sensitive to societal cues about body image than others. For example, some theorists suggest that adolescents are particularly vulnerable as their body image is especially ‘elastic’ because they go through puberty and the drastic physical and psychological changes associated with it (Grogan, 1999).

Firstly, we will look at what these societal ideals are, how they operate, their influence and the stereotypes that are related to them. Thereafter the focus will be on the groups (media, peers and family) that convey these ideals and stereotypes to individuals and the methods that they use to do this.

2.7.3.2 Societal Ideal and Stereotypes

2.7.3.2.1 Introduction

What society wants the individual to look like is conveyed to the individual through the societal ideal figure and stereotypes.
2.7.3.2.2 The Societal Ideal

A number of researchers believe that an ideal body image exists and that it consists of what the individual would like to look like (Burns 1979; Rauste-von Wright, 1989; Schonfeld cited by Collins & Plahn, 1988) According to Mostert (1995) the characteristics of these ideal images are primarily shaped by societal norms, culture and stereotypes. Because they are continuously influenced by fashion, group pressure and beliefs, they are very flexible and change over time. Grogan (1999) believes body image to be elastic and that it can thus change when the individual receives new information. So the body image can be influenced by shifts in the societal ideal.

Williams (2001) states that a woman learns from early on what is thought to be physically attractive from her family, the media and society. According to Mostert (1995) young people who are busy creating their own distinctive identities imitate these popularized ideal images because they have a strong desire to belong and conform to the group. Therefore, one can expect adolescents to feel the pressure of these idealized images even more intensely (Mostert, 1995). “One may thus expect young people to evaluate their physical appearance and attractiveness with reference to a fairly limited set of bodily features, partly different for the two sexes” (Rauste-von Wright, 1989, pp. 72-73).

Throughout history, ideals of feminine attractiveness have varied and changed in accordance with the aesthetic standards of the particular period (Ehrenreich & English cited in Heinberg & Thompson, 1995; Fallon, 1990; Garner et al., 1980; Mazur, 1986). Over time, people, particularly women, have attempted to alter their bodies to conform to the specific era’s idea of beauty (Ehrenreich & English cited in Wiseman et al., 1992; Williams, 2001). Garner et al. (1980) states that over time, different body shapes have been selected for, and associated with, desirable social status. These shapes have varied from the Rubenesque women of the 17th century to contemporary symbols of fashion (Garner et al., 1980). Especially over the last few decades, the idealized female shape has shifted from a voluptuous, curved figure to the angular and slim look of today (Garner et al., 1980; Grogan, 1999). Heinberg and Thompson (1995) also state that the “ideal”

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female body has changed drastically over the last few decades. According to Lakoff and Scherr one can use representations of beauty in the media to follow trends in ideal beauty, from art or portraits in the time before the camera to contemporary commercial advertisements and photographs (cited in Wiseman et al., 1992).

There are quite a few studies that show the movement towards the current ideal of extreme thinness in the media. Silverstein et al. (1986) used photographs from *Ladies Home Journal* and *Vogue* magazines to illustrate that the bust to waist ratio in these magazines has decreased significantly over the previous few decades. Garner et al. (1980) found an increase in the number of “diet-for-weight-loss” articles in six leading women’s magazines between 1959 and 1978. Wiseman et al. (1992) extended Garner et al.’s study and in a survey of magazine articles (1959-1988) found an overall increase in emphasis on weight reduction over the 30-year period. They also found a rise in the relative number of diet, exercise, and diet/exercise articles.

This trend towards increasing slimness can also be seen in the way the appearance of the “ideal” female (e.g. models, beauty queens and *Playboy* bunnies) has changed in the last years. Morris et al. (1989) found that the desired body shape for English fashion models over the years 1967 to 1987 was becoming more tubular with bust and hips becoming smaller while height and waist increased. Garner et al. (1980) examined the *Playboy* centrefolds and Miss America contestants as “ideals” in terms of body shape for that period and showed that between 1959 and 1978 there was a significant move toward a thinner ideal and found that both the average weights of *Playboy* centrefolds and Miss America contestants decreased during that time period. This move toward a thinner ideal standard of beauty is more remarkable as, based on data from the Society of Actuaries “Build and Blood Pressure Studies” (1959, 1979), American women were actually becoming heavier between 1959 and 1978 (Garner et al., 1980).

Wiseman et al. (1992) extended this research for the period 1979 to 1988. They found that the cultural ideal for women’s body size has stayed thin and perhaps become even thinner. Miss America Contestants’ body size was still decreasing, while body size had
plateaued at a very low level for Playboy centerfolds. They found that this indicator of women’s “ideal” body image has by and large stabilized at 13 to 19% below expected weight. It could be that the current levelling off in women’s ideal body size had occurred because a decrease in percent of expected weight now would be almost impossible and dangerously unhealthy (Wiseman et al., 1992). This could be explained as a floor effect.

“From birth, females are indoctrinated with the message that they should be pretty – which in this sociohistorical moment means being thin” (Silberstein et al., p. 92, cited in Thompson, 1990). Western culture places enormous value on being beautiful and also thin, especially for women and strongly associates the two aspects with each other (Mostert, 1995; Ricciardelli & McCabe 2001; Siever, 1994; Wolf, 1990). It is therefore still important for most women to be attractive which today means being thin, but also muscular (Wilfley & Rodin, 1995). Women are expected to attain a delicate balance of thinness without seeming to be just “skin and bones” which is very difficult to achieve (Hoyt & Kogan, 2001). There is a lot of support for the point of view that the current societal standards for beauty emphasize the desirability of thinness (Cash & Henry, 1995; Fallon & Rozin, 1985; Furnham et al., 2002; Grogan, 1999; Kallen & Doughty, 1984; Monteath & McCabe, 1997; Parkinson et al., 1998; Rosenblum & Lewis, 1999; Striegel-Moore et al., 1986; Thompson, 1990; Webster & Tiggemann, 2003). A thin ideal may indeed be normative for females and may be present for even very young females (Kostanski et al., 2004; Parkinson et al., 1998). Many girls develop a preference for being thin by the time they are early adolescents (Cohn et al., 1987).

Yet these societal ideals are widely cited as being “unrealistic” and “unattainable” for many females (Cash & Green, 1986; Fallon, 1990; Hargreaves & Tiggeman, 2004; Pliner et al., 1990; Rosenblum & Lewis, 1999; Webster & Tiggemann, 2003; Williams, 2001), especially considering the fact that Black and White American women’s BMI had increased from 1983 to 2001 (Cash et al., 2004). Even though these ideals are unrealistic, they still seem to lead to discrimination against “unattractive” individuals, an occurrence labelled “beautyism” by Cash (1990).
2.7.3.2.3 Stereotypes

One way in which these ideals are conveyed to people is through stereotypes (Monteath & McCabe, 1997). Researchers have found that in our society thinness is valued, while its opposite, obesity, is seriously denigrated (Rodin, Siberstein, & Striegel-Moore, 1985; Schwartz & Brownell, 2004; Sobal et al., 1995; Spillman & Everington, 1989; Thompson, 1990). Our society’s obsession with the perfect body is also revealed in our negative stereotypes about overweight people (Clayson & Klassen, 1989). People try to conform to the positive stereotype of the thin person to avoid being associated with the fat stereotype and escape the resulting stigmatization. The thinness stereotype proposes that being thin is associated with traits such as beauty, youthfulness, goodness, intelligence, wealth, power, success, competence, happiness, popularity, having friends, social acceptability, being pleasant and a romantic relationship (Brouwers, 1990; Grogan, 1999; Monteath & McCabe, 1997; Napoli, Kilbride, & Trebbs, 1985; Williams, 2001).

According to Burns (1979) there is enough evidence to believe that people consistently respond to stereotypes in a particular manner. As has been repeatedly shown, there is an extremely negative stereotype for overweight people (for both men and women) in Western society (Cossrow, Jeffery, & McGuire, 2001; Harris, Harris, & Bochner, 1982; Monteath & McCabe, 1997; Thompson et al. cited in Hoyt & Kogan, 2001). The majority of research has suggested that being fat is associated with a wide variety of negative characteristics (Crandall, 1994). Schwartz & Brownell (2004) describe negative messages about being overweight as “relentless”. Fat people are seen as less attractive, aesthetically displeasing, lazy or less hardworking, stupid or less intelligent, dirty, sloppy, disagreeable, mean, bad, sly, morally and emotionally impaired, alienated from their sexuality, discontent with themselves, less active and athletic, more self-indulgent and less self-disciplined, less popular, less self-confident, less conscientious, less competent and successful (Harris et al., 1982; Harris et al., 1991; Keys, 1955; Lewis, Cash, Jacobi, & Bubb-Lewis cited in Annis et al., 2004; Millman cited in Crandall, 1994; Monteath & McCabe, 1997; Puhl & Brownell, 2002; Rodin, Silberstein, & Streigel-Moore cited in Crandall, 1994; Tiggemann & Rothblum, 1988; Wooley & Wooley, 1979).
Heavier body weights and shapes are viewed as socially undesirable and this is particularly true for females (Smolak & Levine, 2001). Obesity is considered to be unattractive in Western society (Allon, 1973; Fisher cited in Ellis, 1990; Grogan, 1999). Appearance is a major motivation for most people’s efforts to manage their body weight by striving to be thin and avoiding being fat (Hayes & Ross, 1987). Obesity is frequently viewed as the result of “personal misbehaviour” (Thompson, Heinberg, Altabe, & Tantleff-Dunn cited in Hoyt & Kogan, 2001).

According to Mostert (1995) people in most instances react to such stereotypes in a negative way. These stereotypes tend to be shared by overweight persons themselves (Tiggemann & Rothblum, 1988).

This bias leads to the stigmatization of people who are obese and also discrimination against them (Crocker, Cornwall, & Major, 1993; Grogan, 1999; Puhl & Brownell, 2002; Siever, 1994). Studies testing for implicit bias have found anti-fat attitudes to be at least as strong as those for race and gender (Schwartz & Brownell, 2004). Yet, explicit bias also exists for weight, which is why some researchers assert that obese persons are the last group for whom it is socially acceptable to be overtly discriminated against (Paul, Henderson, and Brownell cited in Schwartz & Brownell, 2004; Thompson et al., 1999). Studies have shown that, although these negative attitudes toward the obese affect people of all ages and sexes, overweight women are perceived more negatively (Canning & Mayer, 1966; Harris et al., 1991). Yet, Harris et al. (1982) found no evidence to support the widely held belief that obesity specifically would be viewed more negatively for women than for men.

These negative views of overweight and obesity are especially harmful if we consider the fact that the prevalence of overweight and obesity seems to be increasing among Americans (Flegal, Carrol, Ogden, & Johnson, 2002). According to the CDC 1997-1998 statistics more than half of American adults were overweight, 20% of adults were obese (Schoenborn et al., 2002). In America in the time period 1999 to 2000 34.0% of women were obese (BMI greater than 30) and with the inclusion of overweight persons (BMI:
25.0-29.9) this number rose to 62.0% (Flegal et al., 2002). Statistics indicate that 45% of South Africans over the age of 15 are overweight or obese, (CME, 2002). Popkin and Udry (1998) state that the proportion of American adolescents that are obese more than doubled between the 70’s and 90’s, so this is also a significant problem with adolescents. Popkin and Udry (1998) in their study found that 26.6% of American female adolescents were overweight while 9.7% are obese. They also found that 22.6% of White girls and 34% of Black girls were overweight. A steadily increasing number of individuals are thus vulnerable to stereotyping and discrimination.

When considering Western society’s demanding standards of physical appearance and its prejudiced “anti-fat” attitudes and action, it comes as no surprise that obese individuals experience psychosocial costs because of their weight (Annis et al., 2004). This stigma and discrimination against the obese could have an important influence on the health and psychological welfare of overweight people (Schwartz & Brownell, 2004). An important aspect of psychological well-being is body image (Schwartz & Brownell, 2004). The very strong relationship between weight and body dissatisfaction has already been discussed (see section 2.3.4 Negative Body Image and Weight). Smolak and Levine (2001) propose that this relationship between BMI and body esteem is probably created by societal attitudes toward overweight people.

These socially defined stereotypes have a strong influence on how a woman views her own appearance (Mostert, 1995). If an individual’s social environment regards him or her as unattractive, it should not be surprising that the obese individual will internalize this self-view (Annis et al., 2004). The stigma society places on being overweight may influence how women who deviate from the thin ideal feel about their bodies and the heavier a woman becomes, and thus deviates more from the societal ideal, the higher her levels of body dissatisfaction become (Banfield & McCabe, 2002; Monteath & McCabe, 1997; Neumark-Sztainer & Haines, 2004). According to Striegel-Moore et al. (1986, p. 247) “the more a woman believes that ‘what is fat is bad, what is thin is beautiful, and what is beautiful is good,’ the more she will work toward thinness and be distressed about fatness.”
2.7.3.2.4 Influence of the Societal Ideal

The current ideal body according to Western culture is unrealistically thin and very difficult for most women to achieve (Pliner et al., 1990; Thompson & Stice, 2001; Williams, 2001). Many females come to internalize these cultural ideals and assess their physical and personal self-worth in relation to these unrealistic and extreme standards (Thompson & Stice, 2001). The closer the person’s subjective body image is to this internalized ideal, the greater the possibility for that individual of having a high self-esteem and healthy body image (Monteath & McCabe, 1997; Mostert, 1995). Yet, although most people seem to strive for the ‘perfect body’; and ‘ideal weight’, very few people achieve this goal (Corey & Corey cited in Mostert, 1995). Nearly all of the female (96%) university students in a study by Monteath and McCabe (1997) perceived themselves to be larger than the societal ideal. Few women appear to be satisfied with their weight and general physical appearance (Mostert, 1995).

For overweight women, exposure to the thin ideal is likely to make them aware of the discrepancy between their own bodies and the ideal body shape (Williams, 2001). If females observe a discrepancy between ideal female body and their own bodies, they may become worried that their own weight is not acceptable (Posavac, Posavac, & Posavac, 1998). This discrepancy which they see between their own bodies and the internalized ideal, influences their body image evaluation, leads the majority of women to feel dissatisfied with their bodies and can also be implicated in body image disturbance (Cash et al., 1997; Heinberg, 1996; Muth & Cash, 1997; Sobal et al., 1995; Williams, 2001). According to Burns (1979, p. 151) if a woman’s subjective body image deviates from the ideal body image it can be “quite disruptive on personality.”

Some women are so dissatisfied with their perceived body size that they become motivated to become thin and maintain that thinness (Molloy & Herzberger, 1998). As a result of this dissatisfaction, most adolescent girls want a thinner body and many engage in weight loss behaviours in order to achieve this ideal (Ricciardelli & McCabe, 2001). Moderate dieting to control weight and achieve the ideal seems to be “normal” behaviour for women in Western cultures (Polivy & Herman, 1987; Williams, 2001). According to
Williams (2001) the prevalence of adolescent girls on diet is disturbing. Patton et al.’s (1997) study of Australian teenage girls found that 40% of the girls were intermediate dieters and 7% extreme dieters. Szabo and Hollands (1997) found that 20% of the sample of Black and White schoolgirls in Johannesburg had abnormal attitudes to eating and were at risk for eating-related problems. Body dissatisfaction tends to motivate restrictive dieting, which places the individual at risk for eating disorders (Williams, 2001). Some research partly attributes the increase in eating disorders and disturbed eating patterns among young people to the promotion of the “thin-ideal” by the media in western cultures and also the stigmatization of obesity (Garner et al., 1980; Hargreaves & Tiggemann, 2004; Hsu, 1989; Striegel-Moore et al., 1986; Williams, 2001).

2.7.3.3 Messengers of the Ideal and Stereotypes

In this section the focus will be on the media, family and peers as the three most important groups that transmit sociocultural ideals on the perfect body to adolescents. These three groups are the same ones that Thompson et al. names as the primary sources of influence on body image and eating disturbance in his Tripartite Influence Model (cited in Keery, Van den Berg, & Thompson, 2004). He hypothesized that these groups exert their influence on body image and eating disturbance via two primary mechanisms: appearance comparison and internalization of the thin-ideal. According to Williams (2001) an individual is taught the cultural perspective of female beauty by the media, family and friends and these three groups also have a huge effect on the internalisation of the individual’s stereotypic beliefs. Polce-Lynch et al. (2001) also names the sociocultural influences like peer and family relationships, and the media as important influences on body image. Peers and the media become the most important authority on appearance and style during early adolescence (Smolak & Levine, 2001).

According to Keery et al. (2004), each of the sociocultural influence factors (peer, parents, and media) can be viewed as a multidimensional construct, consisting of multiple sub-components. Peer and parental influence could consist of criticism or teasing, modelling of dieting or body image concerns, and investment in thinness. The information provided by the media about appearance standards and/or dieting procedures
and internalization of media images and messages (i.e., thin-ideal internalization) can all be viewed as components of media influences. As the groups that transmit sociocultural ideals to adolescents are not the true focus of the current study, they will only be looked at briefly.

2.7.3.3.1 The Media

According to Smolak (2004) media influences seem to start influencing body image by late elementary school. The mass media, including magazines and television, is the single strongest influencing factor on adolescent body image (Hargreaves & Tiggemann, 2004). Twenty-three percent of women in Garner’s study (1997) stated in retrospect that movie or TV celebrities had formed their body image when they were young, while 22% named fashion magazine models as being influential at that time. According to Polce-Lynch et al. (2001) connections have been made between media’s influence and negative psychological impact for adolescents. Two of these psychological consequences that are especially significant in adolescence are eating disorders (Stice, Schupak-Neuberg, Shaw, & Stein, 1994; Waller et al., 1994) and body image problems (Henderson-King & Henderson-King, 1997; Polce-Lynch et al., 2001; Strasburger, 1995).

The media influences girls’ body image by firstly making them aware of the societal ideal, and then urging them to compare themselves to this unrealistic ideal, which predictably leads to dissatisfaction. The mass media is one of the major transmitters of sociocultural ideals about the female body for adolescent girls: it promotes the thin ideal and the thin/fat stereotypes (Ellis, 1990; Field, Cheung, et al., 1999; Jones, 2001; Polce-Lynch et al., 2001; Williams, 2001). For female adolescents the frequency of reading fashion magazines was positively associated with feeling that pictures in magazines influence their idea of the perfect body shape (Field, Cheung, et al., 1999). When compared to the family and peers, adolescent girls view the media as the strongest pressure that promotes the thin ideal (Wertheim, Paxton, Schultz, & Muir, 1997). The media promotes and continually reinforces the thin ideal by means of television, movies, magazines, the fashion-, cosmetic- and diet industries (Molloy & Herzberger, 1998; Williams, 2001). Since adolescents and young adults don’t have the necessary
perspective to see it as an artificial ideal (Ellis, 1990), exposure to it may cause them to have a negative body image (Fallon & Rozin, 1985) which is found in research results (Hargreaves & Tiggemann, 2004). It leads to increased body dissatisfaction (Hargreaves & Tiggemann, 2004; Heinberg & Thompson, 1995) and is at least partially responsible for promoting eating disorders (Field, Cheung, et al., 1999; Stice & Shaw, 1994).

Results from studies about the effects of media images have tended to find that women feel less good about their bodies after viewing these idealised media images (Grogan, 1999). Media exposure has been linked to changes in body image disturbance and satisfaction (Groesz, Levine, & Murnen, 2002). Research shows that adolescent girls who read more magazines and watch more television, report more body dissatisfaction (Hargreaves & Tiggemann, 2004; Levine, Smolak, & Hayden, 1994). According to Ricciardelli and McCabe (2001) perceived pressure from the media to lose weight predicted higher levels of body dissatisfaction. The results from three experiments by Posavac et al. (1998) clearly demonstrate that exposure to media images of female attractiveness is capable of causing increased weight concern among most young women. According to Field, Cheung, et al. (1999) pictures in magazines had a strong impact on female children and adolescents’ perceptions of their weight and shape. Exposure to media images can thus clearly influence women’s feelings about their weight and bodies.

Keery et al. (2004) found that comparison partially mediated the relationship between media influence and body dissatisfaction while Hargreaves and Tiggemann (2004) believe that media exposure influences body image by way of appearance-related social comparison. Social comparison has been viewed as a central contributor to body image (Jones, 2001; Stormer & Thompson, 1996). Social comparison refers to the cognitive judgements that people make about their own characteristics compared to others (Jones, 2001). According to Social Comparison Theory, people desire accurate, objective evaluations of their abilities and attitudes (Grogan, 1999). When they are not able to evaluate themselves directly, they try to satisfy this need for self-evaluation through comparisons with other people (Grogan, 1999). Research indicates that individuals choose family, peers and celebrities or media figures (fashion models, actors, sportstars) as
targets for social comparison (Grogan, 1999; Heinberg & Thompson, 1992; Jones, 2001). According to a number of authors cited in Hargreaves and Tiggemann (2004) viewing television or reading magazines, encourages individuals to evaluate their own appearance by comparison to the idealized images in these media. More than 25% of the women in Garner’s survey (1997) indicated that they always or very often compared themselves to models in magazines. Individuals who have higher levels of appearance-related social comparison are more likely to feel greater dissatisfaction with their bodies (Jones, 2001).

Although media images play an important role in the way that the women perceive and evaluate their bodies (Garner, 1997; Grogan, 1999), this depends on the viewer’s perception of the importance of those cues (Garner, 1997). According to Williams (2001) some women are more susceptible to media influences than others.

2.7.3.3.2 Family

Children learn certain aspects of body image from their parents (Smolak and Levine, 2001). Polce-Lynch et al. (2001) found family influences to be uniquely associated with body image and their results suggest that family members have a significant say in how girls evaluate themselves.

According to Keery et al. (2001) internalization and comparison fully mediate the relationship between parental influence and body dissatisfaction. So parents seem to be both models for comparison and reinforcers (or not) of the societal standard of appearance. Ricciardelli and McCabe (2001) cite a number of studies that show mothers to act both as role models and social reinforcers in relation to girls’ attitudes and behaviours regarding eating. The family plays an important role in helping the adolescent to interpret society’s values, norms and expectations (Williams, 2001). Family members can therefore also intensify the sociocultural focus on thinness for girls that is pervasive in our society (Byely et al., 2000). Byely et al. (2000) hypothesizes that familial influences can shape adolescent girls’ body image and dieting behaviour through direct communication and modelling of mother’s behaviours and attitudes.
Parental comments about a child’s weight do seem to be linked to body image (Ricciardelli & McCabe, 2001; Smolak & Levine, 2001). Results from Sobal et al.’s study (1995) indicated that 84% of the adolescent females who were encouraged to lose weight had received encouragement to lose weight from their family. Pike and Rodin (1991) also found that the mothers of adolescent girls with disturbed eating patterns were generally more critical of their weight and appearance than the mothers of girls without eating problems, which suggests that mothers may influence daughters’ eating behaviours by placing direct pressure on them to be thin. Kanakis and Thelen (1995) found that compared to the control group, the bulimic group reported greater distress at being teased by the family and greater pressure from their mothers to diet. Criticism and teasing about body weight, especially from family members, made individuals even more vulnerable to media messages regarding the “ideal body” (Williams, 2001). Teasing will be discussed in more detail in the section on peers and friends.

In addition to direct comments, parental modelling of weight concerns may contribute to body esteem problems in children (Smolak & Levine, 2001). According to Rosen, Orosan-Weine, and Tang (cited in Williams 2001) being exposed to parents who model weight concern, body dissatisfaction and dieting can be expected to influence preoccupation with physical appearance. Sandtner et al.’s study (cited in Smolak & Levine, 2001) on pubertal girls found significant correlations between mothers’ and daughters’ eating behaviours and attitudes and Pike & Rodin (1991) found that the daughters were inclined to take on the mothers’ attitudes toward weight and to copy the mothers’ eating habits. Yet, Byely et al.’s (2000) findings fail to support the notion that girls imitate their mothers’ dieting and body image concerns. Williams (2001) mentions that while consensus on the degree of modelling is lacking, it is generally accepted that mothers influence their daughters to some extent regarding body dissatisfaction, dieting and other eating disturbances.

2.7.3.3.3 Peers and Friends
According to Keery et al. (2001) internalization and comparison partially mediated the relationship between peer influence and body dissatisfaction. A person’s internalization
of cultural appearance standards has been identified as a correlate of body image dissatisfaction (Schwartz & Brownell, 2004). Peer influence plays a significant role in the internalization of the individual’s values and norms (Williams, 2001). Negative comments, teasing and criticism from peers or friends may discourage certain sorts of behaviours while others will be advanced by compliments from these people (Williams, 2001). The thin ideal is thus promoted via social reinforcement and as adolescents are especially focussed on conforming to the norm and being socially accepted, they are very vulnerable to peer pressure to be thin (Stice, 1994).

Both same-sex and opposite-sex peers were also found to influence girls’ attempts to alter body change strategies (McCabe & Ricciardelli 2001). Numerous studies have shown that same-gender friends’ suggestions and encouragement lead to more dieting and strategies to increase muscles in adolescent girls (Ricciardelli & McCabe, 2001). Sobal et al. (1995) found that of the adolescent females in their study who were encouraged to lose weight, 8% had received encouragement to lose weight from their friends. In a study of American grade 6 to 8 girls, Taylor et al. (1998) found that the main risk factor for excessive weight concerns was the importance peers put on weight and eating while the effects of being teased about weight also played an important role.

According to Williams (2001) teasing about body shape may lead to the individual feeling ashamed about her body and sad at not being able to meet expectations. The more frequent and upsetting the teasing, the greater the likelihood that it will lead to body dissatisfaction (Levine et al., 1994). Teasing experiences play a role in producing body image problems and eating disturbances in adolescent females (Thompson, Coovert, Richards, Johnson, & Cattarin, 1995). Research shows significant correlations between teasing history and current levels of body image dissatisfaction, eating disturbance and depression in adolescent females (Fabian & Thompson, 1989). Garner’s survey (1997) found that teasing during childhood or adolescence has a permanent effect on women’s feelings about their bodies. Multiple studies show that teasing about weight or size while growing up is related to higher adult levels of eating disturbance, increased problems with appearance- and body image dissatisfaction, appearance evaluation and depression.
Social comparison, as already discussed in section 2.4.3.3.1 on media influences, is also relevant with peers. According to Jones (2001) appearance is one of the possible pathways to acceptance and popularity. Social comparison can thus be a way to learn about the appearance-related social expectations of peers and to evaluate the self in terms of those standards. According to Jones (2001) the same-sex peers at school rather than media figures were most likely to be comparison targets for height and weight for adolescents. Regardless of BMI, students who report more frequent social comparison with peers as well as models or celebrities experience greater body dissatisfaction (Jones, 2001). For the girls, body shape comparisons as well as weight were significantly related to body dissatisfaction. This outcome is compatible with previous research (Rosenblum & Lewis, 1999; Taylor et al., 1998). Body image satisfaction was related most strongly to the frequency of social comparisons for a very limited set of physical attributes. These are the very attributes that are idealized in the media and are frequently the basis for teasing by peers (Taylor et al., 1998; Thompson, Heinberg, Altabe, & Tantleff-Dunn cited in Hoyt & Kogan, 2001).

2.8 Associated Problems

Body image problems have been associated with a wide variety of factors such as problems with self-concept (Ellis, 1990; Lerner, Karabenick, & Stuart, 1973; Ricciardelli & McCabe, 2001; Rosen & Ross, 1968; Sondhaus et al., 2001; Webster & Tiggeman, 2003), negative self-esteem (Abell & Richards, 1996; Balogun, 1986; Cash cited in Williams, 2001; Frost & McKelvie, 2004; Furnham et al., 2002; Grogan, 1999; Hoyt & Kogan, 2001; McCaulay et al., 1988; Monteath & McCabe, 1997; Olivardia cited in Hargreaves & Tiggemann, 2004; Padin, Lerner, & Spiro, 1981; Smolak & Levine, 2001; Thomas, 1989; Webster & Tiggemann, 2003), eating disorders (Bruch, 1962; Cash & Brown, 1987; Cash & Deagle, 1997; Cooley & Toray, 2001; Duva & Lester, 1997;
Furnham et al., 2002; Garner & Garfinkel, 1981; Garner & Kearney-Cooke, 1996; Leon, Fulkerson, Perry, & Early-Zald, 1995; Smolak & Levine, 2001; Thompson et al. cited in Hoyt & Kogan, 2001), eating disturbance in eating-disordered and non-eating-disordered populations (Attie & Brooks-Gunn, 1989; Fabian & Thompson, 1989; Richards, Thompson, & Coovert cited in Thompson, 1990; Thompson, 1990; Thompson et al., 1995; Thompson & Psaltis, 1988), weightloss behaviours (Olivardia cited in Hargreaves & Tiggemann 2004), emotional adjustment (Koleck, Bruchon-Schweitzer, Cousson-Gélie, Gilliard, & Quintard, 2002), social involvement (Mostert, 1995), social anxiety (Trapnell, Meston, & Gorzalka, 1997), and impaired psychosocial functioning (Cash & Pruzinsky, 1990; Harris, 1995; Smolak & Levine, 2001) including the onset of adolescent depression and level of depression (Armatas, Moran, & Sands, 2003; Fabian & Thompson, 1989; Franko & Striegel-Moore, 2002; Marsella, Shizuru, Brennan, & Kameoka, 1981; Noles, Cash, & Winstead, 1985; Smolak & Levine, 2001; Stice & Bearman, 2001; Thompson & Psaltis, 1988). According to Koff and Benavage (1998) there is strong evidence that negative body image has an acute effect on women’s self-perceptions, psychological functioning and behaviour. Body dissatisfaction was also found to be related to how women thought and felt about themselves (Webster & Tiggemann, 2003). Body image is clearly a factor that has the potential to influence almost every facet of a person’s life and is thus important to investigate.

2.9 Summary

A strong relationship exists between a woman’s weight and her body image. Research has shown that women of all ages have a more negative body image than men, while adolescent women have the worst body image. International research has shown White women to have more negative body image than Black women although little is known about the South African situation. Sociocultural theories of body image suggest that unrealistic societal beauty ideals are largely responsible for body dissatisfaction. The current societal ideal for women is a very thin body type. The unrealistic nature of the current ideal has led to body image dissatisfaction becoming almost normative for women in the western world.
CHAPTER 3
ROMANTIC RELATIONSHIPS

3.1 Introduction

Although a lot of research has been done on the role of body dissatisfaction in eating disorders, few studies have focused on the role of body dissatisfaction in interpersonal relationships and specifically romantic relationships (Hoyt & Kogan, 2001). According to Mostert (1995) the body image of adolescent girls is strongly related to their social involvement. Girls with a positive perception of their bodies tend to be more willing to engage in social activities and interpersonal relationships than their peers with poor body images (Mostert, 1995).

3.2 Attractiveness and Relationships

According to Mostert (1995) physical appearance plays a central role in social relationships and especially in relationships with the opposite sex. In addition to the qualities previously discussed in the section on the attractiveness stereotype (Section 2.7.3.2.3 Stereotypes) Berscheid, Dion, Walster, and Walster also found that attractive individuals are considered more desirable romantic partners (cited in Stelzer et al., 1987) and as having more sexual warmth (Feingold, 1992). Byrne, Ervin, and Lamberth (1970) showed that sexual attractiveness, desirability as a date and as a spouse are related to physical attractiveness, while Brislin and Lewis (1968) also found a very high correlation between a partner’s attractiveness and desire to date. Feingold’s meta-analysis (1990) found that subjects’ physical attractiveness was correlated with amount of liking by their blind dates for both sexes. Durran (cited in Rosenblum & Lewis, 1999) also found attractive people to be treated preferentially in dating situations. Studies have found physical attractiveness to be the single most influential aspect in determining liking in blind dates while people with outstanding personality features or intelligence were not liked any better than individuals who were less gifted (Berscheid & Walster, 1972).
Yet, there exists a greater cultural emphasis upon physical attractiveness for women (Jones, 2001; Mazur, 1986) which might partially be explained by the fact that a man with an attractive woman was more likely to be favourably rated in status than a man with an unattractive woman (Sigall & Landy, 1973). Many studies have shown that, compared to women, men placed greater emphasis on a potential partner’s physical attractiveness and that attractiveness and dating popularity were more strongly correlated for women (Buss, 1994; Feingold, 1990; Hatfield & Sprecher cited in Siever, 1994; Jackson, 1992; Miller & Rivenbark, 1970; Nezlek, 1999; Walster et al., 1966; Wiederman & Hurst, 1998). Feingold’s meta-analysis (1990) of 23 previous studies found that men rated a mate/date/partner’s physical attractiveness as more important than did women. All five research paradigms supported Feingold’s hypothesis that more men than women value attractiveness. This was also found in a study with male and female adolescents (Roscoe, Diana, & Brooks, 1987).

A few studies also show that the woman’s body size, shape, and physical attractiveness are quite influential when a man decides whether to initiate a romantic relationship (Singh & Young, 1995; Smith et al., 1990; Wiederman 2000). When compared with women, men are a lot less willing to start a relationship requiring a high level of personal investment when the prospective partner is perceived as unattractive (Townsend & Levy, 1990). Men also choose physically attractive women as being those with whom they would most willingly enter a short-term or long-term relationship (Hoyt & Kogan, 2001).

Walster et al. (1966) explored the relationship between desire for a second date and preference for characteristics such as intelligence, femininity, extroversion, and physical attractiveness and found that physical attractiveness was the only characteristic related to a man wanting a second encounter with his blind date. Spreadbury and Reeves (1979) found that women who rated themselves high in physical attractiveness dated more frequently than did women who rated low and also dated more different men than did the women who rated low while no relationship was found between personality, dating frequency, and number of men dated. This finding is corroborated by Jensen (1985, p. 103) who also found a girl’s physical appearance to be much more influential than “the
lesser requirements of intelligence, character or personality.” “Whether viewed from a sociobiological or sociocultural perspective, women’s physical aesthetics are influential in dating, mating, and other facets of heterosexual relations” (Cash, Ancis, & Strachan, 1997, p. 434). According to Hesse-Biber socioculturally constructed prescriptions for female sexuality define a woman’s desirability as dependent on her appearance and, specifically, on having a thin body and low weight (cited in Gerson et al., 2004).

Attractiveness often translates into an emphasis on thinness (Lamb et al., 1993). Both adolescent girls and boys endorsed weight as a prominent attractiveness feature for females (Jones, 2001). According to many studies done in the United States, American men generally find thin women most sexually appealing (Harris et al., 1991; Spillman & Everington, 1989; Wiederman, 2000). According to Stake & Lauer (1987) the “ideal” woman as rated by average men, is slightly below average in weight. In Sobal et al.’s study (1995) 96% of male respondents ranked average weight women as their first choice for female partners, 82% of men ranked underweight women as their second choice and 84% ranked overweight women as their third choice. In Western society, an extremely negative stereotype of overweight people exists (Monteath & McCabe, 1997; Smolak & Levine, 2001). People view an obese woman as less sexually attractive, skilled, warm, and responsive, and view her as less likely to experience desire and various sexual behaviours than a woman whose weight is in the normal range (Regan, 1996).

According to researchers heavier women are stigmatized, particularly in the field of dating and sexuality (Harris, 1990; Neumark-Sztainer & Haines, 2004; Regan, 1996; Sobal et al., 1995; Stake & Lauer, 1987; Wiederman & Hurst, 1998). Studies have indicated that heavier women (higher BMI) are less likely to be involved in a steady dating relationship and to have sexual experience (Sheets & Ajmere, 2005; Stake & Lauer, 1987; Wiederman & Hurst, 1998). Harris et al. (1991) found that people who were dating had a significantly lower BMI than those who were single. Women who viewed themselves as fat dated considerably less often than other women (Kallen & Doughty, 1984). Research indicates that obesity may lessen opportunities for dating and marriage, especially among women (Gortmaker, Must, Perrin, Sobol, & Deitz, 1993; Stake &
Laurer, 1987) while Kallen and Doughty (1984) found body type to be the most significant predictor of dating frequency.

Singh and Young state that in general, perceived obesity seems to be the most negative factor for men choosing a partner (cited in Hoyt & Kogan, 2001). Males much more frequently than females indicated that a partner being the right weight was very important (Sobal et al., 1995). Sobal et al. (1995) found 30% of male participants to rate a potential girlfriend being the right weight as very important and 63% viewed it as “some important”, but only 7% of the men viewed it as unimportant. Men ranked a woman’s weight distribution as the fourth most important body characteristic for opposite-sex physical attractiveness (Lerner et al., 1973) and also had reported less comfort in dating overweight people than did women. According to Harris et al. (1991) men are almost twice as likely as women to have declined to date someone because of their weight. Multiple studies have indicated that overweight adolescents, and especially overweight girls, may be viewed as less desirable partners for romantic relationships (Neumark-Sztainer & Haines, 2004). Thus a woman’s body size and weight might clearly influence her relationship status. Little research has been done in this field with adolescents, especially in the South African context.

Attractiveness, in the form of body weight, does seem to continue being influential even well into a relationship and does play a role in sexual satisfaction. According to Gortmaker et al. (1993) heavier women are less likely than lighter women to get married. Women also worry more than men that their partners’ attraction to them will lessen if they gain weight (Cambell cited in Sheets & Ajmere, 2001). This does seem to be a valid concern as Margolin and White found that weight gain in women led to decreased sexual interest and sexual satisfaction among their husbands, but such was not the case with regard to men’s weight gain and wives’ sexual interest (cited in Wiederman, 2000). Blumstein and Schwartz (1983) studied a group of adult couples and found that men’s happiness with a marital or cohabiting relationship to be better predicted by how they perceived their partners’ attractiveness than women’s happiness was. Thus, the female partner’s weight and attractiveness seem to be quite influential in even an established
relationship, predicting aspects ranging from sexual satisfaction to general happiness with the relationship.

Women’s facial attractiveness also seems to play a role in romantic relationships. Female facial attractiveness is a significant determinant of male romantic and sexual interest in a specific woman (Gangestad cited in Wiederman & Hurst, 1997; Symons, 1995). Women who were rated as objectively less facially attractive were less likely to be involved in a steady dating relationship and to have had sexual intercourse (Wiederman & Hurst, 1998). Self-rated physical attractiveness was positively and significantly related to sexual experience.

Yet, these male attitudes towards female attractiveness do differ in different cultural groups. Cultures supply gender-specific standards for physical attractiveness, body weight, and body shape (Fallon, 1990; Rosenblum & Lewis, 1999) and so men of different cultures find different sizes and shapes attractive in a woman. It seems that White American men prefer thinner body types than Black American men. Greenberg and LaPorte (1996) found that White American men chose significantly thinner ideal female figures than Black American men and they also reported wishing more often than Black men that their girlfriends would lose weight. Harris et al. (1991) found Whites who were dating were significantly thinner than Whites who were not dating, while Blacks who were dating were non-significantly heavier than Blacks who were not dating. Whites more frequently believed that overweight people had a difficult time dating than the other Ethnic groups (Sobal et al., 1995) while more White males (60%) than Black males (31%) showed distaste for dating an overweight woman (Harris et al., 1991). They also found that Black males were less likely than White males to have refused to date someone because of her weight, and more likely to consider an overweight woman as sexually attractive. Powell and Kahn (1995) found that White men indicated less desire than Black men to date a woman who is heavier than the ideal. They also felt that they would be more likely to be mocked than did Black men if they chose to date a heavier-than-ideal woman. Black men thus not only show more tolerance for dating a bigger woman, but actually prefer their dates to be slightly larger. White women therefore
receive more social pressure to be thin than do Black women (Greenberg & LaPorte, 1996; Powell & Kahn, 1995).

3.3 Influence of Attractiveness Equals Thinness Stereotype on Women

According to Annis et al. (2004) if a person’s social environment views her as unattractive, it should not be surprising that the individual will internalise this self-view and view herself as unattractive. Lerner (cited in Rosenblum & Lewis, 1999) proposed the “circular functions” hypothesis to explain the impact of appearance on development. According to this interactional perspective a person’s appearance evokes responses from other people, which are perceived by the person and which in turn affect his or her sense of their own physical attractiveness (Rosenblum & Lewis, 1999). A person’s physical appearance is thus connected to their future body image through these interactions with other people and through the feedback that they provide (Lerner & Jovanovic cited in Rosenblum & Lewis, 1999; Lerner & Kaufman cited in Rosenblum & Lewis, 1999).

One of the most important motivations behind peoples concern with their appearance is the wish to be attractive to people of the opposite sex (Sobal et al., 1995). Although good looks are an advantage for both sexes, they are more than merely a pleasant bonus for women (Rand & Hall, 1983). Women try to physically fit the male ideal to increase their chances of finding a partner. Because the cultural ideal for female beauty influences one's attractiveness to the other sex, girls frequently believe that success in heterosexual dating is dependent upon their body shape and especially on being thin (Gershon et al., 2004). The fact that a woman’s physical appearance is very important to men may influence women’s preference for weight and their concern with weight (Cohn & Adler, 1992; Furnham, Dias, & McClelland cited in Markey et al., 2004). Women may strive to be thin because they believe that this is what men and society find most attractive (Bergstrom, Neighbors, & Lewis, 2004; Millman cited in Sobal et al., 1995). This might be the case as the popular belief is that a female who is only slightly overweight is at a significant disadvantage in the interpersonal relationship market (Allon, 1973).
There is a lot of evidence for a relationship between what women think men want and what women strive to look like. Women to a certain extent base their judgements of their bodies on what men of their race find attractive (Parker et al., 1995). Molloy and Herzberger (1998) found that women’s perceptions of men’s preferences for female body size significantly correlate with women’s preferred weight. While Powell and Kahn (1995) found significant Pearson correlations between two items that measured perceived pressure from males for thinness and discrepancy between current and ideal body sizes, Lerner et al. (1973) found that for college students of both sexes, what they saw as important for determining their own attractiveness, was also important for members of the opposite sex finding them physically attractive. Therefore, women may try to be physically appealing to attract a desirable partner (Siever, 1994).

Yet, some studies show that women might get what they think men would like women to look like quite wrong (Markey et al., 2004). Women have been found to believe that men prefer thinner women than they actually do (Bergstrom et al., 2004; Demarest & Langer, 1996; Fallon & Rozin, 1985; Rozin & Fallon, 1988) and so women generally tend to underestimate males’ preferred female figure (Cohn et al., 1987; Markey et al., 2004). Szymanski and Cash (1995) found that college women’s perceptions of their physical attributes as being different from men’s female ideals of attractiveness are positively related to body image distress. Thus, although men do stigmatize overweight women, women’s fear of not being accepted may be out of proportion to the stigmatization that happens in reality (Dwyer & Mayer, 1973) which shows the psychological impact of the “thin” norm on women (Kallen & Doughty, 1984).

Yet, what women believe men would like them to look like not only influences their own preference for how they should look when trying to find a partner, but also influences a woman’s preferences for, and feelings about her own appearance within an established relationship. When studying adult couples Blumstein and Schwartz (1983, p. 247) stated that “most wives…are keenly aware of the importance to their husbands of their looks”. Murray, Touyz, and Beaumont (cited in Markey et al., 2004) found that once in a relationship with a significant other, women report being more upset by their
companion’s comments about their weight. Women also report being more likely than men to change their eating behaviours and feelings about their bodies in keeping with what they perceive their partner’s preferences to be (Tantleff-Dunn & Thompson, 1995). Garner (1997) also found that interpersonal factors were important in determining whether a woman had a positive or negative body image.

According to Thomas (1989) women’s reports of their “significant others’” views of their appearance were strongly related to their body-image satisfaction, with the strongest positive correlates of body-image satisfaction being the perceptions of close male friends, boyfriends and spouses. It thus seems that body-image evaluation was very much influenced by the women’s judgement of the perceptions of important men in their lives (Thomas, 1989). In the 1997 Psychology Today survey (Garner, 1997) 40% of the female respondents named their partner’s opinion of their appearance as a factor fostering negative body image, while 48% named compliments on their appearance as encouragement to positive body image. Other studies also show a relationship between a woman’s perception of her boyfriend/husband’s satisfaction with her body and her own satisfaction with her body (Charles & Kerr, 1986; Markey et al., 2004; Miller, 2001; Tantleff-Dunn & Thompson, 1995). Yet, husbands’ actual satisfaction with their wives’ bodies was not significantly related to women’s own body satisfaction or to their perceptions of their husbands’ satisfaction with their bodies (Markey et al., 2004). The women in this study wanted to be thinner, and they thought their husbands also desired this. Yet, women underestimate how satisfied their partners are with their weight, as men are in reality relatively satisfied with their partners’ bodies and would only like them to be slightly thinner (Markey et al., 2004; Miller, 2001). Women thus seem to overestimate men’s preference for a thin woman.

If a woman perceives herself to differ from the body type/size that her partner would ideally want in a partner, it can have very negative consequences for her. Tantleff-Dunn and Thompson’s (1995) study clearly shows that women’s perception of their male partner’s preferred size plays an important role in predicting their own level of body image disturbance. Szymanski and Cash (1995) found greater emotional vulnerabilities
among women who not only fail to meet their own personal physical standards, but also believe that they fall short of partners’ aesthetic expectations.

From the previous two sections it is clear that a woman’s body size and physical attractiveness are important to potential male partners (Wiederman, 2000) and therefore these aspects can influence her dating success and sexual history. The question is whether her subjective body image can influence her relationship status and number of sexual partners.

3.4 Body Image and Relationships

A few studies have shown that the subjective part of body image is significant because, although body dissatisfaction and body size are significantly related among women, this correlation is far from perfect (Wiederman & Hurst, 1998).

3.4.1 Body Image and Relationship Status

Studies have shown that women’s body image can be related to their current relationship status (Wiederman & Hurst, 1998). Women who perceive themselves as attractive and appear attractive to others are more likely to be involved in romantic relationships (Hoyt & Kogan, 2001; Wiederman & Hurst, 1998). According to Hoyt and Kogan (2001), many people who have poor body image are uncomfortable in intimate situations. They frequently do not want to be seen undressed by their romantic partner and are often preoccupied with aspects of their bodies with which there are discontented. This led Hoyt and Kogan (2001) to believe that women with better body image would be more likely to be involved in romantic relationships. Wiederman (2000) found that women who scored higher on a scale, designed to measure self-consciousness over one’s bodily appearance and concern that one would appear fat to an intimate partner, were less likely to be currently involved in a relationship.

Wiederman and Hurst (1998) also found women in romantic relationships to indicate non-significantly less body dissatisfaction than single women. According to Hoyt and
Kogan (2001) participants’ relationship status was unrelated to their satisfaction with their appearance, yet, those women who were most dissatisfied with their dating situations were also most dissatisfied with their body image.

It is clear that appearance and body image are important in finding a partner, but does it still play a role once relationships are formed?

3.4.2 Body Image and Sexual Relationships

Research has found a relationship between a woman’s physical attractiveness and her amount of sexual experience (Curran, Neff, & Lippold, 1973; Feingold, 1992) and it is known that a woman’s attractiveness is very important for sexual desirability before marriage (Hoyt & Kogan, 2001). Although it is clear that a woman’s real physical attributes (attractiveness, body size and shape) may be significant in determining male attention and sexual opportunity, subjective views about one’s attractiveness and body could also be linked to sexual self-schema (Wiederman & Hurst, 1997). Daniluk stated that qualitative studies show that physical attractiveness, body size and body image play important roles in the sexuality of women (cited in Wiederman & Hurst, 1997, 1998). Plausibly, viewing one’s physical attributes in a positive light would allow for greater confidence in heterosexual contacts, which could lead to more opportunities for sexual involvement and validation (Wiederman & Hurst, 1997). Therefore body image can be predictive of sexual experience.

According to Wiederman (2000) there are many young women who are not overweight, but for whom the appearance of their bodies during physical intimacy is a worry. Wiederman (2000) then found that women who scored higher on a scale which measures self-consciousness over one’s bodily appearance and concern that one would appear fat to an intimate partner, were less likely to have sexual experience. Research on sexual satisfaction found that those people who were dissatisfied with their sex lives were more dissatisfied with their body appearance than were those satisfied with their sex lives (Hoyt & Kogan, 2001). According to Hoyt & Kogan (2001) the way a woman perceives her own level of attractiveness seems to influence her comfort in and enjoyment of sexual
relationships. Results show that body image concerns can influence comfort during sexual activity, which presumably influences sexual enjoyment and intense body dissatisfaction may even lead to complete avoidance of sexual activity because of self-consciousness (Ackard et al., 2000).

Subjective views about one’s facial and bodily attractiveness may also be positively related to sexual experience and sexual esteem (MacCorquodale & DeLamater, 1979; Murstein & Holden, 1979; Wiederman & Hurst, 1998). Many studies find a relationship between positive body image and higher levels of sexual experience in women (Ackard et al., 2000; Faith & Schare, 1993; Trapnell et al., 1997). Yet, Wiederman and Hurst (1998) found general body dissatisfaction to be unrelated to sexual experience and they explain their finding by stating that relatively high levels of body dissatisfaction have become more or less normative for women in the United States and therefore the normative nature of body dissatisfaction may cancel out any potential relationships between body image and sexual experience.

3.4.3 Body Image and Relationship Satisfaction

Clearly a lot of studies had focussed on the role of body image in sexual satisfaction, yet very little research has been done in the field of body image and relationship satisfaction. Only a few studies have been done on the topic of weight and relationship satisfaction. A study by Stake and Lauer (1987) found that overweight women perceive their partners as less satisfied with their relationships than average weight women, but that this was not true for men. Sheets and Ajmere (2005) found a negative correlation between weight and relationship satisfaction in women. Previous studies have shown negative body image to be correlated with poor relations with members of the opposite sex during adolescence (Davison & McCabe, 2003). Yet, research focussing exclusively on the effect of body image on romantic relationships is needed.

Few studies have to date been done on romantic relationship satisfaction with South African samples and none of these had anything to do with either body image or adolescents. The only studied even remotely similar to what was done in the current
study is a study by Hoyt and Kogan (2001), who found individuals who were dissatisfied with their relationships to be non-significantly more dissatisfied with their body appearance than were those individuals who were satisfied with their relationship status. Hoyt and Kogan (2001) believed that women who saw themselves as attractive, and thus had more positive body image, would be more likely to enjoy romantic relationships. The current study thus aims to investigate the effect of body image on the level of satisfaction of South African adolescents with their romantic relationships.

3.5 Summary

Very little research has been done on the role of body image in romantic relationships. Women’s physical appearance has been found to play a central role in romantic relationships. For females’ physical attractiveness is frequently viewed as being thin and heavier women are stigmatized in the field of dating. Yet, men’s attitudes towards female attractiveness differ in different cultural groups.

If a women’s social environment considers her unattractive, the individual will frequently internalise this self-view and view herself as unattractive. Women frequently believe that their success in heterosexual dating depends on their body shape and especially on being thin, which may influence women’s preference for-, and concern with weight, and might lead them to strive to be thin. There is a lot of evidence for a relationship between what women think men want and what women strive to look like.

Research indicates that a relationship exists between a woman’s body image and her current relationship status. Body image also seems to play an important role in the sexuality of women. Very little research has been done in the field of body image and relationship satisfaction, with only a few studies having been done on the topic of weight and relationship satisfaction.
4.1 Introduction

In this chapter the adolescent period is discussed. The focus of this chapter will be on relevant developmental tasks, like body image development and dating relationships, and also the psychosocial crisis of this period.

The adolescent period is a time of great physical, emotional, intellectual, academic, social and spiritual change and development (Williams, 2001). For some there are also new social roles to be learned including that of being a girl- or boyfriend to another individual as male-female relationships become increasingly important as adolescents become older (Biehler & Hudson, 1986). As mentioned earlier body image is especially important during this period (Kostanski et al., 2003). Adolescent girls have to adapt to a changing body which, due to the changes of puberty, is increasingly discrepant with the societal ideal (discussed in more detail in section 2.7.2 Overview: Developmental Factors). These physical changes are especially difficult to accept in this period in their lives when the approval of others, especially their peers, is of paramount importance and when they try their best to conform to the group in every possible way.

4.2 Definition of Adolescence

Newman and Newman (1997) identified 11 stages of psychosocial development, and they divide adolescence into two stages:

1) Early adolescence (12 – 18 years)
2) Late adolescence (18 – 22 years)

They state that this division of the adolescent period into two stages was done because of the extension of adolescence due to various changes in modern society (Newman & Newman, 1997). The focus of the current study will be on early adolescence. Early adolescence starts with the onset of puberty and ends at about the age of 18 years, usually
when the person graduates from high school (Newman & Newman, 1997). According to Newman and Newman (1997) the early adolescent stage is characterized by quick physical changes that transform the child into an adult with considerable new cognitive abilities, emotional maturation, sexual awakening, and an increased sensitivity to interaction with peers.

4.3 Psychosocial Theory

4.3.1 Developmental Tasks
Developmental tasks refer to a set of skills and abilities that contribute to improved mastery over the environment (Newman & Newman, 1997). “These tasks define healthy, normal development at each age in a particular society” (Newman & Newman, 1997, p. 65). Havighurst (cited in Newman & Newman, 1997) believes that developmental tasks change with age because each society has expectations for behaviour that depend on the person’s age. A person who masters the tasks becomes mature and obtains satisfaction and reward while a person who fails to master them endures anxiety, unhappiness, social disapproval and inability to function as a mature individual (Newman & Newman, 1997; Rice, 1984). According to Newman and Newman (1997) the developmental tasks for the life stage of early adolescence (ages 12 to 18) are:

- physical maturation
- formal operations
- emotional development
- membership in the peer group
- sexual relationships

Havighurst’s (1972) psychosocial view of adolescence combines consideration of individuals’ needs with societal demands and so the developmental tasks consist of what individuals need and society requires. According to Havighurst (1972) the eight tasks are:

1. Accepting one’s figure and using the body successfully
2. Attaining new and more mature relations with peers of both sexes
3. Achieving a masculine or feminine social sex-role
4. Attaining emotional independence from parents and other adults
5. Making preparations for an economic career
6. Preparing for marriage and family life
7. Desiring and accomplishing socially responsible behaviour
8. Developing an ideology to guide behaviour

When studying these two sets of developmental tasks it is clear that both body image (“Accepting one’s figure and using the body successfully”; “physical maturation”) and relationships (“sexual relationships”; “preparing for marriage and family life”) are important themes in adolescence. Adolescents have a lot of physical changes to come to terms with and are also at an age when relationships with the opposite sex start playing an increasingly important role. Two of the developmental tasks have to do with dating in the sense that Lloyd views dating relationships as a practicing ground for the more serious and lasting romantic relationships of adulthood (cited in Carlson, 1999). Therefore the belief that these are important topics in the lives of adolescents is also reflected in the literature.

4.3.1.1 Dating and Romantic Relationships

Furman (2002) believes dating relationships to be central to adolescents’ lives. According to Shulman and Scharf (2000) adolescent dating relationships are believed to play a significant role in the development of later important romantic relationships, yet little is known of the nature of these adolescent relationships. During adolescence there is a new interest in the opposite sex, and also new sexual interests and behaviour (Newman & Newman, 1997). There is an increased interest in dating and the selection of dating partners as adolescents move through the grades (Biehler & Hudson, 1986; Roscoe et al., 1987). According to Sobal, et al. (1995) adolescence is the time when people begin dating and also start establishing preferences for the sort of person they may ultimately marry. A lot of an adolescent’s time is spent evaluating and comparing potential partners, and when a romantic relationship is formed, it quickly overshadows other relationships

According to Rice (1984) American girls begin dating at age 13 while Meller et al. (cited in Kail and Cavanaugh, 2000) proposes that they typically begin to date at about age 15. Rice (1984) also found that by high school level at any given time about 25% of all adolescents were in a steady, exclusive relationship. Yet, cultural factors strongly influence dating patterns (Kail & Cavanaugh, 2000) so the age at which girls start dating and the frequency of dating might be different in South Africa. A study by Shulman and Scharf (2000) on Israeli adolescents found older adolescents to be more likely than the younger ones to be involved in a romantic relationship. This finding was confirmed in a study by Montgomery and Sorell (1998) with a sample of American adolescents.

When adolescents first start dating, the most important qualities they search for in a mate are looks and popularity (Biehler & Hudson, 1986). As time moves on, personality traits and social sophistication are the qualities that they most desire, but eventually, characteristics like dependability and sensitivity are viewed as most important (Biehler & Hudson, 1986). Not only are there differences between the age groups, but also between the sexes. Male adolescents viewed a person’s physical attractiveness and sexual activity as more important when choosing a romantic partner than did female adolescents, who placed greater importance on personality and behaviour traits (Roscoe et al., 1987).

Originally, the principal purpose of dating was to select a partner, but these days dating serve a variety of functions for adolescents (Kail & Cavanaugh, 2000). Some of the functions of dating are (Kail & Cavanaugh, 2000; Rice, 1984; Skipper & Nass, 1966; Williams, 2001):

- Recreation and entertainment. An important purpose of dating is to have fun.
- It aids adolescents in learning adult standards of interpersonal behaviour.
• Status grading. It is a way to establish or raise one’s status among peers by dating and being seen with persons rated as “highly desirable” by one’s peers.
• Provides an opportunity for sexual experimentation.
• Provides companionship like that experienced between best friends without the responsibility of marriage.
• Achieving intimacy, in which a meaningful relationship is established with a person of the opposite sex.
• Socialization. It is an opportunity to get to know members of the opposite sex, learn to adjust to each other, and develop suitable techniques of interaction.
• Mate selection and courtship.

The functions of dating change as adolescents get older (Kail & Cavanaugh, 2000). “Middle” adolescents (ages 14 to 18) most often chose recreation, status, socialization and intimacy as reasons for dating (Roscoe et al., 1987).

Very little research has been done on the dating relationships of South African adolescents and little is known about the prevalence, cultural differences in dating practices, and age of onset of dating in this population. The few studies that have been done on dating have mainly focussed on aspects like abusive relationships (Whitefield, 1999; Whitehead, 1998), sexual relationships and health (Swart, 1999), and AIDS (Nyachuru-Sihlangu, 1993).

4.3.1.2 Body Image During Early Adolescence

According to Ferron (1997, p. 735) “Body image lies at the heart of adolescence” while McCandless (1970, p. 127) believes that to a large extent the adolescent “is his body, and his body is he.” Lerner and his colleagues (Lerner et al., 1973; Lerner et al., 1976) have proposed that during adolescence an individual’s body and physical attributes are especially significant and at that time physical appearance is the dominant concern for females.
During the adolescent period young people experience powerful physiological, psychological, and social changes (Mostert, 1995). Puberty is accompanied by dramatic physical changes that can potentially impact the lives of adolescents in many ways (Mostert, 1995). Pubertal development causes the female shape to change with an increase in body fat and a gradual broadening of the hips (Williams, 2001) and adolescent girls’ body mass indexes also steadily increase with increasing age (Byely et al., 2000; Rosenblum & Lewis, 1999; Wardle & Marsland, 1990). These changes take them further away from the slim societal ideal (Rosenblum & Lewis, 1999; Williams, 2001) and lead to dissatisfaction with appearance (Williams, 2001). According to Mostert (1995) adolescents are especially sensitive to pressures to conform to the ideal appearance and any departure from what the adolescent views as the ideal can cause feelings of being different and inferior (Schonfeld cited in Collins & Plahn, 1988).

An adolescent’s body image changes to accommodate the physical changes (Rosenblum & Lewis, 1999). This process could occur by comparing their changing appearance to the cultural ideal physical appearance (Brownell cited in Rosenblum & Lewis, 1999; Faust, 1983). Adolescents experience increased self-awareness and a lot of attention is focused on the self (Williams, 2001). According to Rice (1984) their emerging, often excessive, self-consciousness about their appearance as they reach sexual maturity is one of the characteristics of adolescents. This self-consciousness causes adolescents to worry a lot about their rates of development and their physical characteristics and appearance (Rice, 1984). This combination of changing appearance and increased capacity for introspection may cause adolescents to be especially vulnerable to extreme and negative preoccupation with their own and others’ views of their bodies (Rosenblum & Lewis, 1999; Simmons et al., 1983). Girls’ body image significantly decreases throughout adolescence while body dissatisfaction increases over time (Byely et al., 2000; Rosenblum & Lewis, 1999; Wardle & Marsland, 1990) and overestimation of fatness is typical of girls in the adolescent period (Williams, 2001). According to Byely et al. (2000) the frequent occurrence of weight concerns and dieting among adolescent girls has been well documented.
The peer group plays a very important role in almost every aspect of the adolescent’s life and also in body image. According to Schonfeld (cited by Collins & Plahn 1988) the adolescent’s perceived ideal appearance is mainly determined by the peer group. For adolescents, physical appearance is very important (Mostert, 1995). It is viewed as one of the strongest influences on an adolescent’s popularity, peer acceptance, and self-evaluation (Jensen, 1985; Jones, 2001; Littrell et al., 1990). To be accepted by and to conform to the peer group are significant and indispensable issues in an adolescent’s personal development and are also some of their main concerns (Bukowski, Hoza, & Boivin cited in Jones, 2001; Mostert, 1995). Gerner (2003), in a study of adolescent girls, found that friendship factors accounted for a significant amount of variance in the prediction of body image concern, body dissatisfaction, and restrained eating. Heavier girls were more likely to believe that being thinner would improve their friendships, yet in truth they did not experience poorer friendships (Gerner, 2003). These results emphasize the importance of perceptions of peer affiliation on body image and dietary restraint (Gerner, 2003).

These high levels of dissatisfaction that adolescent girls experience can negatively influence their functioning. Corey and Corey (cited in Mostert, 1995) conclude that “if you feel basically unattractive, unappealing, or in some other way physically inferior, these self-perceptions are likely to have a powerful effect on other areas of your life”. Therefore, for the adolescent, physical appearance, and especially the physical self image, is an important issue (Mostert, 1995). It is proposed that body image is a crucial part of an adolescent’s life and one which is connected to many other parts of her life, including her interpersonal relationships, physical activities and self concept (Mostert, 1995). Ferron (1997) and Padin et al. (1981) also believe that an adolescent’s adaptation to the physical changes of puberty exercises a strong influence on her social adjustment, psychological well-being, psychosocial functioning and health behaviours. Many theorists have emphasized that, during the adolescence, a person’s views about her body are continuously related to her self-esteem (Padin et al., 1981) and Erikson (cited in Lerner et al., 1976) strongly emphasizes the adolescent’s physical features as a source of identity and self-concept.
Researchers have repeatedly pointed out that an association exists between dieting and eating disorders and negative body image. In South African, Szabo and Hollands (1997) in a study of Black and White Johannesburg adolescent girls, found the prevalence of dieting to be alarmingly high. He found 20% of the sample tested had abnormal attitudes to eating and was at risk for eating-related problems. Szabo and Hollands (1997) found a steady rise in the number of eating disorders among the Black population in South Africa which shows that eating disorders can no longer be seen as a problem specific to South Africa’s minority white population.

4.3.1.3 Possible Link Between Body Image and Dating Relationships

Body image and dating relationships are clearly important during adolescence and are both developmental tasks of adolescence. The question is now whether they have an influence on each other? There as some indications that this might be the case.

Davison and McCabe (2003) found a negative body image to be strongly related to poor interaction with members of the opposite sex during adolescence. Berscheid, Walster and Bornstedt (1973) found that adolescents who were satisfied with their bodies and thus had a positive body image, seemed to relate better to other people and particularly to members of the opposite sex than did those who were dissatisfied with their looks. Mostert (1995) also believes physical appearance to play an important role in the social life of the adolescent and she found this to be true in her own study which found the body image of her sample of adolescent girls to be strongly associated with their level of social involvement. Gerner (2003), with a sample of grade 9 and 10 girls, found that beliefs about the impact of thinness on male friendships exert a strong influence on body image and dietary restraint among the adolescent girls. Williams’ (2001) study found that the female adolescents felt that the expression of love from boyfriends caused the girl to feel special and good about herself.

4.3.2 Psychosocial Crisis

According to Erikson the individual has a psychosocial task to master in each stage of human development (Rice, 1984). This confrontation with each task produces a conflict
which has two possible outcomes and is called a psychosocial crisis (Rice, 1984). If the conflict during that stage is effectively resolved, a positive quality is built into the personality and further development takes place, but if the conflict continues or is not resolved satisfactorily, the individual’s ego is damaged because a negative quality is integrated into it (Rice, 1984). A psychosocial crisis occurs when a person makes psychological adjustments to social demands at each developmental stage (Newman & Newman, 1997). Yet, in this context “crises” refers to a normative set of stresses instead of an unusual set of events (Newman & Newman, 1997).

According to Erikson, the psychological task of the adolescence period is achieving identity versus identity confusion/diffusion (Rice, 1984). During this stage old and new identities are consolidated to form a new personal identity which enables adolescents to know who they are and where they are going (Williams, 2001). Newman and Newman (1997) on the basis of their different developmental stages, name group identity versus alienation as the psychosocial crisis of early adolescence. They believe that every psychosocial crisis involves a discrepancy between a person’s developmental capabilities at the start of the stage and societal pressures for more effective, integrated functioning.

What these two different approaches have in common is that both emphasize identity as an important issue during the adolescent period. And it seems that both body image and relationships are connected to the adolescent identity. Erikson (cited in Lerner et al, 1976) places strong emphasis on the adolescent’s physical features as a source of identity. Potash (2002) also believes body image to be a significant part of identity development, especially during adolescence when adaptation to pubertal changes is an important developmental task. Douvan and Adelson have the following to say about dating, “the dating mechanism serves in defining and testing of identity; it is a laboratory for training in the social graces; it provides occasion for sexual experimentation and discovery; it is used to chart popularity and success” (p. 203; Biehler & Hudson, 1986, p. 584), while Daniluk (1993) views sexuality as a critical component of identity formation. Furman (2002) also names adolescent romantic relationships as an aspect that affects identity development.
4.4 Summary

Early adolescence starts with the onset of puberty and ends at about the age of 18 years. When looking at the developmental tasks of adolescence, it is clear that both body image and dating relationships are important themes in adolescence. Adolescents have a lot of physical changes to come to terms with and are also at an age when relationships with the opposite sex start playing an increasingly important role.

Adolescent dating relationships are central to adolescents’ lives and are believed to play a significant role in the development of later important romantic relationships, yet very little research has been done on the dating relationships of South African adolescents. Cultural factors have been found to strongly influence dating patterns.

Body image also seems to be a topic that is of vital importance to the adolescent. During adolescence young people experience pubertal development, which take them further away from the slim societal ideal and leads to dissatisfaction with appearance. These changes come at a time when their appearance is of the utmost concern for the adolescent females. Body image is also connected to many other important parts of the female adolescent’s life.

There is some evidence for a link between adolescents’ body image and their dating relationships. Additionally, both body image and dating relationships are linked to adolescent identity which is the psychosocial crisis of this period.

4.5 Summary of Literature Review

Body image and dating relationships are two of the most important topics in the life of the female adolescent. Adolescents are at a time in their lives when they have to come to terms with many physical changes and when relationships with the opposite sex become increasingly important. Adolescent women are the group with the worst body image. Yet,
not much South African research has been done on either body image or dating relationships with adolescent populations.

International research has shown racial and cultural differences to exist for both body image and dating patterns. White women seem to have more negative body image than Black women although little is known about the South African situation. Therefore, it is also important to investigate the role of culture in South African adolescents’ body image and dating relationships.

Very little research has been done on the role of body image in romantic relationships, both internationally and locally. There are some indications that a link might exist between adolescents’ body image and their dating relationships. Research has found a relationship between women’s body image and their relationship status. Yet, little research has been done in the field of body image and relationship satisfaction, with only a few studies having been done on the topic of weight and relationship satisfaction. Thus, it is important to investigate the possible relationship between female adolescents’ body image and their dating relationships.
CHAPTER 5
RESEARCH GOALS AND HYPOTHESES

5.1 Broad Aims of the Study

In general the study aims to investigate body image and romantic relationships in a sample of South African female adolescents from four different cultural groups. Specifically, there are three broad aims.

5.1.1 Primary Aim
The primary aim of this study is to investigate the potential relationship between female adolescents’ body image and their relationships. Specifically:

• to determine if a relationship exists between participants’ body image, as measured by four different measures, and their relationship status.
• to establish if a relationship exists between participants’ body image, as measured by four different measures, and participants’ satisfaction with their romantic relationships.

Furthermore, additionally, to determine if participants’ culture or body mass index had any influence on the above relationships. Therefore, the research will focus on whether an adolescent’s body dissatisfaction and own appearance evaluation are related to her ability to have a dating relationship and her satisfaction with this relationship.

5.1.2 Secondary Aim One
The first secondary aim of the study is to investigate aspects of the body image of the current sample by measuring four aspects of body image and establish how they are influenced by the following factors:
• participants’ cultural group
• participants’ age
• participants’ body size
5.1.3 Secondary Aim Two
The second secondary aim of the study is to investigate aspects of the relationship status and also relationship satisfaction of the current sample by establish how they are influenced by the following factors:
• participants’ cultural group
• participants’ age
• participants’ body size

5.2 Hypotheses

5.2.1 Hypotheses: Body Image

Hypothesis 1: Relationships will exist between the four different measures of body image.

Hypothesis 2: The cultural groups will score differently from each other on the measures of body image with Coloured and Black females having more positive body image than both English- and Afrikaans-speaking White females.

Hypothesis 3: Body image will change with age, with older girls having more negative body image than younger girls.

Hypothesis 4: Older females will have a higher body mass index than younger females. Black and Coloured females will have a higher mean body mass index than both English and Afrikaans White girls.

Hypothesis 5: Participants with higher body mass indexes will score more negatively on measures of body image than will participants with lower body mass indexes. There is a relationship between a girl’s body image and her body mass index. This relationship will be different for each cultural group.
5.2.2 Hypotheses: Romantic Relationships

5.2.2.1 Relationship Status

Hypothesis 6: There will be a relationship between a girl’s age and her relationship status.

Hypothesis 7: There will be a relationship between body mass index and relationship status. This relationship will be influenced by culture.

Hypothesis 8: The cultural groups will not differ in their frequency of being in a dating relationship.

5.2.2.2 Relationship Satisfaction

Hypothesis 9: There will not be a relationship between a girl’s age and her satisfaction with her dating relationship.

Hypothesis 10: There will be a relationship between a girl’s body mass index and her satisfaction with her dating relationship.

Hypothesis 11: The cultural groups will not differ on their level of satisfaction with their dating relationships.

5.2.3 Hypotheses: Body Image and Romantic Relationships

Hypothesis 12: There will be a relationship between a girl’s body image and her relationship status.

Secondary hypotheses: This relationship will be different for the different cultural groups and body mass index groups.
Hypothesis 13: There will be a relationship between a girl’s body image and her satisfaction with her dating relationship.
Secondary hypotheses: This relationship will be different for the different cultural groups and body mass index groups.
CHAPTER 6
METHOD OF RESEARCH

6.1 Sampling

Female adolescents were chosen as the participating group for this study because the literature indicates that this is the group for whom physical appearance and body image are not only the most important but also of the greatest concern (as discussed in Chapters 2 and 4).

The decision was made to sample girls from different cultural groups, as previous research indicates that race and culture not only play a role in body image, but also in how appearance influences romantic relationships (discussed in Sections 2.6 and 3.2). The decision was made to sample four different cultural groups: Afrikaans-speaking White girls, English-speaking White girls, isiXhosaspeaking Black girls and Afrikaans-speaking Coloured girls. From here on the groups will be referred to as Afr/White, Eng/White, Black and Coloured. A distinction was made between Afrikaans and English-speaking White girls because of the belief that they come from two separate cultural groups with different family values and beliefs which could potentially impact their views on body image and relationships. These groups were chosen because they are some of the largest cultural groups in the Western Cape area.

As Williams (2001) is of the opinion that bulimia in South Africa is more common in the part of the population that has access to television and as the literature shows the media has a large influence on body image (discussed in detail in section 2.4.3.3.1 The Media), it was decided to sample only more urbanized sections of these groups as they would probably have had more frequent contact with different forms of the media. This prevents any cultural differences in body image that we may find in fact to be differences caused by varying levels of exposure to the media. Other South African research also points to westernization as an important influence. Szabo (1998) believed urbanization to play a role in the appearance of eating disorders in South Africa’s black community while
Haynes (1995) found urban Black women who were more westernized, to have more body dissatisfaction than the less westernized rural Black women.

According to Newman and Newman (1997) early adolescence stretches from age 12 to 18. Yet, as the focus of the current study is dating, which is more important during the high school years, only secondary school pupils from grades eight to eleven were sampled. The grade 12 classes were excluded due to their busy academic schedules during the matric year. Four schools were selected because they represented girls from a variety of cultural groups, but also because they were all public schools located in urban areas. All schools were co-educational, as Kouzma (2003) found differences in romantic relationships between girls who attended co-educational and all-girls schools regarding frequency of being in a romantic relationship and relationship satisfaction. About 160 girls, 40 per grade, were randomly selected by teachers from each school to participate in the study.

Six hundred and sixteen questionnaires were handed out at the four schools, of which 575 were returned completed. Another 36 questionnaires were excluded as the participants were too old (thus older than 18) and 1 because the participant was too young (younger than 13). A further 27 questionnaires were excluded as the participants were from other cultural groups than the four that had been selected for this study. Finally, 511 completed questionnaires were included in the study. The details regarding the grade, cultural and age composition of the sample are found in Table 1 and Table 2 respectively.

Participants’ mean age was 15.43 years ($SD = 1.38$). The mean age was 15.17 ($SD = 1.33$) for the Afr/White group, 14.92 ($SD = 1.33$) for the Eng/White group, 16.02 ($SD = 1.44$) for the Black group and 15.72 ($SD = 15.72$) for the Coloured group. As Levene’s test indicated that the population variances were significantly different ($p < 0.05$), Welch’s robust test of equality of means was used to determine if the groups’ mean ages were significantly different from one another. Significant age differences were found ($F(3, 279.282) = 17.910, p < 0.01$). Post hoc tests reveal that the Afr/White and the Eng/
White groups’ mean ages were significantly lower than the Black and Coloured groups ($p < 0.05$). No significant age difference existed between the Afr/White and the Eng/White groups and between the Black and the Coloured groups respectively ($p > 0.05$).

Table 1

*Sample Grade and Cultural Group Composition*

<table>
<thead>
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<th>Black</th>
<th>Coloured</th>
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<tr>
<td>Total</td>
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<td>138</td>
<td>129</td>
<td>106</td>
<td>511</td>
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Table 2

*Sample Age and Cultural Group Composition*

<table>
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<td>511</td>
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</table>
Figure 1 reflects the weight distribution of the sample.

Figure 1. Percentage of participants in each of the four weight groups.

As can be seen from Figure 1, the sample consisted of a great majority of normal weight participants and contained very few girls who were either under- or overweight.

6.2 Research Design

A cross-sectional survey research design was used. Data was collected using self-report questionnaires. This method was used because of the relatively large sample size and the sensitive nature of some of the questions which might be potentially embarrassing for participants to answer in an interview situation.
6.3 Measuring Instruments

This study focussed on two aspects: the body image of adolescent girls and their romantic relationships. The body image component was measured using the Eating Disorder Inventory’s (EDI) Body Dissatisfaction subscale (Garner, Olmstead, & Polivy, 1983), the Body Cathexis Scale (BCS) (Secord & Jourard, 1953) and measures of self-rated facial and bodily attractiveness. Participants’ current relationship status was requested and the Relationship Assessment Scale (RAS) (Hendrick, 1988) was used to measure their satisfaction with their current romantic relationship. A brief discussion of each measuring instrument follows.

1. Biographical questionnaire

Biographical information regarding the age, grade, race, home language, weight and height of the participant was collected (refer to Addendum A Section A).

Participants’ body mass index (BMI) was calculated by converting their self-reported height and weight into a standard index of overall body size according to Quetlet’s index: Kg/m² (Wiederman & Hurst, 1998). According to Balogun (1986) and Garrow and Webster (1985) BMI has been shown to be a convenient, reliable and relatively accurate measure of overall adiposity and has been used as a measure of body size in many studies focussing on various aspects of body image (e.g. Hoyt & Kogan, 2001; Rucker & Cash, 1992; Snooks & Hall, 2002; Wiederman, 2000; Wiederman & Hurst, 1998). Studies have found it to be a good measure of adolescent adiposity (Taylor, Falorni, Jones, & Goulding, 2003) while some even view it as the best measure (Popkin & Udry, 1998). As self-reported and measured BMI were highly correlated in previous studies (Burckes-Miller & Black cited in Hoyt & Kogan, 2001; Wiederman, 2000) and measurement by research assistants is more labour intensive and potentially embarrassing for research participants, BMI was calculated based on self-reported height and weight.

The Centers for Disease Control and Prevention (CDC, 2004) 2000 growth chart for girls ages 2-20 (refer to Addendum B) was used to classify the girls according to their BMI.
score into the following categories: Underweight, Normal Weight, Overweight, and Obese. Underweight was defined as having a BMI smaller than the 5th percentile. Normal Weight was defined as having a BMI between the 5th percentile and the 85th percentile, Overweight as between the 85th and 95th percentile and Obese as above the 95th percentile. These cut-off points have also been used in other studies of adolescent weight (e.g. Himes & Dietz cited in Ribeiro et al., 2003; Hosseini, Carpenter, Mohammad, & Jones, 1999; Pinhas-Hamiel et al., 2003; Popkin & Udry, 1998; Strauss & Mir, 2001; Wang & Wang, 2002).

2. Eating Disorder Inventory (EDI): Body Dissatisfaction subscale
The EDI (Garner et al., 1983) is an often used self-report measure of eating-related attitudes and traits (Wiederman, 2000) (refer to Addendum A Section D). The Body Dissatisfaction subscale measures the participant’s current dissatisfaction with the specific body parts which are the most problematic for women (Wiederman & Hurst, 1998). The subscale consists of 9 items and participants respond using a 6-point Likert-scale. The possible responses range from 1 = always to 6 = never. After four items are reverse-scored, an overall score is created by summing responses across all nine items. A participant’s score can range from 0 to 27 with higher scores indicating greater body dissatisfaction (Wiederman & Hurst, 1997).

Garner et al. (1983) reported a Chronbach’s alpha of .91 with a sample of female university students and Wiederman and Hurst (1998) one of .89 with a similar sample, while Shore and Porter (cited in Thompson, 1990) also found it to be internally consistent with a sample of adolescents. Garner (cited in Wiederman & Hurst, 1998) also found test-retest correlations of .95 for one week and .97 for three weeks. The scale has frequently been used to assess body dissatisfaction in studies with non-eatingdisordered female samples (Cusumano & Thompson, 1997; Harris, 1995; Posavac et al., 1998; Rucker & Cash, 1992; Siever, 1994; Thompson & Altabe, 1991; Wiederman & Hurst, 1998; Wiederman & Pryor, 1997) while Thompson (1990) and Gardner (2001) also mentioned it as a popular instrument with which to measure body satisfaction in their chapters on the assessment of body image.
The subscale was chosen as it measures satisfaction with the particular body parts that are influenced by pubertal development and it is thus especially relevant to use with adolescents. According to Thompson (1990) the reading level is fifth grade which also makes it suitable for use with school pupils. This measuring instrument has previously been used with a South African sample in a study by Geach (1995).

3. Body Cathexis Scale (BCS)

The original Body Cathexis Scale was developed by Secord and Jourard in 1953 and was a 46-item scale, but Tucker (1981) introduced a new 40-item version of the scale which has been used in more recent studies (refer to Addendum A Section C). Secord and Jourard defined body cathexis as “the degree of feeling of satisfaction or dissatisfaction with the various parts or processes of the body” (1953, p. 343). The scale is often used to measure attitude towards one’s physical body and to assess the satisfaction or dissatisfaction with its parts or processes (Mable, Balance, & Galgan, 1986).

The items consist of different body parts or aspects of the body which are responded to on a 5-point Likert-type scale ranging from 1 = strong negative and desire for change to 5 = strong satisfaction. A body cathexis score is established by summing the 40 items of the scale and then dividing the score by 40. A final score can thus range from 1 to 5. A high score would indicate that the person generally feels positive about her body while a lower score indicates a general negative feeling. Different versions of the scale have been used in a multitude of studies over the last few decades (e.g. Frost & McKelvie, 2004; Mable et al., 1986; Webster & Tiggemann, 2003) and Thompson (1990) also mentions it as one of the more popular measures of body dissatisfaction. It has even been used in a South African study with a sample of female first year university students (Ellis, 1990).

Secord and Jourard’s original scale had a reported reliability coefficient of .83 (Webster & Tiggeman, 2003). The test-retest reliability has been reported to be .87 (Tucker, 1981), while Weinberg, using the 40-item scale, reported a split-half reliability coefficient of .75 for adult females (Balogun, 1986). According to Balogun (1986) the test is reliable and
internally consistent. Sondhaus et al. (2001) also states that the scale has demonstrated both validity and reliability.

4. Self-rated facial and bodily attractiveness scales
Self-rated bodily attractiveness was assessed by requesting participants to use a 7-point scale to indicate their response to the statement “Overall, I would rate the attractiveness of my body as….” The response scale was anchored with 1 = Well Below Average, 4 = Average, and 7 = Well Above Average. Self-rated facial attractiveness was assessed by asking the participants to use the same 7-point scale in response to the statement “Overall, I would rate the attractiveness of my face as….” (refer to Addendum A Section B). This method of self-rating facial or bodily attractiveness has been used in previous studies (Feingold, 1992; Wiederman, 2000; Wiederman & Hurst, 1997; Wiederman & Hurst, 1998).

5. Current relationship status
Participants were asked to indicate their current relationship status using five categories: has never dated anyone, not dating anyone currently, casually dating one or more people, dating one person exclusively, and engaged or planning to marry (refer to Addendum A Section E). Responses to this item were used to categorize participants into four groups. The participants indicating that they were engaged or were planning to marry were combined with those indicating that they were dating one person exclusively to form the fourth group, as only ten people indicated that they were engaged or planning to marry. This method of assessing relationship status has been used in previous studies (Wiederman, 2000; Wiederman & Hurst, 1998).

6. Relationship Assessment Scale
Relationship satisfaction will be assessed by using the Relationship Assessment Scale (RAS) (Hendrick, 1988). The RAS is a 7-item Likert-scale instrument designed to measure satisfaction in romantic relationships not limited to marital relationships (refer to Addendum A Section F). Responses are given on a 5-point Likert-scale, with different anchors for each item. After reverse-scoring items 4 and 7, items are summed for a total
score (A=1, E=5). Scores can range from 7 to 35 with higher scores indicating greater relationship satisfaction. It has been used extensively by Cramer (2001a, 2001b, 2002, 2003, 2004a, 2004b) in studies on relationship satisfaction.

It has good concurrent validity and very good internal consistency, with an alpha of .86 (Hendrick, 1988). The RAS shows moderate to high correlations with other measures of marital satisfaction, for example the Dyadic Adjustment Scale and the Kansas Marital Satisfaction Scale, yet it has also been tested with dating couples (Hendrick, Dicke & Hendrick, 1998). The results of a study by Vaughn and Matyastik Baier (1999) support the criterion-relate validity of the RAS as a measure of relationship satisfaction. The RAS test-retest reliability was .85 and it showed consistent measurement properties across samples with couples of different ages and ethnicities in a study by Hendrick et al. (1998). The RAS is suitable for the purposes of the current study as it is a relatively brief measure and it is easy to administer.

6.4 Procedure

Permission was obtained from the Western Cape Department of Education to visit four schools in the Western Cape. The individual schools were then asked for permission to distribute the questionnaires to the students during class time. After obtaining permission from the Western Cape Department of Education as well as the respective schools, an appointment was made with each school to visit the school on a date convenient for them to discuss the research project, to get permission and to make arrangements to administer the questionnaires.

The researcher trained five research assistants to assist with the data collection. The researcher informed them of the nature of the study and the procedure surrounding the administration of the tests. The researcher was then accompanied to each of the schools by a number of the assistants which depended on how large the group of participants
would be. The selection of the assistants for each visit also depended on the first language of the assistant and that of the majority of the children in the particular school.

The administration of the tests was done in group format with only girls present. The researcher had arranged for the boys to be moved to other classes for the duration of the session to decrease participants’ self-consciousness while answering possibly sensitive questions. The size of the groups depended on the ability of the girls to comprehend and answer the questions. After speaking to teachers it was decided that data collection with the younger participants (grades 8 and 9) and the isiXhosa-speaking girls would be done in smaller groups which could fit into classrooms as they experienced more difficulties and thus needed more assistance in completing questionnaires in English. With the isiXhosa-speaking groups there were two assistants and the researcher available at each session, due to the increased number of language related questions. Data collection with the older girls of the Afrikaans- and English-speaking schools was done in larger groups in the school halls as they needed very little assistance in completing the questionnaires.

At each session the researcher explained the nature and aim of the study to the group of participants and also assured them that confidentiality and anonymity would be maintained. The participants were informed that participation was voluntary and that they could leave out any items that they felt uncomfortable answering. Thereafter the questionnaires were handed out and the instructions for the completion of the questionnaire were explained. The researcher and assistants were available while the participants completed the questionnaire to answer any questions that they had.

The questionnaires were only available in English, but the assistants and researcher explained the nature of the study and answered all questions in the participants’ home language. When visiting the school that had a majority of isiXhosa-speaking pupils, the one assistant, who is himself isiXhosa-speaking, aided the participants in completing the questionnaires. The assistant is a registered clinical psychologist who was fully qualified to explain the nature of the study and how to complete the questionnaire to the participants in isiXhosa and also to translate any items that they did not understand.
An assistant was also available with to take measurements of participants who did not know their height or weight. The testing took between 20 and 40 minutes depending on the age and the home language of the participants. Thereafter the researcher thanked the girls for their participation and invited anyone who had any questions to come speak to her at the end of the session to discuss any related questions and problems. After the data had been collected, the researcher personally scored all the tests according to the instructions.

6.5 Ethical Considerations

Care was taken not to harm participants in any way. Consent was obtained from the Department of Education and the individual schools to do the study. The participants were also informed of the nature of the study beforehand and then asked whether they would participate. Participation was voluntary and participants were informed of the option not to complete any items that they felt uncomfortable with. If participants left out sections of the questionnaire their entire protocol was discarded. Participants were also informed that their questionnaires would be anonymous and at no time were their names or any other information requested that would make it possible for their identities to be discovered. Any information gathered from individual questionnaires was kept confidential and participants were informed of this beforehand. Special care was taken to use questionnaires that would not be harmful to the participants and the Department of Education was also consulted in this regard.

6.6 Statistical Techniques Used

Hypothesis 1
Spearman’s Rho was used to investigate the correlations between the four measures of body image (Face ratings, Body ratings, BCS scores, and EDI scores). These correlations were also repeated for each Body Mass Index and cultural group individually.
Hypothesis 2
The relationship between culture and body image was examined for each of the four measures of body image. This was done by using oneway Analysis of Variance to compare the means of each body image measure for the different cultural groups. Post hoc tests were then done to compare each cultural group with the others for each measure of body image.

Hypothesis 3
The relationship between age and body image was examined for each of the four measures of body image. This was done by using oneway Analysis of Variance to compare the means of each body image measure for the different age groups. Post hoc tests were then done to compare each age group with the others for each measure of body image.

Hypothesis 4
The relationship between age and body mass index was examined for each of the age groups. This was done by using oneway Analysis of Variance to compare the different age groups’ body mass indexes. The relationship between culture and body image index was also examined. To compare the different cultural groups’ BMI’s a oneway Analysis of Variance was done. Post hoc tests were done to further compare each cultural group with the others on BMI.

Hypothesis 5
The relationship between participants’ body image and their body mass indexes was investigated in two ways. Firstly, oneway Analysis of Variance was done to compare the different BMI groups for each body image measure. Post hoc tests were then done to further compare all measures of body image on BMI. Secondly, Spearman’s Rho was then used to investigate the correlations between the BMI data and the four body image measures. These correlations were also repeated for each cultural group individually.
Hypothesis 6
The relationship between participants’ age and their relationship status was investigated in two ways. Firstly, as both status and age were categorical variables, crosstabulation was used to examine the relationship between them. Thereafter, one-way Analysis of Variance was done to determine if the status groups’ mean ages significantly differed from each other. Post hoc tests were then done to further compare each status group with the others on age.

Hypothesis 7
The relationship between participants’ relationship status and their body mass indexes was investigated in two ways. Firstly, Kruskal-Wallis tests were used to determine if the relationship status groups had significantly different mean body mass indexes. Then one-way Analysis of Variance was done to determine whether differences exist between the BMI means for the different relationship status groups for each cultural group individually. Secondly, crosstabulation was used to examine the relationship between BMI group and status as both these variables were categorical.

Hypothesis 8
Crosstabulation was used to examine the relationship between cultural group and relationship status as both of these variables were categorical.

Hypothesis 9
The relationship between age and relationship satisfaction was investigated by using Analysis of Variance to determine whether differences existed between the RAS score means for each age. Simple regression analysis was also done to determine if age was a predictor of relationship satisfaction as assessed by the RAS. Thereafter, simple regression was done for each cultural group individually to determine if age was a predictor of relationship satisfaction for any of the cultural groups.
Hypothesis 10
The relationship between participants’ body mass indexes and their relationship satisfaction was investigated in two ways. Firstly, oneway Analysis of Variance was done to determine whether differences existed between the mean Relationship Assessment Scale scores for each BMI group. Thereafter, simple regression analysis was used to determine if BMI was a predictor of relationship satisfaction as assessed by the Relationship Assessment Scale.

Hypothesis 11
The relationship between culture and relationship satisfaction was examined by using oneway Analysis of Variance to compare the Relationship Assessment Scale means of the four cultural groups. Post hoc tests were then done to compare each cultural group with the others.

Hypothesis 12
The relationship between body image and relationship status was examined by using oneway Analysis of Variance to compare each measure of body image’s means for the four status groups. Post hoc tests were then done to compare each status group with the others. Then oneway Analysis of Variance was done to determine whether differences exist between the measures of body image’s means for the different relationship status groups for each cultural group individually. These analyses were also repeated for each body mass index group individually.

Hypothesis 13
Simple regression analysis was used to determine if any of the four measures of body image was a predictor of relationship satisfaction as assessed by the Relationship Assessment Scale. Simple regression was done for each cultural group individually to determine if any of the body image measures was a predictor of relationship satisfaction for any of the cultural groups. These analyses were also repeated for each body mass index group individually.
CHAPTER 7
RESULTS

The results are put forward in the same order as the hypotheses were put forward. Only the results of each hypothesis are given in this section with their implications being discussed in Chapter 8.

7.1 Body Image

7.1.1 Hypothesis 1:
Relationships will exist between the four different measures of body image.

7.1.1.1 Total Sample

7.1.1.1.1 Descriptive Statistics
The means and standard deviations of the four measures of body image for the total sample are given in Table 3.

Table 3
Means and Standard Deviations of Body Image Measures

<table>
<thead>
<tr>
<th>Body Image Measures</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>4.66</td>
<td>1.35</td>
</tr>
<tr>
<td>Body</td>
<td>4.57</td>
<td>1.34</td>
</tr>
<tr>
<td>BCS</td>
<td>3.51</td>
<td>.57</td>
</tr>
<tr>
<td>EDI</td>
<td>7.63</td>
<td>6.61</td>
</tr>
</tbody>
</table>

Note. Face = facial attractiveness rating; Body = body attractiveness rating; BCS = Body Cathexis Scale; EDI = Eating Disorders Inventory, Body Dissatisfaction scale.

7.1.1.2 Correlations
Correlations were done between the four body image measures to determine whether a relationship exists between them. The Body and the Face variables were both ordinal.
Although the BCS and EDI scores were measured on the interval level, the Shapiro-Wilk test shows that both sets of data significantly deviated from normality (\( p < .05 \)). Therefore, the Spearman correlation coefficient was used to investigate correlations between the four measures of body image. The results yielded by the analysis are shown in Table 4.

Table 4

Correlations Between Body Image Measures \((N = 511)\)

<table>
<thead>
<tr>
<th>Body Image Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Face</td>
<td></td>
<td>.511**</td>
<td>.354**</td>
<td>-.136**</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.403**</td>
<td>-.381**</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.451**</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01

As shown in Table 4, significant correlations were found between all measures of body image. A significant positive correlation (\( r = .511, p < .01 \)) was found between the Face and Body ratings. Thus, the higher a participant rated the attractiveness of her face, the higher she also rated the attractiveness of her body and vice versa. Significant positive correlations were also found between the BCS scores and the Face and Body ratings. This implies that the better the participants’ body image, as measured by the BCS, the higher they rated their facial (\( r = .354, p < .01 \)) and bodily (\( r = .403, p < .01 \)) attractiveness.

Significant negative correlations were found between scores on the EDI and all three the other measures. The higher scores on the EDI scale indicated greater body dissatisfaction. Therefore, the more positively the participants rated themselves on facial (\( r = -.136, p < .01 \)) and bodily (\( r = -.381, p < .01 \)) attractiveness, the less was their body dissatisfaction as measured by the EDI and vice versa. The relationship was the same between the EDI and the BCS. The higher the participants’ body image satisfaction, as measured by the BCS, the lower was their body satisfaction as measured by the EDI (\( r = -.451, p < .01 \)).
The hypothesis regarding a possible relationship between different measures of participants’ body image was also investigated for the different cultural and BMI groups.

7.1.1.2 Cultural Groups

The means of the four measures of body image for each of the four cultural groups are given in Figure 2.

![Bar chart showing means for Afrikaans/White, Eng White, Coloured, and Black groups for Face, Body, BCS, and EDI measures.]

*Figure 2.* Means of Body Image Measures (Face = facial attractiveness rating; Body = body attractiveness rating; BCS = Body Cathexis Scale; EDI = Eating Disorder Inventory, Body Dissatisfaction scale) for Each Cultural Group.

This hypothesis was investigated for the four cultural groups (Afr/White, Eng/White, Coloured, and Black) individually. As with the whole sample, Spearman correlations were done between the body image measures for each cultural group to determine whether a relationship exists between them. The results of these correlations are given in Table 5.
Table 5
*Correlations Between Body Image Measures For Each Cultural Group*

<table>
<thead>
<tr>
<th>Body Image Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Afr/White ($n = 138$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.529**</td>
<td>.398**</td>
<td>-.282**</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.459**</td>
<td>-.627**</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.582**</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eng/White ($n = 138$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.470**</td>
<td>.417**</td>
<td></td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.512**</td>
<td>-.485**</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.644**</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coloured ($n = 106$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.373**</td>
<td>.248*</td>
<td>-.010</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.448**</td>
<td>-.235*</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.308**</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black ($n = 129$)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.506**</td>
<td>.226*</td>
<td>.124</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.164</td>
<td>-.036</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.138</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

As shown in Table 5, there existed significant positive correlations between the Face and Body ratings for Afr/White ($r = .529, p < .01$), Eng/White ($r = .470, p < .01$), Coloured ($r = .373, p < .01$), and Black ($r = .506, p < .01$) participants. These findings show that the higher participants from all four cultural groups rated the attractiveness of their faces, the higher they also rated the attractiveness of their bodies and *vice versa*. 
The correlations between the BCS scores and the Face and Body ratings were found to be significantly positive for all the cultural groups, except for the Black group for whom only the correlation between the BCS scores and the Face ratings ($r = .226$, $p < .05$) was significant. These findings imply that the better these girls felt about their bodies, as measured by the BCS, the higher they rated their facial and bodily attractiveness and vice versa. Therefore, the better the Afr/White participants’ body image was, the higher they rated their facial ($r = .398$, $p < .01$) and bodily ($r = .459$, $p < .01$) attractiveness. This was also true for the Eng/White [Face ($r = .417$, $p < .01$); Body ($r = .512$, $p < .01$)] and Coloured [Face ($r = .248$, $p < .05$); Body ($r = .448$, $p < .01$)] participants.

Significant correlations between the EDI and the other measures of body image were only found for some cultural groups. None of these correlations were significant for the Black group. The Afr/White group was the only one for which the correlation between the EDI scores and the Face ratings was significant ($r = -.282$, $p < .01$), which indicates that the higher these participants’ EDI scores (and thus the higher their body dissatisfaction), the lower was their self-rated facial attractiveness. Significant negative correlations were found between the EDI and Body ratings for the Afr/White ($r = -.627$, $p < .01$), Eng/White ($r = -.485$, $p < .01$), and Coloured groups ($r = -.235$, $p < .05$). This shows that the worse these participants’ body dissatisfaction was with the body parts commonly of concern to females (as measured by the EDI), the lower they rated themselves on bodily attractiveness. Significant negative correlations were also found between the EDI and BCS scores for the Afr/White ($r = -.582$, $p < .01$), Eng/White ($r = -.644$, $p < .01$), and Coloured groups ($r = -.308$, $p < .01$). Thus, the worse these participants’ body dissatisfaction was with the body parts commonly of concern to females (as measured by the EDI), the more dissatisfied they were with their bodies (as measured by the BCS) and vice versa.

7.1.1.3 Body Mass Index Groups

This hypothesis was also investigated for the four BMI groups (Underweight, Normal Weight, Overweight and Obese) individually. The means of the four measures of body image for each BMI group are given in Figure 3.
As can be seen from Figure 3, differences clearly existed between the BMI groups with regard to the body image measures, especially for the EDI measure. Spearman correlations were done between the four body image measures for each BMI group to determine whether a relationship exists between them. The results yielded by the analysis are shown in Table 6.

The results, as depicted in Table 6, show that for the Underweight BMI group there were only two significant correlations. The underweight adolescents’ facial attractiveness ratings were significantly positively correlated with their BCS scores ($r = .579$, $p < .01$) which indicates that the higher their self-ratings of facial attractiveness, the higher was their body satisfaction, as measured by the BCS, and vice versa. Their EDI and BCS scores were significantly negatively correlated ($r = -.464$, $p < .05$). This was expected as they are both measures of body satisfaction, with higher scores on the EDI indicating more body dissatisfaction and higher scores on the BCS indicating less dissatisfaction.
Table 6

Correlations Between Body Image Measures For Each Body Mass Index Group

<table>
<thead>
<tr>
<th>Body Image Measures</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Underweight (n = 25)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.388</td>
<td>.579**</td>
<td>-.192</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.104</td>
<td>-.186</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.464*</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Normal Weight (n = 405)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.524**</td>
<td>.369**</td>
<td>-.176**</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.435**</td>
<td>-.380**</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.454**</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overweight (n = 63)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.551**</td>
<td>.313*</td>
<td>-.026</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.339**</td>
<td>-.344**</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.456**</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Obese (n = 18)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Face</td>
<td></td>
<td>.476*</td>
<td>.091</td>
<td>-.080</td>
</tr>
<tr>
<td>2. Body</td>
<td></td>
<td></td>
<td>.201</td>
<td>-.598**</td>
</tr>
<tr>
<td>3. BCS</td>
<td></td>
<td></td>
<td></td>
<td>-.497*</td>
</tr>
<tr>
<td>4. EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

The EDI and BCS scores were also significantly negatively correlated for the other three weight categories (Normal Weight, $r = -.454$, $p < .01$; Overweight, $r = -.456$, $p < .01$; Obese, $r = -.497$, $p < .05$). This shows that no matter what an adolescent female’s weight was, the two measures of body satisfaction were still related. Face and Body ratings were significantly positively correlated for the Normal Weight ($r = .524$, $p < .01$), Overweight ($r = .551$, $p < .01$), and Obese groups ($r = .476$, $p < .05$). Therefore, except for the
underweight girls, the higher self-ratings of facial attractiveness were for the sampled girls, the higher also were their self-ratings of bodily attractiveness and vice versa.

BCS scores were significantly positively correlated with both Face and Body ratings for both the Normal weight and the Overweight groups. This shows that the higher the self-rated facial attractiveness of a normal \((r = .369, p < .01)\) or overweight \((r = .313, p < .05)\) girl, the higher was her body satisfaction as measured by the BCS and vice versa. Results indicate that the situation was the same for the self-rated bodily attractiveness of a normal \((r = .435, p < .01)\) and overweight \((r = .339, p < .01)\) girl.

The Normal Weight group was the only group for whom there was a significant relationship between their Face ratings and their EDI scores \((r = -.176, p < .01)\). This finding indicates that the higher this group of girls rated their facial attractiveness, the less dissatisfied they were with those body-parts that women are usually dissatisfied with and vice versa. There was a significantly negative relationship between Body ratings and EDI scores for normal weight \((r = -.380, p < .01)\), overweight \((r = -.344, p < .01)\), and obese \((r = -.598, p < .01)\) participants. This shows that the more attractive these girls believed their bodies to be, the less dissatisfied were they with those body-parts that are usually of concern to women and vice versa.

7.1.2 Hypothesis 2:

The cultural groups will score differently from each other on the measures of body image, with Coloured and Black females having more positive body image than both English- and Afrikaans-speaking White females.

7.1.2.1 Descriptive Statistics

The means of the four measures of body image for each of the four cultural groups have already been shown in Figure 2. The figure shows that there were clearly differences between the cultures for each body image measure, yet Analysis of Variance tests needed to be done to determine whether these differences were statistically significant.
7.1.2.2 Comparing the Cultural Groups

To compare the means of each body image measure for the different cultural groups one way ANOVA’s were done. Levene’s test was done to determine whether the variances of the groups are the same. Levene’s test was significant \(p < .05\) for the Body, Face and EDI variables. This indicated a violation for the assumption of homogeneity of variances. Therefore an ANOVA was only done for the BCS \(p > .05\) data while Welch’s Robust Tests of Equality of Means were done to determine whether differences exist between the Body, Face and EDI means for the different cultural groups. The results from the ANOVA are shown in Table 7.

Table 7

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCS Between Groups</td>
<td>5.509</td>
<td>3</td>
<td>1.836</td>
<td>5.789</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>158.311</td>
<td>499</td>
<td>.317</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>163.820</td>
<td>502</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results showed a significant difference in the means of the cultural groups, when considering the results of the BCS \(F(3, 499) = 5.789; p < .05\). The results from the Welch test are shown in Table 8.

Table 8

<table>
<thead>
<tr>
<th></th>
<th>Statistic</th>
<th>(df_1)</th>
<th>(df_2)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>Welch</td>
<td>8.955</td>
<td>3</td>
<td>264.693</td>
</tr>
<tr>
<td>Body</td>
<td>Welch</td>
<td>9.252</td>
<td>3</td>
<td>265.155</td>
</tr>
<tr>
<td>EDI</td>
<td>Welch</td>
<td>14.839</td>
<td>3</td>
<td>267.940</td>
</tr>
</tbody>
</table>

These results showed a significant difference in the means of the cultural groups, when considering the results of the Face \(F(3, 264.693) = 8.955; p < .01\), Body \(F(3, 265.155) = 9.252; p < .01\), and EDI measures \(F(3, 267.940) = 14.839; p < .01\). Yet, Post hoc
The tests needed to be done to compare all cultural groups with each other. The Bonferroni test was done with the BCS as the variances were not unequal for that variable, while the Games-Howell test was used with the Face, Body and EDI variables as their variances were unequal. The results for these analyses are shown in Tables 9, 10, 11, and 12.

Table 9

*Multiple Comparisons for Culture, Dependent Variable: Face*

<table>
<thead>
<tr>
<th>Cultural Group (I)</th>
<th>Cultural Group (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Games-Howell</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afr/White</td>
<td>Eng/White</td>
<td>.144</td>
<td>.144</td>
<td>.746</td>
<td>-.23 - .52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>-.583*</td>
<td>.181</td>
<td>.008</td>
<td>-1.05 - -.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>-.489*</td>
<td>.166</td>
<td>.019</td>
<td>-.92 - -.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eng/White</td>
<td>Afr/White</td>
<td>-.144</td>
<td>.144</td>
<td>.746</td>
<td>-.52 - .23</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>-.728*</td>
<td>.176</td>
<td>.000</td>
<td>-1.18 - -.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>-.634*</td>
<td>.160</td>
<td>.001</td>
<td>-1.05 - -.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coloured</td>
<td>Afr/White</td>
<td>.583*</td>
<td>.181</td>
<td>.008</td>
<td>.11 - 1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>.728*</td>
<td>.176</td>
<td>.000</td>
<td>.27 - 1.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>.094</td>
<td>.195</td>
<td>.963</td>
<td>-.41 - .60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>Afr/White</td>
<td>.489*</td>
<td>.166</td>
<td>.019</td>
<td>.06 - .92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>.634*</td>
<td>.160</td>
<td>.001</td>
<td>.22 - 1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>-.094</td>
<td>.195</td>
<td>.963</td>
<td>-.60 - .41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

According to Table 9, the Afr/White and Eng/White girls’ Face means significantly differed from the Black and Coloured girls’ Face means ($p < .05$). Yet, the Afr/White and Eng/White girls’ means did not significantly differ from each other ($p > .05$) and neither did those of the Black and Coloured participants.
Table 10

*Multiple Comparisons for Culture, Dependent Variable: Body*

<table>
<thead>
<tr>
<th>(I) Cultural Group</th>
<th>(J) Cultural Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Games-Howell</td>
<td>Afr/White</td>
<td>Eng/White</td>
<td>.202</td>
<td>.143</td>
<td>.495</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>Eng/White</td>
<td>-.547*</td>
<td>.186</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Eng/White</td>
<td>-.447*</td>
<td>.159</td>
<td>.027</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>Afr/White</td>
<td>-.202</td>
<td>.143</td>
<td>.495</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>Eng/White</td>
<td>-.749*</td>
<td>.180</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Eng/White</td>
<td>-.649*</td>
<td>.153</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>Afr/White</td>
<td>.547*</td>
<td>.186</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>Afr/White</td>
<td>.749*</td>
<td>.180</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>Afr/White</td>
<td>.100</td>
<td>.193</td>
<td>.955</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coloured</td>
<td>.447*</td>
<td>.159</td>
<td>.027</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eng/White</td>
<td>.649*</td>
<td>.153</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coloured</td>
<td>-.100</td>
<td>.193</td>
<td>.955</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the .05 level.

The results of the Body measure, according to Table 10, were very similar to that of the Face measure. The Afr/White and Eng/White girls’ Body means significantly differed from the Black and Coloured girls’ Body means ($p < .05$). Yet, the Afr/White and Eng/White girls’ means did not significantly differ from each other ($p > .05$) and neither did the Black and Coloured girls.
According to Table 11, the only groups where BCS means were significantly different from each other, were the Afr/White and Eng/White girls, who significantly differed from the Black girls \((p < .05)\). Yet, the Afr/White and Eng/White girls’ means did not significantly differ from each other \((p > .05)\). The coloured girls did not significantly differ from either the Black girls or the Afr/White and Eng/White girls on this measure \((p > .05)\).
Table 12

*Multiple Comparisons for Culture, Dependent Variable: EDI*

<table>
<thead>
<tr>
<th>(I)Cultural Group</th>
<th>(J)Cultural Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afr/White</td>
<td>Eng/White</td>
<td>.355</td>
<td>.895</td>
<td>.979</td>
<td>-1.96 - 2.67</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>2.911*</td>
<td>.835</td>
<td>.003</td>
<td>.75 - 5.07</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>3.951*</td>
<td>.702</td>
<td>.000</td>
<td>2.13 - 5.77</td>
</tr>
<tr>
<td>Eng/White</td>
<td>Afr/White</td>
<td>-.355</td>
<td>.895</td>
<td>.979</td>
<td>-2.67 - 1.96</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>2.556*</td>
<td>.875</td>
<td>.020</td>
<td>.29 - 4.82</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>3.596*</td>
<td>.749</td>
<td>.000</td>
<td>1.66 - 5.54</td>
</tr>
<tr>
<td>Coloured</td>
<td>Afr/White</td>
<td>-2.911*</td>
<td>.835</td>
<td>.003</td>
<td>-5.07 - -0.75</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>-2.556*</td>
<td>.875</td>
<td>.020</td>
<td>-4.82 - -0.29</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>1.040</td>
<td>.676</td>
<td>.417</td>
<td>-.71 - 2.79</td>
</tr>
<tr>
<td>Black</td>
<td>Afr/White</td>
<td>-3.951*</td>
<td>.702</td>
<td>.000</td>
<td>-5.77 - -2.13</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>-3.596*</td>
<td>.749</td>
<td>.000</td>
<td>-5.54 - -1.66</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>-1.040</td>
<td>.676</td>
<td>.417</td>
<td>-2.79 - .71</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the .05 level.

The Afr/White and Eng/White girls’ EDI means significantly differed from the Black and Coloured girls’ EDI means \((p < .05)\). Yet, the Afr/White and Eng/White girls’ means were not significantly different from each other \((p > .05)\) and neither were the Black and Coloured girls.

7.1.3 Hypothesis 3:

**Body image will change with age, with older girls having more negative body image than younger girls.**

7.1.3.1 Descriptive Statistics

The means of the four measures of body image for each age group are shown in Figure 4.
When looking at Figure 4 it is unclear whether there was a difference in each body image measure between the age groups. Therefore, Analysis of Variance tests were done to determine whether the differences were statistically significant.

7.1.3.2 Comparing the Age Groups
To compare the different age groups on each body image measure, one-way ANOVA’s were done. Levene’s test was done to determine whether the variances of the groups were the same. Levene’s test was significant ($p < .05$) for the Body, Face and EDI variables. This indicates a violation of the assumption of homogeneity of variances. Therefore an ANOVA was only done for the BCS ($p > .05$) data while Welch’s Robust Tests of Equality of Means were done to determine whether differences existed between the Body, Face and EDI means for the different age groups. The results from the ANOVA are shown in Table 13 and those of the Welch test in Table 14.
The results show there was no significant difference in the means of the age groups, when considering the results of the BCS \[ F(5, 497) = .884; p > .05 \].

According to Table 14, there were no significant differences in the Body means of the age groups \[ F(5, 164.812) = 2.111; p > .05 \], yet there were significant differences in the means of the Face \[ F(5, 160.183) = 2.485; p < .05 \], and EDI \[ F(5, 170.377) = 3.790; p < .05 \] measures for the age groups. Yet, Post hoc tests needed to be done to compare all age groups with each other. This was only done with the Face and EDI scores as it is already known that there were no age differences on the Body and BCS scores. The Games-Howell test was done with the Face and EDI variables as their variances were found to be unequal. The results for these analyses are shown in Tables 15 and 16. To limit the size of these two tables only the significant results were shown in the tables.
Table 15
Multiple Comparisons for Age, Dependent Variable: Face

<table>
<thead>
<tr>
<th>(I) Age Group</th>
<th>(J) Age Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games-Howell</td>
<td>13</td>
<td>16</td>
<td>-.661*</td>
<td>.223</td>
<td>.044</td>
<td>-1.31</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>13</td>
<td>-.661*</td>
<td>.223</td>
<td>.044</td>
<td>.01</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the .05 level.

According to Table 15, the only significant result was that the 13-year-old and the 16-year-old girls’ Face means significantly differed from each other ($p < .05$).

Table 16
Multiple Comparisons for Age, Dependent Variable: EDI

<table>
<thead>
<tr>
<th>(I) Age Group</th>
<th>(J) Age Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games-Howell</td>
<td>16</td>
<td>18</td>
<td>3.165*</td>
<td>.966</td>
<td>.018</td>
<td>.35</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>18</td>
<td>3.418*</td>
<td>1.072</td>
<td>.022</td>
<td>.31</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>16</td>
<td>-3.165*</td>
<td>.966</td>
<td>.018</td>
<td>-5.98</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>18</td>
<td>-3.418*</td>
<td>1.072</td>
<td>.022</td>
<td>-6.53</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the .05 level.

According to Table 16 the only significant result was that the 18-year-old girls’ EDI mean significantly differed from that of the 16 and 17-year-old girls ($p < .05$).

7.1.4 Hypothesis 4

7.1.4.1 Hypothesis 4.1:
Older females will have a higher body mass index than younger females.
7.1.4.1.1 Descriptive Statistics

The mean BMI and its standard deviation for each age group are given in Table 17.

Table 17

*Means and Standard Deviations of Body Mass Index for Each Age*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Mass Index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>38</td>
<td>18.91</td>
<td>2.75</td>
</tr>
<tr>
<td>14</td>
<td>113</td>
<td>20.37</td>
<td>3.62</td>
</tr>
<tr>
<td>15</td>
<td>113</td>
<td>20.74</td>
<td>3.47</td>
</tr>
<tr>
<td>16</td>
<td>120</td>
<td>20.92</td>
<td>3.15</td>
</tr>
<tr>
<td>17</td>
<td>92</td>
<td>21.64</td>
<td>3.66</td>
</tr>
<tr>
<td>18</td>
<td>35</td>
<td>23.49</td>
<td>4.58</td>
</tr>
</tbody>
</table>

When looking at Table 17 it is clear that the participants’ mean BMI increased with age, yet it is unknown whether this increase in BMI is significant. Therefore, an ANOVA needed to be done to determine whether this difference was statistically significant.

7.1.4.1.2 Comparing the Age Groups

To compare the different age groups’ BMI’s a oneway ANOVA was done. Levene’s test was done to determine whether the variances of the groups are the same. Levene’s test was non-significant ($p > .05$) for the BMI variable. This indicates no violation for the assumption of homogeneity of variances and so an ANOVA was done for the BMI data. The ANOVA’s results are shown in Table 18.

Table 18

*The Analysis of Variance Results for Age*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI Between Groups</td>
<td>469.603</td>
<td>5</td>
<td>93.921</td>
<td>7.649</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6200.505</td>
<td>505</td>
<td>12.278</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6670.108</td>
<td>510</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results show there was a significant difference in the BMI means of the age groups 
$[F(5, 505) = 7.649; p < .05]$.

7.1.4.2 Hypothesis 4.2:
**Black and Coloured females will have a higher body mass index than both English and Afrikaans White girls.**

7.1.4.2.1 Descriptive Statistics
The mean BMI and its standard deviation are given for each cultural group in Table 19.

<table>
<thead>
<tr>
<th>Culture</th>
<th>N</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Mass Index</td>
<td>Afr/White</td>
<td>138</td>
<td>20.20</td>
</tr>
<tr>
<td>Eng/White</td>
<td>138</td>
<td>19.94</td>
<td>3.34</td>
</tr>
<tr>
<td>Coloured</td>
<td>106</td>
<td>20.90</td>
<td>3.80</td>
</tr>
<tr>
<td>Black</td>
<td>129</td>
<td>22.73</td>
<td>3.52</td>
</tr>
</tbody>
</table>

When looking at Table 19, it seems that the participants’ mean BMI was different for each cultural group, yet it is unknown whether these differences were significant. Therefore, an ANOVA needed to be done to determine whether these differences were statistically significant.

7.1.4.2.2 Comparing the Cultural Groups
To compare the different cultural groups’ BMI’s a oneway ANOVA needed to be done. Levene’s test indicated no violation for the assumption of homogeneity of variances and so an ANOVA was done for the BMI data ($p > .05$). These results are shown in Table 20.
Table 20

*The Analysis of Variance Results for Culture*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>624.120</td>
<td>3</td>
<td>208.040</td>
<td>17.446</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>6045.987</td>
<td>507</td>
<td>11.925</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>6670.108</td>
<td>510</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show there was a significant difference in the BMI means of the cultural groups \(F(3, 507) = 17.446; p < .05\). Yet, Post hoc tests needed to be done to compare all cultural groups with each other. Bonferroni was selected, as Levene’s test indicated no violation of the assumption of homogeneity of variances. Results are shown in Table 21.

Table 21

*Multiple Comparisons for Culture, Dependent Variable: BMI*

<table>
<thead>
<tr>
<th>(I)Cultural Group</th>
<th>(J)Cultural Group</th>
<th>Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonferroni</td>
<td>Afr/White</td>
<td>.2584</td>
<td>.4157</td>
<td>1.00</td>
<td>-.843 - 1.359</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>-.7016</td>
<td>.4460</td>
<td>.698</td>
<td>-1.883 - .480</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>-2.5254*</td>
<td>.4229</td>
<td>.000</td>
<td>-3.646 - -1.405</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eng/White</td>
<td>Afr/White</td>
<td>-2.584</td>
<td>.4157</td>
<td>1.00</td>
<td>-1.359 - .843</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>-.9599</td>
<td>.4460</td>
<td>.191</td>
<td>-2.141 - .221</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>-2.7838*</td>
<td>.4229</td>
<td>.000</td>
<td>-3.904 - -1.664</td>
</tr>
<tr>
<td>Coloured</td>
<td>Afr/White</td>
<td>.7016</td>
<td>.4460</td>
<td>.698</td>
<td>-.480 - 1.883</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>.9599</td>
<td>.4460</td>
<td>.191</td>
<td>-.221 - 2.141</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>-1.8238*</td>
<td>.4527</td>
<td>.000</td>
<td>-3.023 - -.625</td>
</tr>
<tr>
<td>Black</td>
<td>Afr/White</td>
<td>2.5254*</td>
<td>.4229</td>
<td>.000</td>
<td>1.405 - 3.646</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>2.7838*</td>
<td>.4229</td>
<td>.000</td>
<td>1.664 - 3.904</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>1.8238*</td>
<td>.4527</td>
<td>.000</td>
<td>.625 - 3.023</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.
As shown by table 21, the Black girls had significantly different BMI’s from the Afr/White, Eng/White and Coloured girls ($p < .05$), who did not significantly differ from each other regarding BMI.

7.1.5 Hypothesis 5

7.1.5.1 Hypothesis 5.1

Participants with higher body mass indexes will score more negatively on measures of body image than will participants with lower body mass indexes.

7.1.5.1.1 Descriptive Statistics for Each BMI group

The means of the four measures of body image for each BMI group have already been shown in Figure 3. The figure illustrates that in general smaller participants had more positive views of their bodies than heavier participants, but that the situation was reversed regarding views of their facial attractiveness. Yet Analysis of Variance tests needed to be done to determine whether these differences between the BMI groups were statistically significant.

7.1.5.1.2 Comparing the Body Mass Index Groups

To compare the different BMI groups for each body image measure, oneway ANOVA’s needed to be done. Levene’s test was done to determine whether the variances of the BMI groups were the same for each body image measure respectively. Levene’s test was significant ($p < .05$) for the BCS and EDI variables. This indicated a violation for the assumption of homogeneity of variances. Therefore an ANOVA was done for the Body and Face data, while Welch’s Robust Tests of Equality of Means were done to determine whether differences exist between the BCS and EDI means for the different BMI groups. The ANOVA results are shown in Table 22.
Table 22

*The Analysis of Variance Results for Body Mass Index*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>21.529</td>
<td>3</td>
<td>7.176</td>
<td>4.086</td>
<td>.007</td>
</tr>
<tr>
<td>Within Groups</td>
<td>879.936</td>
<td>501</td>
<td>1.756</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>901.465</td>
<td>504</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Face</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>6.814</td>
<td>3</td>
<td>2.271</td>
<td>1.245</td>
<td>.293</td>
</tr>
<tr>
<td>Within Groups</td>
<td>912.488</td>
<td>500</td>
<td>1.825</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>919.302</td>
<td>503</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show a significant difference in the means of the BMI groups, when considering the results of the Body ratings [$F(3, 501) = 4.086; p < .01$], but the results show no significant difference in the means of the BMI groups for Face ratings [$F(3, 500) = 1.245; p > .05$]. The results from the Welch test are shown in Table 23.

Table 23

*Robust Tests of Equality of Means for Body Mass Index*

<table>
<thead>
<tr>
<th></th>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCS</td>
<td>Welch</td>
<td>.919</td>
<td>45.943</td>
<td>.439</td>
</tr>
<tr>
<td>EDI</td>
<td>Welch</td>
<td>16.418</td>
<td>48.766</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results showed a significant difference in the means of the BMI groups for the EDI scores [$F(3, 48.766) = 16.418; p < .01$], but it showed no significant difference in the means of the BMI groups for the BCS scores [$F(3, 45.943) = .919; p > .05$]. Yet, Post hoc tests needed to be done to compare all BMI groups with each other. It was already known that no significant differences existed between the BMI groups for the BCS and Face data, so only the Body and EDI were investigated. The Bonferroni test was done with the Body data as the variances were not unequal for that variable, while the Games-Howell was done with the EDI variable as its variances were unequal. The results for these analyses are shown in Tables 24 and 25.
Table 24

*Multiple Comparisons for Body Mass Index Group, Dependent Variable: Body*

<table>
<thead>
<tr>
<th>(I) BMI Group</th>
<th>(J) BMI Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonferroni</td>
<td>Underweight</td>
<td>.541</td>
<td>.279</td>
<td>.316</td>
<td>- .20 - 1.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NormalWeight</td>
<td>.274</td>
<td>.318</td>
<td>1.00</td>
<td>- .57 1.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overweight</td>
<td>1.306*</td>
<td>.413</td>
<td>.010</td>
<td>.21 2.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal Weight</td>
<td>Underweight</td>
<td>-.541</td>
<td>.279</td>
<td>.316</td>
<td>-1.28 .20</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overweight</td>
<td>-.267</td>
<td>.180</td>
<td>.827</td>
<td>-.74 .21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obese</td>
<td>.765</td>
<td>.319</td>
<td>.102</td>
<td>-.08 1.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>Underweight</td>
<td>-.274</td>
<td>.318</td>
<td>1.00</td>
<td>-1.12 .57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NormalWeight</td>
<td>.267</td>
<td>.180</td>
<td>.827</td>
<td>-.21 .74</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obese</td>
<td>1.032*</td>
<td>.354</td>
<td>.022</td>
<td>.09 1.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>Underweight</td>
<td>-1.306*</td>
<td>.413</td>
<td>.010</td>
<td>-2.40 -.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NormalWeight</td>
<td>-.765</td>
<td>.319</td>
<td>.102</td>
<td>-1.61 .08</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overweight</td>
<td>-1.032*</td>
<td>.354</td>
<td>.022</td>
<td>-1.97 -.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

The results of the Body measure showed that the obese participants significantly differed $(p < .05)$ from the underweight and overweight participants, but not from the normal weight participants on self-ratings of bodily attractiveness $(p > .05)$. 

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### Table 25

*Multiple Comparisons for Body Mass Index Group, Dependent Variable: EDI*

<table>
<thead>
<tr>
<th>(I) BMI Group</th>
<th>(J) BMI Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval Lower Bound</th>
<th>95% Confidence Interval Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games-Howell</td>
<td>Underweight</td>
<td>-4.560*</td>
<td>.810</td>
<td>.000</td>
<td>-6.76</td>
<td>-2.36</td>
</tr>
<tr>
<td></td>
<td>NormalWeight</td>
<td>-6.341*</td>
<td>1.140</td>
<td>.000</td>
<td>-9.34</td>
<td>-3.35</td>
</tr>
<tr>
<td></td>
<td>Overweight</td>
<td>-11.111*</td>
<td>2.172</td>
<td>.000</td>
<td>-17.15</td>
<td>-5.07</td>
</tr>
<tr>
<td></td>
<td>Obese</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal Weight</td>
<td>Underweight</td>
<td>4.560*</td>
<td>.810</td>
<td>.000</td>
<td>2.36</td>
<td>6.76</td>
</tr>
<tr>
<td></td>
<td>Overweight</td>
<td>-1.781</td>
<td>.919</td>
<td>.220</td>
<td>-4.19</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>Obese</td>
<td>-6.551*</td>
<td>2.064</td>
<td>.025</td>
<td>-12.39</td>
<td>-.71</td>
</tr>
<tr>
<td>Overweight</td>
<td>Underweight</td>
<td>6.341*</td>
<td>1.140</td>
<td>.000</td>
<td>3.35</td>
<td>9.34</td>
</tr>
<tr>
<td></td>
<td>NormalWeight</td>
<td>1.781</td>
<td>.919</td>
<td>.220</td>
<td>-.63</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td>Obese</td>
<td>-4.770</td>
<td>2.214</td>
<td>.166</td>
<td>-10.89</td>
<td>1.35</td>
</tr>
<tr>
<td>Obese</td>
<td>Underweight</td>
<td>11.111*</td>
<td>2.172</td>
<td>.000</td>
<td>5.07</td>
<td>17.15</td>
</tr>
<tr>
<td></td>
<td>NormalWeight</td>
<td>6.551*</td>
<td>2.064</td>
<td>.025</td>
<td>.71</td>
<td>12.39</td>
</tr>
<tr>
<td></td>
<td>Overweight</td>
<td>4.770</td>
<td>2.214</td>
<td>.166</td>
<td>-1.35</td>
<td>10.89</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

The results of the EDI measure, according to Table 25, indicated that the underweight and normal weight participants differed significantly from the obese participants on the EDI measure ($p < .05$). The underweight and normal weight participants also differed significantly ($p < .05$) from each other on the EDI measure and the underweight participants significantly differed from the overweight participants ($p < .05$).

#### 7.1.5.2 Hypothesis 5.2

There is a relationship between a girl’s body image and her body mass index. This relationship will be different for each cultural group.
7.1.5.2.1 Descriptive Statistics for the Total Sample

The means and standard deviations of the four measures of body image for the total sample have already been given in Table 3. The mean BMI for the total sample was 20.92 ($SD = 3.62$).

7.1.5.2.2 Correlations for the Total Sample

Correlations were done between the BMI data and the four body image measures to determine whether a relationship existed between them. The Body and the Face variables were both ordinal. Although the BCS and EDI scores were measured on the interval level, the Shapiro-Wilk test showed that both sets of data significantly deviated from normality ($p < .05$). Therefore, the Spearman correlation coefficient was used to investigate correlations between BMI and the four measures of body image. The results yielded by the analysis are shown in Table 26.

Table 26

*Correlations Between BMI and Body Image Measures (N = 511)*

<table>
<thead>
<tr>
<th>Body Image Measures</th>
<th>Face</th>
<th>Body</th>
<th>BCS</th>
<th>EDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td>.045</td>
<td>-.122**</td>
<td>-.099*</td>
<td>.328**</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

As shown in Table 26, the correlation between the participants’ BMI and their self-ratings of Facial attractiveness was non-significant ($p > .05$). The correlation between the participants’ BMI and Body ratings was found to be significant ($r = -.122, p < .01$), which means that the more positive the participants rated their bodies to be, the lower were their BMI’s and *vice versa*. A weak, negative correlation was found between the participants’ BCS scores and their BMI’s ($r = -.099, p < .05$). This shows that the more satisfied participants were with their bodies, as measured by the BCS, the lower were their BMI’s and *vice versa*. Participants’ EDI scores were also found to be positively correlated with their BMI’s ($r = .328, p < .01$). This indicates that the more dissatisfied the participants were with their bodies, the higher were their BMI’s and *vice versa*. 
7.1.5.2.3 Descriptive Statistics for Each Cultural Group

The mean scores of the four measures of body image for each cultural group have already been given in Figure 2. The means and standard deviations of the BMI for each cultural group have already been given in Table 19.

7.1.5.2.4 Correlations for Each Cultural Group

This hypothesis will be investigated for the four cultural groups (Afr/White, Eng/White, Coloured, and Black) individually. As with the whole sample, Spearman correlations were done between the BMI scores and the four body image measures for each cultural group to determine whether a relationship exists between them. The results found by the analysis are given in Table 27.

Table 27

<table>
<thead>
<tr>
<th>Body Image Measures</th>
<th>BMI of Afr/White group</th>
<th>BMI of Eng/White group</th>
<th>BMI of Coloured group</th>
<th>BMI of Black group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.016</td>
<td>-.342**</td>
<td>-.173*</td>
<td>.464**</td>
</tr>
<tr>
<td>Face</td>
<td>-.143</td>
<td>-.334**</td>
<td>-.350**</td>
<td>.564**</td>
</tr>
<tr>
<td>Body</td>
<td>.035</td>
<td>-.222*</td>
<td>-.165</td>
<td>.376**</td>
</tr>
<tr>
<td>BCS</td>
<td>.024</td>
<td>.080</td>
<td>-.065</td>
<td>.252**</td>
</tr>
<tr>
<td>EDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; **p < .01

As with the whole sample, there were no significant correlations between participants’ BMI and their Face rating for any of the cultural groups (p > .05). There were significant negative correlations between participants’ BMI and their Body rating for Afr/White ($r = -.342, p < .01$), Eng/White ($r = -.334, p < .01$) and Coloured ($r = -.222, p < .05$) participants. This finding indicates that the higher these participants’ BMI was, the lower they rated the attractiveness of their bodies and *vice versa*. There were also significant negative correlations between participants’ BMI and their BCS scores for Afr/White ($r = -.173, p < .05$), and Eng/White ($r = -.350, p < .01$) but not for Coloured (p > .05) and Black (p > .05) participants. This result shows that for White girls, the higher their BMI
was the less satisfied they were with their bodies (as measured by the BCS) and vice versa. Lastly, significant positive correlations were found between BMI and EDI scores for all four cultural groups \((p < .01)\). This shows that for girls of all four cultures, it was found that if they had higher BMI’s, they also had higher body dissatisfaction with the body parts usually of concern to females.

7.2 Romantic Relationships

7.2.1 Relationship Status

7.2.1.1 Hypothesis 6:
There will be a relationship between a girl’s age and her relationship status.

7.2.1.1.1 Descriptive Statistics
There were five categories which participants could select as their current relationship status: has never dated anyone, not dating anyone currently, casually dating one or more people, dating one person exclusively, and engaged or planning to marry. As only 10 people selected the engaged or planning to marry category, these participants were included into the dating one person exclusively category for the analysis. The frequency of each relationship status and the mean age and standard deviations for that status for the total sample are given in Table 28.

Table 28

<table>
<thead>
<tr>
<th>Relationship Status</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dating1</td>
<td>106</td>
<td>15.38</td>
<td>1.53</td>
</tr>
<tr>
<td>Dating2</td>
<td>158</td>
<td>15.08</td>
<td>1.28</td>
</tr>
<tr>
<td>Dating3</td>
<td>55</td>
<td>15.44</td>
<td>1.34</td>
</tr>
<tr>
<td>Dating4</td>
<td>184</td>
<td>15.74</td>
<td>1.32</td>
</tr>
</tbody>
</table>

*Note. Dating1 = Has never dated anyone; Dating2 = Not dating anyone currently; Dating3 = Casually dating one or more people; Dating4 = Dating one person exclusively and engaged or planning to marry.*
7.2.1.1.2 Relationship Between Age and Status

As both status and age were categorical variables, crosstabulation was used to examine the relationship between them. In Table 29, the number of participants in each age group who selected each relationship status was shown.

Table 29

*Age and Status Crosstabulation*

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Dating 1</th>
<th>Dating 2</th>
<th>Dating 3</th>
<th>Dating 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>10</td>
<td>14</td>
<td>5</td>
<td>9</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>26.3%</td>
<td>36.8%</td>
<td>13.2%</td>
<td>23.7%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>2.0%</td>
<td>2.8%</td>
<td>1.0%</td>
<td>1.8%</td>
<td>7.6%</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>27</td>
<td>51</td>
<td>9</td>
<td>25</td>
<td>112</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>24.1%</td>
<td>45.5%</td>
<td>8.0%</td>
<td>22.3%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>5.4%</td>
<td>10.1%</td>
<td>1.8%</td>
<td>5.0%</td>
<td>22.3%</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>24</td>
<td>30</td>
<td>13</td>
<td>44</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>21.6%</td>
<td>27.0%</td>
<td>11.7%</td>
<td>39.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>4.8%</td>
<td>6.0%</td>
<td>2.6%</td>
<td>8.7%</td>
<td>22.1%</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>14</td>
<td>37</td>
<td>16</td>
<td>50</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>12.0%</td>
<td>31.6%</td>
<td>13.7%</td>
<td>42.7%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>2.8%</td>
<td>7.4%</td>
<td>3.2%</td>
<td>9.9%</td>
<td>23.3%</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>20</td>
<td>24</td>
<td>9</td>
<td>39</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>21.7%</td>
<td>26.1%</td>
<td>9.8%</td>
<td>42.4%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>4.0%</td>
<td>4.8%</td>
<td>1.8%</td>
<td>7.8%</td>
<td>18.3%</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>11</td>
<td>2</td>
<td>3</td>
<td>17</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>33.3%</td>
<td>6.1%</td>
<td>9.1%</td>
<td>51.5%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>2.2%</td>
<td>.4%</td>
<td>.6%</td>
<td>3.4%</td>
<td>6.6%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>158</td>
<td>55</td>
<td>184</td>
<td>503</td>
<td></td>
</tr>
<tr>
<td>% within Age</td>
<td>21.1%</td>
<td>31.4%</td>
<td>10.9%</td>
<td>36.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>21.1%</td>
<td>31.4%</td>
<td>10.9%</td>
<td>36.6%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Table 29 shows that the status group which the majority of the 13 and 14-year-old participants selected was the ‘not dating anyone currently’ one, while the status group which the most 15 to 18-year-old participants selected was the ‘dating one person exclusively’ choice. The number of the participants dating one person exclusively seemed to increase with age from 23% of 13-year-olds to 51.5% of 18-year-olds. A chi-square test was used to test the patterns in the data. The test is shown in Table 30.

Table 30

**Chi-Square Tests for Age and Status**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>38.133a</td>
<td>15</td>
<td>.001</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>42.117</td>
<td>15</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>503</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 2 cells (8.3%) have expected count less than 5. The minimum expected count is 3.61.

Both the Pearson Chi-Square and the Likelihood Ratio were significant which indicate a significant relationship between participants’ age and their relationship status.

### 7.2.1.1.3 Comparing the Age Groups

To determine if differences existed between the mean ages of each relationship status, oneway ANOVA’s needed to be done. Levene’s test indicated that the variances of the groups were not the same ($p < .05$) for the age variable, which indicated a violation for the assumption of homogeneity of variances. Thus Welch’s Robust Tests of Equality of Means were done to determine if differences existed between the age means for each status. The results from the Welch test are shown in Table 31.

Table 31

**Robust Tests of Equality of Means for Status**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Welch</td>
<td>7.363</td>
<td>3  191.126</td>
</tr>
</tbody>
</table>

122
Results show that there were significant differences in the mean ages of the relationship statuses \(F(3, 191.126) = 7.363; p < .05\). Post hoc tests needed to be done to compare all relationship statuses with each other. The Games-Howell test was used as the variances of the age variable were unequal. The results for these analyses are shown in Table 32.

Table 32

*Multiple Comparisons for Relationship Status, Dependent Variable: Age*

<table>
<thead>
<tr>
<th>(I)Status</th>
<th>(J)Status</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games-Howell</td>
<td>Dating1</td>
<td>.301</td>
<td>.180</td>
<td>.339</td>
<td>-.16</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating2</td>
<td>-.059</td>
<td>.234</td>
<td>.994</td>
<td>-.67</td>
<td>.55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating3</td>
<td>-.362</td>
<td>.177</td>
<td>.178</td>
<td>-.82</td>
<td>.10</td>
<td></td>
</tr>
<tr>
<td>Dating2</td>
<td>Dating1</td>
<td>-.301</td>
<td>.180</td>
<td>.339</td>
<td>-.77</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating3</td>
<td>-.360</td>
<td>.208</td>
<td>.312</td>
<td>-.90</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating4</td>
<td>-.663*</td>
<td>.141</td>
<td>.000</td>
<td>-1.03</td>
<td>-.30</td>
<td></td>
</tr>
<tr>
<td>Dating3</td>
<td>Dating1</td>
<td>.059</td>
<td>.234</td>
<td>.994</td>
<td>-.55</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating2</td>
<td>.360</td>
<td>.208</td>
<td>.312</td>
<td>-.18</td>
<td>.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating4</td>
<td>-.303</td>
<td>.206</td>
<td>.459</td>
<td>-.84</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td>Dating4</td>
<td>Dating1</td>
<td>.362</td>
<td>.177</td>
<td>.178</td>
<td>-.10</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating2</td>
<td>.663*</td>
<td>.141</td>
<td>.000</td>
<td>.30</td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dating3</td>
<td>.303</td>
<td>.206</td>
<td>.459</td>
<td>-.24</td>
<td>.84</td>
<td></td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

According to Table 32, the only significant results were that the mean ages of the participants who were not dating anyone currently and those who were dating one person exclusively or were engaged, significantly differed from each other \(p < .05\).

7.2.1.2 Hypothesis 7:

There will be a relationship between body mass index and relationship status. This relationship will be influenced by culture.
7.2.1.2.1 Descriptive Statistics

The frequency of each relationship status and the mean BMI and standard deviations for that status for the total sample are given in Table 33.

Table 33

*Means and Standard Deviations of BMI for Each Relationship Status*

<table>
<thead>
<tr>
<th>Relationship Status</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dating1</td>
<td>106</td>
<td>21.00</td>
<td>3.25</td>
</tr>
<tr>
<td>Dating2</td>
<td>158</td>
<td>20.76</td>
<td>3.85</td>
</tr>
<tr>
<td>Dating3</td>
<td>55</td>
<td>20.34</td>
<td>3.89</td>
</tr>
<tr>
<td>Dating4</td>
<td>184</td>
<td>21.12</td>
<td>3.54</td>
</tr>
</tbody>
</table>

*Note.* Dating1 = Has never dated anyone; Dating2 = Not dating anyone currently; Dating3 = Casually dating one or more people; Dating4 = Dating one person exclusively and engaged or planning to marry.

From the information in Table 33 it seems that there was a difference in mean body mass index between the relationship status groups, yet Anova tests needed to be done to determine whether these differences were statistically significant.

7.2.1.2.2 Comparing the Relationship Status Groups

The Kruskal-Wallis test was used to determine if there existed statistically significant differences in mean BMI between the status groups. The results are shown in Table 34.

Table 34

*Test Statistics for the Kruskal-Wallis Test*

<table>
<thead>
<tr>
<th>Body Mass Index</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>4.335</td>
</tr>
<tr>
<td>df</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.227</td>
</tr>
</tbody>
</table>

*Grouping Variable: Relationship Status*

As can be seen from Table 34, there were no significant differences in BMI between the relationship status groups ($p > .05$).
7.2.1.2.3 Comparison for Each Cultural Group

The relationship between BMI and relationship status was also investigated for each cultural group separately. Levene’s test was done to determine whether the variances of the groups were the same. Levene’s test was non-significant ($p > .05$) for BMI for all cultural groups. Thus ANOVA’s were done to determine whether differences exist between the BMI means for the different relationship status groups for each cultural group. The results from the ANOVA are shown in Table 35.

Table 35

*The Analysis of Variance Results for Relationship Status for Each Cultural Group*

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>BMI</th>
<th>Between Groups</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afr/White</td>
<td>BMI</td>
<td>Between Groups</td>
<td>26.673</td>
<td>3</td>
<td>8.891</td>
<td>.861</td>
<td>.463</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>1383.177</td>
<td>134</td>
<td>10.322</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1409.850</td>
<td>137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eng/White</td>
<td>BMI</td>
<td>Between Groups</td>
<td>55.157</td>
<td>3</td>
<td>18.386</td>
<td>1.668</td>
<td>.177</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>1476.969</td>
<td>134</td>
<td>11.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1532.126</td>
<td>137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coloured</td>
<td>BMI</td>
<td>Between Groups</td>
<td>53.275</td>
<td>3</td>
<td>17.758</td>
<td>1.238</td>
<td>.300</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>1463.156</td>
<td>102</td>
<td>14.345</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1516.432</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>BMI</td>
<td>Between Groups</td>
<td>35.814</td>
<td>3</td>
<td>11.938</td>
<td>.947</td>
<td>.420</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Within Groups</td>
<td>1474.169</td>
<td>117</td>
<td>12.600</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>1509.983</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show there were no significant differences in the mean body mass indexes of the relationship status groups for the Afr/White $[F(3, 134) = .861; p > .05]$, Eng/White $[F(3, 134) = 1.668; p > .05]$, Coloured $[F(3, 102) = 1.238; p > .05]$, and Black $[F(3, 117) = .947; p > .05]$ cultural groups.
7.2.1.2.4 Relationship Between BMI Group and Status

The relationship between BMI group and relationship status was also explored. As both BMI group and status were categorical variables, crosstabulation was used to examine the relationship between them. In Table 36, the number of participants in each BMI group who selected each relationship status was shown.

Table 36

*BMI Group and Status Crosstabulation*

<table>
<thead>
<tr>
<th>BMI Group</th>
<th>Status</th>
<th>Dating 1</th>
<th>Dating 2</th>
<th>Dating 3</th>
<th>Dating 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>n</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>% within BMI</td>
<td>24.0%</td>
<td>24.0%</td>
<td>16.0%</td>
<td>36.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within Status</td>
<td>5.7%</td>
<td>3.8%</td>
<td>7.3%</td>
<td>4.9%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>1.2%</td>
<td>1.2%</td>
<td>.8%</td>
<td>1.8%</td>
<td>5.0%</td>
<td></td>
</tr>
<tr>
<td>Normal Weight</td>
<td>n</td>
<td>82</td>
<td>128</td>
<td>47</td>
<td>141</td>
<td>398</td>
</tr>
<tr>
<td>% within BMI</td>
<td>20.6%</td>
<td>32.2%</td>
<td>11.8%</td>
<td>35.4%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within Status</td>
<td>77.4%</td>
<td>81.0%</td>
<td>85.5%</td>
<td>76.6%</td>
<td>79.1%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>16.3%</td>
<td>25.4%</td>
<td>9.3%</td>
<td>28.0%</td>
<td>79.1%</td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>n</td>
<td>16</td>
<td>15</td>
<td>2</td>
<td>29</td>
<td>62</td>
</tr>
<tr>
<td>% within BMI</td>
<td>25.8%</td>
<td>24.2%</td>
<td>3.2%</td>
<td>46.8%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within Status</td>
<td>15.1%</td>
<td>9.5%</td>
<td>3.6%</td>
<td>15.8%</td>
<td>12.3%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>3.2%</td>
<td>3.0%</td>
<td>.4%</td>
<td>5.8%</td>
<td>12.3%</td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>n</td>
<td>2</td>
<td>9</td>
<td>2</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>% within BMI</td>
<td>11.1%</td>
<td>50.0%</td>
<td>11.1%</td>
<td>27.8%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within Status</td>
<td>1.9%</td>
<td>5.7%</td>
<td>3.6%</td>
<td>2.7%</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>.4%</td>
<td>1.8%</td>
<td>.4%</td>
<td>1.0%</td>
<td>3.6%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>n</td>
<td>106</td>
<td>158</td>
<td>55</td>
<td>184</td>
<td>503</td>
</tr>
<tr>
<td>% within BMI</td>
<td>21.1%</td>
<td>31.4%</td>
<td>10.9%</td>
<td>36.6%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% within Status</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>% of Total</td>
<td>21.1%</td>
<td>31.4%</td>
<td>10.9%</td>
<td>36.6%</td>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>
Table 36 shows that the status group which the most underweight, normal weight and overweight participants selected was the ‘dating one person exclusively’ one, while the status group which most obese participants selected was the ‘not dating anyone currently’ choice. The percentage of the participants dating one person exclusively seemed to be less for the obese participants. A chi-square test was used to test the patterns in the data. The test is shown in Table 37.

Table 37

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>11.691ª</td>
<td>9</td>
<td>.231</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>12.762</td>
<td>9</td>
<td>.174</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>503</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 3 cells (18.8%) have expected count less than 5. The minimum expected count is 1.97.

Both the Pearson Chi-Square and the Likelihood Ratio were non-significant which indicate that no significant relationship existed between participants’ body mass index group and their relationship status.

7.2.1.3 Hypothesis 8:

The cultural groups will not differ in their frequency of being in a dating relationship.

7.2.1.3.1 Relationship Status and Culture

The relationship between cultural group and relationship status was explored via crosstabulation as both variables were categorical variables. The number of participants in each cultural group who selected each relationship status was shown in Figure 5 and also in Table 38.
Figure 5. Number of participants in each of the four cultural groups who selected each of the four relationship statuses (Dating1 = Has never dated anyone; Dating2 = Not dating anyone currently; Dating3 = Casually dating one or more people; Dating4 = Dating one person exclusively and engaged or planning to marry).

Table 38 shows that the status group which the most Afr/White participants selected was the ‘not dating anyone currently’ one, which was also the status that had the most votes from the Eng/White group. The status group which the most Coloured and Black participants selected was the ‘dating one person exclusively’ and ‘engaged or planning to marry’ one. The percentage of participants dating one person exclusively seemed to be different for each cultural group. The Afr/White group had the least percentage of girls dating someone exclusively, the Eng/White group had the second least, the Coloured group the highest percentage of girls dating someone exclusively and the Black group the second highest. Quite a few participants from all the cultural groups indicated dating someone casually at the time of the study.
Table 38

*Cultural Group and Status Crosstabulation*

<table>
<thead>
<tr>
<th>Cultural Group</th>
<th>Status</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Afr/White</strong></td>
<td></td>
<td>17</td>
<td>72</td>
<td>20</td>
<td>29</td>
<td>138</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Culture</td>
<td></td>
<td>12.3%</td>
<td>52.2%</td>
<td>14.5%</td>
<td>21.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>3.4%</td>
<td>14.3%</td>
<td>4.0%</td>
<td>5.8%</td>
<td>27.4%</td>
</tr>
<tr>
<td><strong>Eng/White</strong></td>
<td></td>
<td>28</td>
<td>55</td>
<td>12</td>
<td>43</td>
<td>138</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Culture</td>
<td></td>
<td>20.3%</td>
<td>39.9%</td>
<td>8.7%</td>
<td>31.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>5.6%</td>
<td>10.9%</td>
<td>2.4%</td>
<td>8.5%</td>
<td>27.4%</td>
</tr>
<tr>
<td><strong>Coloured</strong></td>
<td></td>
<td>16</td>
<td>14</td>
<td>15</td>
<td>61</td>
<td>106</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Culture</td>
<td></td>
<td>15.1%</td>
<td>13.2%</td>
<td>14.2%</td>
<td>57.5%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>3.2%</td>
<td>2.8%</td>
<td>3.0%</td>
<td>12.1%</td>
<td>21.1%</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td></td>
<td>45</td>
<td>17</td>
<td>8</td>
<td>51</td>
<td>121</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Culture</td>
<td></td>
<td>37.2%</td>
<td>14.0%</td>
<td>6.6%</td>
<td>42.1%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>8.9%</td>
<td>3.4%</td>
<td>1.6%</td>
<td>10.1%</td>
<td>24.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>106</td>
<td>158</td>
<td>55</td>
<td>184</td>
<td>503</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% within Culture</td>
<td></td>
<td>21.1%</td>
<td>31.4%</td>
<td>10.9%</td>
<td>36.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>% of Total</td>
<td></td>
<td>21.1%</td>
<td>31.4%</td>
<td>10.9%</td>
<td>36.6%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

7.2.1.3.2 Relationship Between Status and Culture

A chi-square test was used to test the patterns in the data and to determine whether relationship status and culture were related for this sample. The test is shown in Table 39.

Table 39

*Chi-Square Tests for Culture and Relationship Status*

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>95.951a</td>
<td>9</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>96.951</td>
<td>9</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>503</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.59.
Both the Pearson Chi-Square and the Likelihood Ratio were significant which indicates a significant relationship between participants’ Cultural group and their relationship status.

7.2.2 Relationship Satisfaction

The mean score for the Relationship Assessment Scale for the whole sample was 28.04 (SD = 4.81).

7.2.2.1 Hypothesis 9:
There will not be a relationship between a girl’s age and her satisfaction with her dating relationship.

7.2.2.1.1 Descriptive Statistics
The means and standard deviations for RAS scores for each age are given in Table 40.

Table 40
Means and Standard Deviations of RAS for Each Age

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS</td>
<td>13</td>
<td>24.89</td>
<td>4.51</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>27.58</td>
<td>4.53</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>28.46</td>
<td>4.53</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>28.02</td>
<td>5.48</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>28.74</td>
<td>4.89</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>27.82</td>
<td>3.54</td>
</tr>
</tbody>
</table>

Note. RAS = Relationship Assessment Scale.

It is unclear from Table 40 whether age differences existed for RAS scores, yet it seems that 13-year-old participants were less satisfied with their dating relationships.

7.2.2.1.2 Comparing the Age Groups
Levene’s test was done to determine whether the variances of the groups are the same. Levene’s test was non-significant (p > .05) for the RAS variable. Therefore Analysis of
Variance was done to determine whether differences existed between the RAS score means for each age. These results are shown in Table 41.

**Table 41**

*The Analysis of Variance Results for Age*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS Between Groups</td>
<td>122.413</td>
<td>5</td>
<td>24.483</td>
<td>1.059</td>
<td>.385</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4044.316</td>
<td>175</td>
<td>23.110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4166.729</td>
<td>180</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results show there were no significant differences in the mean RAS scores of the age groups \[F(5, 175) = 1.059; p > .05\].

Simple regression analysis was also done to determine if age was a predictor of relationship satisfaction as assessed by the RAS. Results are recorded in Table 42.

**Table 42**

*Simple Regression of Age on the Relationship Assessment Scale*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>22.552</td>
<td>4.235</td>
<td>5.325</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.349</td>
<td>.268</td>
<td>.097</td>
<td>1.300</td>
<td>.195</td>
</tr>
</tbody>
</table>

\(F = 1.690\)

*R squared = 0.9%

*\(p < .05\)*

As shown in Table 42, age was not a significant predictor of participants’ level of satisfaction with romantic relationships.
Comparing the Age Groups for Each Cultural Group

Simple regression was also done for each cultural group individually to determine if age was a predictor of relationship satisfaction for any of the cultural groups. Results are recorded in Tables 43 to 46.

Table 43
Simple Regression of Age on the RAS for Afrikaans White Participants

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>26.057</td>
<td>7.940</td>
<td>3.282</td>
<td>.003</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.249</td>
<td>.508</td>
<td>.096</td>
<td>.490</td>
<td>.629</td>
</tr>
</tbody>
</table>

\(F = .240\)

*\(p < .05\)

\(R^2 = 0.9\%\)

Table 44
Simple Regression of Age on the RAS for English White Participants

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>6.650</td>
<td>8.256</td>
<td>.805</td>
<td>.425</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.415</td>
<td>.539</td>
<td>.379</td>
<td>2.625</td>
<td>.012</td>
</tr>
</tbody>
</table>

\(F = 6.889\)

*\(p < .05\)

\(R^2 = 14.4\%\)

Table 45
Simple Regression of Age on the RAS for Coloured Participants

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>34.170</td>
<td>11.664</td>
<td>2.930</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-388</td>
<td>.730</td>
<td>-.070</td>
<td>-.531</td>
<td>.597</td>
</tr>
</tbody>
</table>

\(F = .282\)

*\(p < .05\)

\(R^2 = 0.5\%\)
Table 46

Simple Regression of Age on the RAS for Black Participants

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>21.849</td>
<td>6.002</td>
<td>3.641</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.316</td>
<td>.373</td>
<td>.120</td>
<td>.846</td>
<td>.402</td>
</tr>
</tbody>
</table>

\[ F = .715 \quad R \text{ squared} = 1.4\% \]

*p < .05

As shown in Tables 43 to 46, age was not a significant predictor of participants’ level of satisfaction with romantic relationships for the Afr/White, Coloured or Black groups, yet, it was for Eng/White participants (\( p < .05 \)). Age accounted for 14.4% of the variation in RAS scores for this group.

7.2.2.2 Hypothesis 10:
There will be a relationship between a girl’s body mass index and her satisfaction with her dating relationship.

7.2.2.2.1 Descriptive Statistics
The means and standard deviations for Relationship Assessment Scale scores for each body mass index group are given in Table 47.

Table 47

Means and Standard Deviations of RAS for Each BMI Group

<table>
<thead>
<tr>
<th>BMI Group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS Underweight</td>
<td>9</td>
<td>25.89</td>
<td>6.74</td>
</tr>
<tr>
<td>Normal Weight</td>
<td>141</td>
<td>28.46</td>
<td>4.55</td>
</tr>
<tr>
<td>Overweight</td>
<td>26</td>
<td>26.92</td>
<td>4.95</td>
</tr>
<tr>
<td>Obese</td>
<td>5</td>
<td>25.80</td>
<td>6.54</td>
</tr>
</tbody>
</table>

*Note. RAS = Relationship Assessment Scale.*
When looking at Table 47, it seems that normal weight participants had higher mean RAS scores than the other weight groups. Yet, an Analysis of Variance test needed to be done to find out whether this observation was statistically significant.

7.2.2.2.2 Comparing the BMI Groups

Levene’s test was done to determine whether the variances of the groups are the same. Levene’s test was non-significant ($p > .05$) for the RAS variable. Therefore one-way Analysis of Variance was done to determine whether differences exist between the RAS score means for each BMI group. These results are shown in Table 48.

<table>
<thead>
<tr>
<th>Table 48</th>
<th>The Analysis of Variance Results for BMI Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SS</td>
</tr>
<tr>
<td>RAS</td>
<td>124.159</td>
</tr>
<tr>
<td>Between Groups</td>
<td>4042.571</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4166.729</td>
</tr>
</tbody>
</table>

The results show there was no significant difference in the mean RAS scores of the BMI groups [$F(3, 177) = 1.812; p > .05$]. Simple regression analysis was also done to determine if BMI was a predictor of relationship satisfaction as assessed by the RAS. Results are recorded in Table 49.

<table>
<thead>
<tr>
<th>Table 49</th>
<th>Simple Regression of Body Mass Index on the Relationship Assessment Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
</tr>
<tr>
<td>Body Mass Index</td>
<td></td>
</tr>
</tbody>
</table>

$F = .184$  
*R squared = 0.1%

*p < .05*
As shown in Table 49, body mass index was not a significant predictor of participants’ level of satisfaction with their romantic relationships ($p > .05$).

7.2.2.3 Hypothesis 11:
The cultural groups will not differ on their level of satisfaction with their dating relationships.

7.2.2.3.1 Descriptive Statistics
The means and standard deviations for the RAS scores for each cultural group are given in Table 50.

Table 50

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS</td>
<td>28</td>
<td>29.93</td>
<td>3.64</td>
</tr>
<tr>
<td>Afr/White</td>
<td>43</td>
<td>28.23</td>
<td>5.15</td>
</tr>
<tr>
<td>Eng/White</td>
<td>59</td>
<td>27.98</td>
<td>5.47</td>
</tr>
<tr>
<td>Coloured</td>
<td>51</td>
<td>26.90</td>
<td>3.98</td>
</tr>
</tbody>
</table>

*Note.* RAS = Relationship Assessment Scale; Afr/White = Afrikaans White; Eng/White = English White.

From the information in Table 50 it seems that there was a difference in mean RAS scores between the cultural groups, yet Analysis of Variance tests needed to be done to determine whether these differences were statistically significant.

7.2.2.3.2 Comparing the Cultural Groups
To compare the different cultural groups on mean RAS scores, oneway ANOVA’s were done. Levene’s test was done to determine whether the variances of the groups were the same. Levene’s test was significant ($p < .05$) for RAS. This indicated a violation for the assumption of homogeneity of variances. Therefore Welch’s Robust Tests of Equality of Means were done to determine if differences exist between the RAS means for the different cultural groups. The results for Welch’s test are shown in Table 51.
Table 51

Robust Tests of Equality of Means for Culture

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAS Welch</td>
<td>3.859</td>
<td>3</td>
<td>89.014</td>
</tr>
</tbody>
</table>

According to Table 51 there existed significant differences in the RAS scores of the different cultural groups \(F(3, 89.014) = 3.859; p < .05\]. Yet, Post hoc tests needed to be done to compare all cultural groups with each other. The Games Howell test was done with the RAS as the variances are unequal according to Levene. The results for this analysis are shown in Table 52.

Table 52

Multiple Comparisons for Culture, Dependent Variable: RAS

<table>
<thead>
<tr>
<th>(I) Cultural Group</th>
<th>(J) Cultural Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td>Afr/White</td>
<td>Eng/White</td>
<td>1.696</td>
<td>1.045</td>
<td>.372</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coloured</td>
<td>1.946</td>
<td>.990</td>
<td>.210</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>3.027*</td>
<td>.885</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>Afr/White</td>
<td>Eng/White</td>
<td>-1.696</td>
<td>1.045</td>
<td>.372</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coloured</td>
<td>.250</td>
<td>1.061</td>
<td>.995</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>1.331</td>
<td>.963</td>
<td>.515</td>
</tr>
<tr>
<td></td>
<td>Afr/White</td>
<td>Coloured</td>
<td>-1.946</td>
<td>.990</td>
<td>.210</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>Coloured</td>
<td>-2.50</td>
<td>1.061</td>
<td>.995</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>1.081</td>
<td>.904</td>
<td>.631</td>
</tr>
<tr>
<td></td>
<td>Afr/White</td>
<td>Black</td>
<td>-3.027*</td>
<td>.885</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>Eng/White</td>
<td>Coloured</td>
<td>-1.331</td>
<td>.963</td>
<td>.515</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coloured</td>
<td>-1.081</td>
<td>.904</td>
<td>.631</td>
</tr>
</tbody>
</table>

*: The mean difference is significant at the .05 level.
According to Table 52, the only significant cultural difference was that the Afr/White and Black girls’ RAS means significantly differed from each other \( p < .05 \).

7.3 Body Image and Romantic Relationships

7.3.1. Hypothesis 12:
There will be a relationship between a girl’s body image and her relationship status. Secondary hypotheses: This relationship will be different for the different cultural groups and body mass index groups.

7.3.1.1 Descriptive Statistics
The means of the four measures of body image for each relationship status group are shown in Figure 6.

![Figure 6](image-url)

*Figure 6.* Means of the Four Body Image Measures (Face = facial attractiveness rating; Body = body attractiveness rating; BCS = Body Cathexis Scale; EDI = Eating Disorder Inventory, Body Dissatisfaction scale) for Each Relationship Status (Dating1 = Has never dated anyone; Dating2 = Not dating anyone currently; Dating3 = Casually dating one or
more people; Dating4 = Dating one person exclusively and engaged or planning to marry).

When looking at Figure 6 it is unclear whether there was a difference in each body image measure between the status groups. Therefore, Analysis of Variance tests needed to be done to determine whether there were statistically significant differences.

7.3.1.2 Comparing the Relationship Status Groups
Levene’s test was done to determine whether the variances of the status groups were the same. Levene’s test was significant \((p < .05)\) for the EDI variable. This indicates a violation for the assumption of homogeneity of variances. Therefore ANOVA’s were done for the Body, Face and BCS data to compare the different status groups on each body image measure. Welch’s test was done to determine whether differences exist between the EDI means for the different relationship status groups. The results from the ANOVA are shown in Table 53 and those of the Welch test in Table 54.

Table 53
*The Analysis of Variance Results for Relationship Status*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>16.500</td>
<td>3</td>
<td>5.500</td>
<td>3.075</td>
<td>.027</td>
</tr>
<tr>
<td>Within Groups</td>
<td>879.855</td>
<td>492</td>
<td>1.788</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>896.355</td>
<td>495</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>32.852</td>
<td>3</td>
<td>10.951</td>
<td>6.245</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>864.416</td>
<td>493</td>
<td>1.753</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>897.268</td>
<td>496</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.292</td>
<td>3</td>
<td>.097</td>
<td>.299</td>
<td>.826</td>
</tr>
<tr>
<td>Within Groups</td>
<td>159.817</td>
<td>491</td>
<td>.325</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>160.109</td>
<td>494</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 53, there were significant differences between the status groups on both the Face \([F(3, 492) = 3.075; p < .01]\) and Body ratings \([F(3, 493) = 6.245; p < .05]\).
The results show there was no significant difference in the means of the status groups, when considering the results of the BCS \[ F(3, 494) = .299; p > .05 \].

Table 54

*Robust Tests of Equality of Means for Relationship Status*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDI Welch</td>
<td>2.771</td>
<td>3</td>
<td>192.455</td>
</tr>
</tbody>
</table>

According to Table 54, there were significant differences in the means of the EDI \[ F(3, 192.455) = 2.771; p < .05 \] measure for the status groups. Yet, Post hoc tests needed to be done to compare all status groups with each other. This was only done with the Face, Body, and EDI scores as it is already known that there were no status differences on the BCS scores. The Games-Howell was done with the EDI variable, as its variances were found to be unequal, while the Bonferroni was used with the Face and Body measures. To limit the size on the tables only the significant results are shown. The results for these analyses are shown in Tables 55, 56 and 57.

Table 55

*Multiple Comparisons for Relationship Status, Dependent Variable: Face*

<table>
<thead>
<tr>
<th>(I) Status</th>
<th>(J) Status</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonferroni</td>
<td>Dating 2</td>
<td>Dating 4</td>
<td>-.428*</td>
<td>.146</td>
<td>.021</td>
<td>-.81  .04</td>
</tr>
<tr>
<td>Dating 4</td>
<td>Dating 2</td>
<td>.428*</td>
<td>.146</td>
<td>.021</td>
<td>.04</td>
<td>.81</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the .05 level.

*Note.* Dating2 = Not dating anyone currently; Dating4 = Dating one person exclusively and engaged or planning to marry.

According to Table 55 the only significant finding on Face ratings was that participants dating one person exclusively or engaged, significantly differed from participants who were not currently dating \( p < .05 \).
Table 56

*Multiple Comparisons for Relationship Status, Dependent Variable: Body*

<table>
<thead>
<tr>
<th>(I) Status</th>
<th>(J) Status</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonferroni</td>
<td>Dating 1</td>
<td>- .534*</td>
<td>.163</td>
<td>.007</td>
<td>-.97</td>
<td>-.10</td>
</tr>
<tr>
<td></td>
<td>Dating 2</td>
<td>- .559*</td>
<td>.144</td>
<td>.001</td>
<td>-.94</td>
<td>-.18</td>
</tr>
<tr>
<td></td>
<td>Dating 4</td>
<td>.534*</td>
<td>.163</td>
<td>.007</td>
<td>.10</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>Dating 1</td>
<td>.559*</td>
<td>.144</td>
<td>.001</td>
<td>.18</td>
<td>.94</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

*Note. Dating1 = Has never dated anyone; Dating2 = Not dating anyone currently; Dating4 = Dating one person exclusively and engaged or planning to marry.*

According to Table 56 participants dating one person exclusively or engaged, significantly differed on Body ratings from participants who have never dated or who are not currently dating (p < .05).

Table 57

*Multiple Comparisons for Relationship Status, Dependent Variable: EDI*

<table>
<thead>
<tr>
<th>(I) Status</th>
<th>(J) Status</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Games-Howell</td>
<td>Dating 2</td>
<td>2.089*</td>
<td>.736</td>
<td>.025</td>
<td>.19</td>
<td>3.99</td>
</tr>
<tr>
<td></td>
<td>Dating 4</td>
<td>-2.089*</td>
<td>.736</td>
<td>.025</td>
<td>-3.99</td>
<td>-.19</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the .05 level.

*Note. Dating2 = Not dating anyone currently; Dating4 = Dating one person exclusively and engaged or planning to marry.*

According to Table 57 participants dating one person exclusively or engaged, significantly differed on EDI scores from participants who were not currently dating (p < .05).
The hypothesis regarding a possible relationship between participants’ body image and their relationship status was also investigated for the different cultural and body mass index groups.

### 7.3.1.3 The Influence of Participants’ Cultural Group

#### 7.3.1.3.1 Afrikaans White Participants

Levene’s test was non-significant \((p > .05)\) for all measures of body image and so the variances of the status groups were equal for each of the body image measures. Therefore ANOVA’s were done for the Body, Face, BCS and EDI data to compare the different status groups on each body image measure for the Afr/White participants. The results from the ANOVA are shown in Table 58.

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>(F)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>Between Groups</td>
<td>5.072</td>
<td>3</td>
<td>1.691</td>
<td>1.101</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>202.663</td>
<td>132</td>
<td>1.535</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>207.735</td>
<td>135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body</td>
<td>Between Groups</td>
<td>6.103</td>
<td>3</td>
<td>2.034</td>
<td>1.338</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>200.655</td>
<td>132</td>
<td>1.520</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>206.757</td>
<td>135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCS</td>
<td>Between Groups</td>
<td>.378</td>
<td>3</td>
<td>.126</td>
<td>.507</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>33.306</td>
<td>134</td>
<td>.249</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33.684</td>
<td>137</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDI</td>
<td>Between Groups</td>
<td>58.698</td>
<td>3</td>
<td>19.566</td>
<td>.382</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>6857.628</td>
<td>134</td>
<td>51.176</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>6916.326</td>
<td>137</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 58 there were no significant differences between the status groups on Face ratings \([F(3, 132) = 1.101; p > .05]\), Body ratings \([F(3, 132) = 1.338; p > .05]\), BCS
scores $[F(3, 134) = .507; p > .05]$ and EDI scores $[F(3, 134) = .382; p > .05]$ for the Afr/White participants.

### 7.3.1.3.2 English White Participants

Levene’s test indicated that the variances of the status groups were the same for each of the measures of body image ($p > .05$). Therefore ANOVA’s were done for the Body, Face, BCS and EDI data to compare the different status groups on each body image measure for the Eng/White participants. The ANOVA’s results are shown in Table 59.

#### Table 59

*The Analysis of Variance Results for Relationship Status for Eng/White Participants*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face</strong></td>
<td>Between Groups</td>
<td>3.020</td>
<td>3</td>
<td>1.007</td>
<td>.782</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>172.582</td>
<td>134</td>
<td>1.288</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>175.601</td>
<td>137</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Body</strong></td>
<td>Between Groups</td>
<td>9.073</td>
<td>3</td>
<td>3.024</td>
<td>2.453</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>165.245</td>
<td>134</td>
<td>1.233</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>174.319</td>
<td>137</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCS</strong></td>
<td>Between Groups</td>
<td>.887</td>
<td>3</td>
<td>.296</td>
<td>1.009</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>39.272</td>
<td>134</td>
<td>.293</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>40.159</td>
<td>137</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDI</strong></td>
<td>Between Groups</td>
<td>142.187</td>
<td>3</td>
<td>47.396</td>
<td>.792</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>7957.696</td>
<td>133</td>
<td>59.832</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8099.883</td>
<td>136</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 59 there were no significant differences between the status groups on Face ratings $[F(3, 134) = .782; p > .05]$, Body ratings $[F(3, 134) = 2.452; p > .05]$, BCS scores $[F(3, 134) = 1.009; p > .05]$ and EDI scores $[F(3, 133) = .792; p > .05]$ for the Eng/White participants.
7.3.1.3.3 Coloured Participants

Levene’s test was done to determine whether the variances of the status groups were the same. Levene’s test was significant ($p < .05$) for the Face variable, which indicates a violation for the assumption of homogeneity of variances. Therefore ANOVA’s were done for the Body, EDI and BCS data to compare the different status groups on each body image measure for the Coloured participants. Welch’s Robust Tests of Equality of Means were done to determine whether differences existed between the Face means for the different relationship status groups of the Coloured participants. The results from the ANOVA are shown in Table 60 and those of the Welch test in Table 61.

Table 60
*The Analysis of Variance Results for Relationship Status for the Coloured Participants*

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>8.083</td>
<td>3</td>
<td>2.694</td>
<td>1.127</td>
<td>.342</td>
</tr>
<tr>
<td>Within Groups</td>
<td>236.674</td>
<td>99</td>
<td>2.391</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>244.757</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.710</td>
<td>3</td>
<td>.237</td>
<td>.700</td>
<td>.554</td>
</tr>
<tr>
<td>Within Groups</td>
<td>32.784</td>
<td>97</td>
<td>.338</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>33.494</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>81.654</td>
<td>3</td>
<td>27.218</td>
<td>.772</td>
<td>.513</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3598.082</td>
<td>102</td>
<td>35.275</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3679.736</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 60, there were no significant differences between the status groups on the Body ratings [$F(3, 99) = 1.127; p > .05$], BCS scores [$F(3, 97) = .700; p > .05$] and EDI scores [$F(3, 102) = .772; p > .05$] for the Coloured participants.

Table 61
*Robust Tests of Equality of Means for Relationship Status for Coloured Participants*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>Welch</td>
<td>.327</td>
<td>3 31.942</td>
</tr>
</tbody>
</table>
According to Table 61, there were no significant differences in the means of the Face ratings \([F(3, 31.942) = .327; p > .05]\) for the status groups of the Coloured participants.

7.3.1.3.4 Black Participants

Levene’s test indicated that the variances of the status groups were the same for each of the measures of body image \((p > .05)\). Thus ANOVA’s were done for the Body, Face, BCS and EDI data to compare the different status groups on each body image measure for the Black participants. The results from the ANOVA are shown in Table 62.

Table 62

| The Analysis of Variance Results for Relationship Status for Black Participants |
|-----------------|-----|-----|-----|-----|
|                 | SS  | df  | MS  | F   | p   |
| Face            |     |     |     |     |     |
| Between Groups  | .660| 3   | .220| .105| .957|
| Within Groups   | 243.932| 116 | 2.103|     |     |
| Total           | 244.592| 119 |     |     |     |
| Body            |     |     |     |     |     |
| Between Groups  | 5.182| 3   | 1.727| .922| .432|
| Within Groups   | 217.185| 116 | 1.872|     |     |
| Total           | 222.367| 119 |     |     |     |
| BCS             |     |     |     |     |     |
| Between Groups  | 2.020| 3   | .673| 1.668| .178|
| Within Groups   | 46.031| 114 | .404|     |     |
| Total           | 48.051| 117 |     |     |     |
| EDI             |     |     |     |     |     |
| Between Groups  | 23.359| 3  | 7.786| .462| .709|
| Within Groups   | 1954.566| 116 | 16.850|     |     |
| Total           | 1977.925| 119 |     |     |     |

According to Table 62 there were no significant differences between the status groups on Face ratings \([F(3, 116) = .105; p > .05]\), Body ratings \([F(3, 116) = .922; p > .05]\), BCS scores \([F(3, 114) = 1.668; p > .05]\) and EDI scores \([F(3, 116) = .462; p > .05]\) for the Black participants.
7.3.1.4 The Influence of Participants’ Body Mass Index Group

7.3.1.4.1 Underweight Participants

Levene’s test indicated that the variances of the status groups were the same for each of the measures of body image ($p > .05$). Therefore ANOVA’s were done for the Body, Face, BCS and EDI data to compare the different status groups on each body image measure for the Underweight participants. The ANOVA’s results are shown in Table 63.

Table 63

| The Analysis of Variance Results for Relationship Status for Underweight Participants |
|-----------------------------------------------|------|--------|------|-------|------|
| Face                                         | SS   | df    | MS   | F     | p    |
| Between Groups                                | 3.125| 3      | 1.042| .445  | .724 |
| Within Groups                                 | 46.833| 20    | 2.342|       |      |
| Total                                        | 49.958| 23    |      |       |      |
| Body                                         | SS   | df    | MS   | F     | p    |
| Between Groups                                | 8.167| 3      | 2.722| 2.121 | .130 |
| Within Groups                                 | 25.667| 20    | 1.283|       |      |
| Total                                        | 33.833| 23    |      |       |      |
| BCS                                          | SS   | df    | MS   | F     | p    |
| Between Groups                                | .314 | 3      | .105 | .280  | .839 |
| Within Groups                                 | 7.844| 21    | .374 |       |      |
| Total                                        | 8.158| 24    |      |       |      |
| EDI                                          | SS   | df    | MS   | F     | p    |
| Between Groups                                | 84.450| 3     | 28.150| 2.526 | .087 |
| Within Groups                                 | 222.883| 20   | 11.144|       |      |
| Total                                        | 307.333| 23   |      |       |      |

According to Table 63 there were no significant differences between the status groups on Face ratings [$F(3, 20) = .445; p > .05$], Body ratings [$F(3, 20) = 2.121; p > .05$], BCS scores [$F(3, 21) = .280; p > .05$] and EDI scores [$F(3, 20) = 2.526; p > .05$] for the Underweight participants.
7.3.1.4.2 Normal Weight Participants

Levene’s test was done to determine if the variances of the status groups were the same. Levene’s test was significant \( (p < .05) \) for the EDI measure, which indicates a violation of the assumption of homogeneity of variances. Thus ANOVA’s were done for the Face, Body and BCS data to compare the different status groups on each body image measure for the Normal Weight participants. Welch’s Test was done to determine if differences existed between the EDI means for the different status groups of these participants. The ANOVA’s results are shown in Table 64 and those of the Welch test in Table 65.

Table 64

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>17.654</td>
<td>3</td>
<td>5.885</td>
<td>3.396</td>
<td>.018</td>
</tr>
<tr>
<td>Within Groups</td>
<td>672.264</td>
<td>388</td>
<td>1.733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>689.918</td>
<td>391</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>15.666</td>
<td>3</td>
<td>5.222</td>
<td>3.079</td>
<td>.027</td>
</tr>
<tr>
<td>Within Groups</td>
<td>659.805</td>
<td>389</td>
<td>1.696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>675.471</td>
<td>392</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.491</td>
<td>3</td>
<td>.164</td>
<td>.534</td>
<td>.659</td>
</tr>
<tr>
<td>Within Groups</td>
<td>118.879</td>
<td>388</td>
<td>.306</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.370</td>
<td>391</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 64 there were significant differences between the status groups on Face ratings \([F(3, 388) = 3.396; p < .05]\) and Body ratings \([F(3, 389) = 3.079; p < .05]\). Yet, no significant differences existed between the BCS scores \([F(3, 388) = .534; p > .05]\) of the different status groups.

Table 65

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EDI</strong></td>
<td>Welch</td>
<td>2.064</td>
<td>3</td>
</tr>
</tbody>
</table>
According to Table 65, there were no significant differences in the means of the EDI ratings \(F(3, 156.087) = 2.064; p > .05\) for the status groups of the Normal Weight participants. Yet, Post hoc tests needed to be done to compare all status groups with each other. This was only done with the Face and Body scores as it was already known that there were no status differences on the EDI and BCS scores. The Bonferroni test was done with the Face and Body variables as their variances were found to be equal. The results for these analyses are shown in Tables 66 and 67. To limit the size of these two tables, only the significant results were shown in the tables.

Table 66

*Multiple Comparisons for Status of Normal Weight Participants, Dependent Variable: Face*

<table>
<thead>
<tr>
<th></th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonferroni</td>
<td>Dating2 Dating4</td>
<td>-.504*</td>
<td>.162</td>
<td>-.93</td>
<td>-.07</td>
</tr>
<tr>
<td></td>
<td>Dating4 Dating2</td>
<td>.504*</td>
<td>.162</td>
<td>.07</td>
<td>.93</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the .05 level.

*Note.* Dating2 = Not dating anyone currently; Dating4 = Dating one person exclusively and engaged or planning to marry.

Table 67

*Multiple Comparisons for Status of Normal Weight Participants, Dependent Variable: Body*

<table>
<thead>
<tr>
<th></th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonferroni</td>
<td>Dating2 Dating4</td>
<td>-.452*</td>
<td>.160</td>
<td>-.88</td>
<td>-.03</td>
</tr>
<tr>
<td></td>
<td>Dating4 Dating2</td>
<td>.452*</td>
<td>.160</td>
<td>.03</td>
<td>.88</td>
</tr>
</tbody>
</table>

*. The mean difference is significant at the .05 level.

*Note.* Dating2 = Not dating anyone currently; Dating4 = Dating one person exclusively and engaged or planning to marry.
According to Table 66, the only significant result was that the participants who were not
dating anyone currently and the participants currently dating one person exclusively, had
significantly different mean Face ratings \( (p < .05) \). According to Table 67, the only
significant result was that the participants who were not dating anyone currently and the
participants currently dating one person exclusively, had significantly different mean
Body ratings \( (p < .05) \).

7.3.1.4.3 Overweight Participants

Levene’s test indicated that the variances of the status groups were the same for each of
the measures of body image \( (p > .05) \). Therefore ANOVA’s were done for the Body,
Face, BCS and EDI data to compare the different status groups on each body image
measure for the Overweight participants. The results are shown in Table 68.

Table 68

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>4.438</td>
<td>3</td>
<td>1.479</td>
<td>.712</td>
<td>.549</td>
</tr>
<tr>
<td>Within Groups</td>
<td>120.545</td>
<td>58</td>
<td>2.078</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124.984</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>12.940</td>
<td>3</td>
<td>4.313</td>
<td>2.155</td>
<td>.103</td>
</tr>
<tr>
<td>Within Groups</td>
<td>116.109</td>
<td>58</td>
<td>2.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>129.048</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1.800</td>
<td>3</td>
<td>.600</td>
<td>1.310</td>
<td>.280</td>
</tr>
<tr>
<td>Within Groups</td>
<td>26.108</td>
<td>57</td>
<td>.458</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>27.908</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>96.433</td>
<td>3</td>
<td>32.144</td>
<td>.673</td>
<td>.572</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2769.905</td>
<td>58</td>
<td>47.757</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2866.339</td>
<td>61</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 68, there were no significant differences between the status groups on
the Face Ratings \( [F(3, 58) = .712; p > .05] \), Body ratings \( [F(3, 58) = 2.155; p > .05] \), BCS
scores \( [F(3, 57) = 1.310; \ p > .05] \) and EDI scores \( [F(3, 58) = .673; \ p > .05] \) for the Overweight participants.

7.3.1.4.4 Obese Participants

Levene’s test was found to be non-significant \( (p > .05) \) for all measures of body image for the Obese participants. Therefore ANOVA’s were done for the Body, Face, BCS and EDI data to compare the different status groups on each body image measure for the Obese participants. The results from the ANOVA are shown in Table 69.

Table 69

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Face</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>5.356</td>
<td>3</td>
<td>1.785</td>
<td>1.408</td>
<td>.282</td>
</tr>
<tr>
<td>Within Groups</td>
<td>17.756</td>
<td>14</td>
<td>1.268</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>23.111</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Body</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>7.589</td>
<td>3</td>
<td>2.530</td>
<td>1.200</td>
<td>.346</td>
</tr>
<tr>
<td>Within Groups</td>
<td>29.522</td>
<td>14</td>
<td>2.109</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>37.111</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BCS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.994</td>
<td>3</td>
<td>.331</td>
<td>1.448</td>
<td>.274</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2.977</td>
<td>13</td>
<td>.229</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.971</td>
<td>16</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>EDI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>66.889</td>
<td>3</td>
<td>22.296</td>
<td>.259</td>
<td>.854</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1206.056</td>
<td>14</td>
<td>86.147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1272.944</td>
<td>17</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to Table 69 there were no significant differences between the status groups on Face ratings \( [F(3, 14) = 1.408; \ p > .05] \), Body ratings \( [F(3, 14) = 1.200; \ p > .05] \), BCS scores \( [F(3, 13) = 1.448; \ p > .05] \) and EDI scores \( [F(3, 14) = .259; \ p > .05] \) for the Obese participants.
7.3.2. Hypothesis 13:
There will be a relationship between a girl’s body image and her satisfaction with her dating relationship.
Secondary hypotheses: This relationship will be different for the different cultural groups and body mass index groups.

7.3.2.1 Body Image as Predictor of Relationship Satisfaction
Simple regression analysis was conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships. Results for the simple regression analysis done to determine if Face ratings were a predictor of relationship satisfaction, as assessed by the RAS, are recorded in Table 70.

Table 70
*Simple Regression of Face on the Relationship Assessment Scale*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient</th>
<th>t-ratio</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.566</td>
<td>.608</td>
<td>7.505</td>
</tr>
<tr>
<td>RAS</td>
<td>.011</td>
<td>.021</td>
<td>.040</td>
</tr>
</tbody>
</table>

\[ F = .277 \]
\[ R \text{ squared} = 0.2\% \]
\[ ^{*}p < .05 \]

As shown in Table 70, Face ratings were not shown to be a significant predictor of participants’ level of satisfaction with their romantic relationships \( p > .05 \). Results for the simple regression analysis done to determine if Body ratings were a predictor of relationship satisfaction, as assessed by the RAS, are given in Table 71.
As shown in Table 71, Body ratings were also not a significant predictor of participants’ level of satisfaction with their romantic relationships ($p > .05$). Results for the simple regression analysis of BCS scores on relationship satisfaction, as measured by the RAS, are given in Table 72.

As shown in Table 72, BCS scores were a significant predictor of participants’ level of satisfaction with their romantic relationships ($p < .05$). Yet, BCS scores could account for only 3.5% of the variation in RAS scores. Results for the simple regression analysis of EDI scores on relationship satisfaction, as measured by the RAS, are shown in Table 73.
As shown by Table 73, EDI scores were not found to be a significant predictor of participants’ level of satisfaction with their romantic relationships (\(p > .05\)). Therefore only the BCS measure of body image was found to be a predictor of participants’ satisfaction with their romantic relationships.

The hypothesis regarding a possible relationship between participants’ body image and their relationship satisfaction was also investigated for the different cultural and body mass index groups.

### 7.3.2.2 The Influence of Participants’ Cultural Group

#### 7.3.2.2.1 Afrikaans White Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Afr/White participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 74.
As shown in Table 74, none of the four measures of body image (Face, Body, BCS, EDI) were significant predictors of Afr/White participants’ level of satisfaction with their romantic relationships ($p > .05$).

**7.3.2.2.2 English White Participants**

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Eng/White participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 75.
As shown in Table 75, none of the four measures of body image (Face, Body, BCS, EDI) were significant predictors of Eng/White participants’ level of satisfaction with their romantic relationships ($p > .05$).

### 7.3.2.2.3 Coloured Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Coloured participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 76.
Table 76

*Simple Regression of Body Image Measures on the RAS for Coloured Participants*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
<th>F</th>
<th>R squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.701</td>
<td>1.109</td>
<td></td>
<td>4.241</td>
<td>.000</td>
<td></td>
<td>0.3%</td>
</tr>
<tr>
<td>RAS</td>
<td>.014</td>
<td>.039</td>
<td>.050</td>
<td>.372</td>
<td>.712</td>
<td>.138</td>
<td></td>
</tr>
</tbody>
</table>

**Simple Regression of Face Measure**

| Constant  | 4.998       | 1.182      |    | 4.228   | .000    |     |           |
| RAS       | .006        | .041       | .018 | .136    | .893    | .018| 0.0%      |

**Simple Regression of Body Measure**

| Constant  | 2.380       | .424       |    | 5.608   | .000    |     | 11.9%     |
| RAS       | .040        | .015       | .346 | 2.706   | .009    | 7.320|           |

**Simple Regression of BCS Measure**

| Constant  | 14.748      | 4.016      |    | 3.673   | .001    |     | 8.5%      |
| RAS       | -.324       | .141       | -.291| -2.296  | .025    | 5.273|           |

*p < .05

According to Table 76, Face and Body ratings were not significant predictors of Coloured participants’ level of satisfaction with their romantic relationships (p > .05). Yet, both measures of body dissatisfaction (BCS and EDI scores) were found to be significant predictors of this group’s level of satisfaction with their romantic relationships (p < .05). BCS scores could account for only 11.9% and EDI scores 8.5% of the variation in RAS scores for this group.

### 7.3.2.2.4 Black Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Black participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 77.
According to Table 77, Body ratings and EDI scores were not significant predictors of Black participants’ level of satisfaction with their romantic relationships ($p > .05$). Yet, Face ratings and BCS scores were found to be significant predictors of this group’s level of satisfaction with their romantic relationships ($p < .05$). Face ratings could account for only 11.5% and BCS scores 8.0% of the variation in RAS scores for this group.

7.3.2.3 The Influence of Participants’ Body Mass Index Group

7.3.2.3.1 Underweight Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Underweight participants. Results for the simple regression analysis done to determine if
Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 78.

Table 78

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
<th>F</th>
<th>R squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Simple Regression of Face Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.692</td>
<td>1.792</td>
<td>.207</td>
<td>.560</td>
<td>.593</td>
<td>.314</td>
<td>4.3%</td>
</tr>
<tr>
<td>RAS</td>
<td>.038</td>
<td>.067</td>
<td>.207</td>
<td>.560</td>
<td>.593</td>
<td>.314</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Simple Regression of Body Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.310</td>
<td>1.832</td>
<td>.005</td>
<td>.013</td>
<td>.990</td>
<td>.000</td>
<td>0.0%</td>
</tr>
<tr>
<td>RAS</td>
<td>.001</td>
<td>.069</td>
<td>.005</td>
<td>.013</td>
<td>.990</td>
<td>.000</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Simple Regression of BCS Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.978</td>
<td>.991</td>
<td>.195</td>
<td>.525</td>
<td>.616</td>
<td>.276</td>
<td>3.8%</td>
</tr>
<tr>
<td>RAS</td>
<td>.020</td>
<td>.037</td>
<td>.195</td>
<td>.525</td>
<td>.616</td>
<td>.276</td>
<td>3.8%</td>
</tr>
<tr>
<td><strong>Simple Regression of EDI Measure</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-.473</td>
<td>5.066</td>
<td>-.093</td>
<td>.928</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>.108</td>
<td>.190</td>
<td>.211</td>
<td>.570</td>
<td>.586</td>
<td>.325</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

*\(p < .05\)

As shown in Table 78, none of the four measures of body image (Face, Body, BCS, EDI) were significant predictors of Underweight participants’ level of satisfaction with their romantic relationships (\(p > .05\)).

7.3.2.3.2 Normal Weight Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Normal Weight participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 79.
As shown in Table 79, none of the four measures of body image (Face, Body, BCS, EDI) were significant predictors of Normal Weight participants’ level of satisfaction with their romantic relationships ($p > .05$).

### 7.3.2.3.3 Overweight Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Overweight participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 80.
Table 80

*Simple Regression of Body Image Measures on the RAS for Overweight Participants*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
<th>F</th>
<th>R squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>1.515</td>
<td>1.506</td>
<td>1.006</td>
<td>.324</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>.131</td>
<td>.055</td>
<td>.437</td>
<td>2.378</td>
<td>.026</td>
<td>5.655</td>
<td>19.1%</td>
</tr>
<tr>
<td>Simple Regression of Face Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.544</td>
<td>1.385</td>
<td>1.837</td>
<td>.079</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>.097</td>
<td>.051</td>
<td>.364</td>
<td>1.915</td>
<td>.068</td>
<td>3.666</td>
<td>13.3%</td>
</tr>
<tr>
<td>Simple Regression of Body Measure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.150</td>
<td>.681</td>
<td>3.155</td>
<td>.004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>.054</td>
<td>.025</td>
<td>.406</td>
<td>2.176</td>
<td>.040</td>
<td>4.736</td>
<td>16.5%</td>
</tr>
<tr>
<td>Simple Regression of BCS Measure</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>16.465</td>
<td>8.017</td>
<td>2.054</td>
<td>.051</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAS</td>
<td>-.296</td>
<td>.293</td>
<td>-.202</td>
<td>-1.010</td>
<td>.323</td>
<td>1.019</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

*p < .05

According to Table 80, Body ratings and EDI scores were not significant predictors of Overweight participants’ level of satisfaction with their romantic relationships (p > .05). Yet, Face ratings and BCS scores were found to be significant predictors of this group’s level of satisfaction with their romantic relationships (p < .05). Face ratings could account for 19.1% and BCS scores 16.5% of the variation in RAS scores for this group.

7.3.2.3.4 Obese Participants

Simple regression analyses were conducted in order to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships for Obese participants. Results for the simple regression analysis done to determine if Face ratings, Body ratings, BCS scores or EDI scores were predictors of relationship satisfaction are recorded in Table 81.
### Table 81

**Simple Regression of Body Image Measures on the RAS for Obese Participants**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>t-ratio</th>
<th>p</th>
<th>F</th>
<th>R squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Simple Regression of Face Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.491</td>
<td>2.664</td>
<td>2.061</td>
<td>.131</td>
<td></td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>RAS</td>
<td>-.004</td>
<td>.101</td>
<td>-.020</td>
<td>-.035</td>
<td>.974</td>
<td>.001</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Simple Regression of Body Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.564</td>
<td>3.204</td>
<td>0.800</td>
<td>.482</td>
<td></td>
<td></td>
<td>0.0%</td>
</tr>
<tr>
<td>RAS</td>
<td>.087</td>
<td>.121</td>
<td>.382</td>
<td>.715</td>
<td>.526</td>
<td>.512</td>
<td>14.6%</td>
</tr>
<tr>
<td><strong>Simple Regression of BCS Measure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Constant</td>
<td>1.063</td>
<td>.475</td>
<td>2.240</td>
<td>.154</td>
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<td>0.0%</td>
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<tr>
<td>RAS</td>
<td>.088</td>
<td>.017</td>
<td>.965</td>
<td>5.237</td>
<td>.035</td>
<td>27.431</td>
<td>93.2%</td>
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<tr>
<td><strong>Simple Regression of EDI Measure</strong></td>
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<tr>
<td>Constant</td>
<td>36.018</td>
<td>19.344</td>
<td>1.862</td>
<td>.160</td>
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<td>0.0%</td>
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<tr>
<td>RAS</td>
<td>-.931</td>
<td>.731</td>
<td>-.592</td>
<td>-1.273</td>
<td>.293</td>
<td>1.621</td>
<td>35.1%</td>
</tr>
</tbody>
</table>

*p < .05

According to Table 81, Face and Body ratings and EDI scores were not significant predictors of Obese participants’ level of satisfaction with their romantic relationships (*p* > .05). Yet, BCS scores were found to be significant predictors of this group’s level of satisfaction with their romantic relationships (*p* < .05). BCS scores could account for 93.2% of the variation in RAS scores for this group.

These results are discussed in Chapter 8.
CHAPTER 8
DISCUSSION

In general, the aim of this study was to investigate body image and romantic relationships in a sample of South African female adolescents from four different cultural groups. The primary aim of this study was to investigate the potential relationship between female adolescents’ body image and their relationship status and relationship satisfaction. An additional aim was to determine if participants’ culture or body mass index had any influence on these potential relationships.

The secondary aim of the study was to investigate how aspects like participants’ age, body size and cultural group influenced their body image. The other secondary aim of the study was to determine how participants’ age, body size and cultural group influenced their relationship status and relationship satisfaction.

8.1 Relationships Among the Measures of Body Image

**Hypothesis 1:** Relationships will exist between the four different measures of body image.

Correlational analysis indicated that the self-ratings of facial and bodily attractiveness and scores on the two measures of body dissatisfaction, the Body Cathexis scale and the Body Dissatisfaction sub-scale of the Eating Disorder Inventory, were all significantly related to each other. Therefore, it seems, that for adolescent females, positive feelings about their bodies, and feelings that they have attractive faces and bodies are all connected. Thus, the hypothesis appears to be true for this sample. The current study focussed on the evaluative aspect of body image and so measured both dissatisfaction with specific body parts and general appearance evaluation. These results indicate that these two aspects of evaluative body image are clearly related to each other.
Few previous studies could be found that have measured both self-rated attractiveness and body dissatisfaction in the same population (Davison & McCabe, 2003; Wiederman, 2000; Wiederman & Hurst, 1997; Wiederman & Hurst 1998), yet none of these reported whether correlations existed between these measures. Therefore, no previous studies could be found with which to compare the current findings.

As previous research has indicated that body attitudes are affected by cultural and or race differences, correlations between the four measures of body image were also done for each cultural group individually (Sondhaus et al., 2001; Thompson & Smolak, 2001). This idea was also reflected in the current findings, as the cultural groups differed from each other on the relationships between body image measures. All the measures were correlated for the Afrikaans White participants and all but one were correlated for the English White and Coloured participants. Yet, only two of the correlations were significant for the Black participants, which could indicate that the two aspects of the evaluative aspect of body image are less strongly related than in the other cultural groups. This is an indication that, like in other parts of the world, culture also plays an important role in body image among South African females.

As many studies have found weight to have a particularly salient influence on body image (Abell & Richards, 1996; Banfield & McCabe, 2002; Garner, 1997; Muth & Cash, 1997; Thompson & Smolak, 2001), it was therefore decided in the present study to also compare girls of different sizes regarding body image. The correlations between the four body image measures were thus also done individually for each of the four body mass index groups proposed in this study. There were significant differences between the groups. The only correlation that was significant for all body mass index groups was the correlation between the two measures of body dissatisfaction, thus between the EDI and BCS. Thus, the body mass index of the participants was related to whether or not their body image measures were correlated with each other.
Although Hypothesis 1 seems to be true when considering the entire sample, it did not apply to all cultural and body mass index groups.

8.2 Culture and Body Image

Hypothesis 2: The cultural groups will score differently from each other on the measures of body image, with Coloured and Black females having more positive body image than both English- and Afrikaans-speaking White females.

Analysis of Variance tests revealed that the cultural groups significantly differed from each other on all four the measures of body image. This is in accordance with findings from previous studies (Sondhaus et al., 2001; Thompson & Smolak, 2001).

Post hoc analysis revealed that Black and Coloured girls rated themselves significantly higher in both facial and bodily attractiveness than both Afrikaans White and English White females. No South African research on self-rated attractiveness could be found with which to compare the current findings. The previous studies in which this method of assessing facial and bodily attractiveness had been used (Feingold, 1992; Wiederman, 2000; Wiederman & Hurst, 1997; Wiederman & Hurst, 1998) did not compare participants from different cultural groups with each other. Yet, previous studies on American women have found Black women to have more positive global appearance evaluation than did White women (Cash & Henry, 1995; Cash et al., 2004; Rucker & Cash, 1992). Edwards (2000) found that almost 60% of her sample of Black female university students indicated satisfaction with their current appearance.

Black and Coloured participants also indicated significantly more body satisfaction than both Afrikaans and English White participants as measured by the Body Cathexis Scale. Black participants also reported significantly less dissatisfaction with those body parts usually of concern to females, as measured by the Body Dissatisfaction scale of the EDI, than both White groups. Although the Coloured group reported more dissatisfaction than
the Black group and less dissatisfaction than both the White groups, these differences were not significant.

Little comparative research about body dissatisfaction has been done among the cultural groups in South Africa. A South African study that did study racial differences, found Black university women to indicate less body shape dissatisfaction than both White and Coloured women (Sheward, 1994). Geach (1995) also used the Body Dissatisfaction subscale in her study of university students and she also found Black females to have lower scores and thus less dissatisfaction than White females. Haynes’s (1995) findings were similar to that of the current study as they also found South African White women to be more dissatisfied than Black women. Yet, this finding was only significant between White women and rural Black women. Black and White university students did not significantly differ in terms of body dissatisfaction. American studies generally show higher levels of body dissatisfaction in White American females than in Black American females of all ages (Abrams et al., 1993; Cash & Henry, 1995; Grogan, 1999; Harris et al., 1991; Henriquees & Calhoun, 1999; Kumanyika, 1987; Rucker & Cash, 1992; Schreiber et al., 1996; Striegel-Moore et al., 2000) including adolescents (Franko & Striegel-Moore, 2002; Smolak & Levine, 2001; Striegel-Moore, et al., 2000). Grogan (1999) also believes this to be the case with British women.

Thus, it can be concluded that Hypothesis 2 was true on both accounts in the present sample of females: The racial groups did score significantly differently from each other on the measures of body image, and in general, Black and Coloured girls had reported more positive body image than White girls. Previous researchers have been divided in their opinion on racial differences regarding body image. Some, like Duncan et al. (2004) believe Black women to have a more positive body image and greater body esteem than women from other ethnic groups, while others, like Caldwell et al. (1997) found Black American women to be more alike than different from White women on measures of body image. Thus, while South African studies with which to compare these findings are scarce, the current findings do seem to be similar to trends found in other countries and in the few existing South African studies on the subject.
Although the current findings indicate that White adolescents on average show a more negative body image, these findings should not make us unconcerned about body image problems among women of other racial groups in South Africa. A great deal of recent studies have shown an increase in body image disturbance and disordered eating in ethnically diverse groups (Koff & Benavage, 1998) while Szabo (1998) found that bulimia has been steadily increasing among Black South Africans. This could be due to the increasing exposure of Black South African girls to Western culture. Acculturation or Westernization possibly influence people from a non-Western culture’s level of body satisfaction (Dounchis et al., 2001; Furnham & Alibhai, 1983; Haynes, 1995; Kawamura cited in Schwartz & Brownell, 2004; Molloy & Herzberger, 1998). According to Bowen et al. (cited in Molloy & Herzberger, 1998), if Black women identify more with the dominant White culture than with their own culture, it could increase their vulnerability to body image distortions and eating disorders. Szabo (1998, p. 13), when discussing the prevalence of eating disorders in the Black population in South Africa, states: “Western values appear to be instrumental in promoting the emergence of these conditions.” Yet, this is currently only speculation and more research needs to be done to confirm this statement.

The reasons for these differences in body image and body attitudes among the cultural groups in South Africa are still unknown. Overseas theorists have proposed a few possible explanations, for example African American culture’s wider range of accepted body sizes for women (Fallon, Katzman, & Wooley cited in Cash & Henry, 1995; Rucker & Cash, 1992), African Americans’ preference for a larger body size than White American women (Abrams et al., 1993; Grogan, 1999; Harris, 1994; Rosenblum & Lewis, 1999), less stigmatization of overweight and obesity among African Americans (Grogan, 1999; Harris et al., 1991), different views of beauty among cultural groups (Molloy & Herzberger, 1998; Rosenblum & Lewis, 1999), different role-models for attractiveness (Franko & Striegel-Moore, 2002; Parnell et al., 1996; Thomas, 1989), racial differences in women’s beliefs regarding what men of their race find attractive in a woman and actual differences in what men find attractive (Greenberg & Laporte, 1996;
Molloy & Herzberger, 1998; Parker et al., 1995; Powell & Kahn, 1995). Research has to be done to test whether these explanations also apply to South African populations.

8.3 Age and Body Image

Hypothesis 3: Body image will change with age, with older girls having more negative body image than younger girls.

When studying the participants’ mean self-ratings of facial and bodily attractiveness for each age, it appeared that their self-ratings of facial and bodily attractiveness increased across age groups 13 to 16 and then decreased again for age groups 17 and 18, but never again to such lows as at that of the age 13 group. Yet, while ANOVA’s showed significant differences in Face scores for the different age groups, the Body scores did not change significantly across age groups. The only age groups that differed significantly from each other on Face scores were the 13- and 16-year-olds, with 13-year-olds having significantly lower self-ratings of facial attractiveness.

When studying the participants’ mean BCS scores as a measure of body satisfaction for each age, it seems that their scores slowly decreased across age groups 13 to 17 and then dramatically increased for the age 18 group. Yet, the results from the ANOVA showed that there was no significant difference in the BCS means of the age groups. Body satisfaction, according to the BCS, was thus not different for girls of different ages.

It is impossible to see a clear trend when looking at the mean EDI scores for each age group. It does not seem that the body dissatisfaction scores increased or decreased across age groups. Yet, an ANOVA analysis indicated that there were significant differences in the means of the EDI scores for the age groups. The only significant differences for the age groups were that the 18-year-old girls’ mean EDI scores significantly differed from that of the 16- and 17-year-old girls. Eighteen-year-olds reported significantly less body dissatisfaction than 16- and 17-year-olds as measured by the EDI. This finding is in contrast with previous studies that show dissatisfaction with specific body parts (e.g.
hips, thighs, bottom as also measured by the EDI in the current study) to increase over the course of adolescence (Davies & Furnham, 1986a; Rosenblum & Lewis, 1999; Salmons et al., 1988; Wardle & Marsland, 1990).

Smolak and Levine (2001) name many studies that show body dissatisfaction to increase with age for girls. A study by Hargreaves and Tiggemann (2002) with female adolescents found their level of body dissatisfaction to increase over a two-year period with the mean age at time one being 15 years and the mean age at time two 17 years. Rosenblum and Lewis (1999) found adolescent girls’ body dissatisfaction to increase between ages 13 to 15, yet scores stayed the same between ages 15 and 18.

When looking at the above results, it can be said that no general significant age trend regarding body image was found for this sample, except maybe that 18-year-old girls indicated less body dissatisfaction than the younger girls on both measures of body satisfaction. Hypothesis 3 was thus not proved to be correct. None of the four body image measures significantly and consistently increased or decreased across age groups and if anything, 18-year-olds (older girls) had better body image in the sense of less dissatisfaction than younger ones. According to some previous research, body image is at its worst during adolescence because of physical changes which could lead them to move away from a thin ideal (Carruth & Goldberg cited in Grogan, 1999; Simmons et al., 1983). This possible increase in body dissatisfaction could be due to the increase in weight that females experience in adolescence. While previous studies found that body image seems to become increasingly negative over the course of adolescence, with body dissatisfaction increasing as the girls become older (Byely et al., 2000; Frost & McKelvie, 2004; Hargreaves & Tiggemann, 2002; Rosenblum & Lewis, 1999; Wardle & Marsland, 1990), this was not supported by findings from the current study. The decrease in body dissatisfaction, as measured by the EDI, that happens at age 18 could hypothetically be because most of the physical changes due to puberty are over by this age and it could be that the girls are getting used to their changed figures and are therefore less dissatisfied.
8.4 Body Mass Index

8.4.1 Age and Body Mass Index

**Hypothesis 4.1:** Older females will have a higher body mass index than younger females.

It is clear that the mean body mass index for an age group increases with increasing age. Analysis of Variance indicated that there was a significant difference in the BMI means of the age groups with older participants having higher body mass indexes than younger ones. Thus, Hypothesis 4.1 was proved to be correct for the current sample. This finding is most probably due to greater pubertal development in the older females. Puberty is associated with a normative increase in body weight and also in body fat (Blyth et al., 1985; Levine, 1987; Nolen-Hoeksema & Girgus, 1994; Richards, Boxer, et al., 1990; Striegel-Moore et al., 2001) and therefore older girls, who are in all likelihood further along in pubertal development, will weigh more.

A study on South African females who were first year students at a university, found that for this sample of women whose ages ranged from late teens to middle twenties, there was a significant relationship between age and body mass index (Senekal et al., 2001). Studies with American samples have also found adolescent girls’ body mass indexes to increase with increasing age (Byely et al., 2000; Rosenblum & Lewis, 1999; Wardle & Marsland, 1990).

8.4.2 Culture and Body Mass Index

**Hypothesis 4.2:** Black and Coloured females will have a higher mean body mass index than both English and Afrikaans White girls.

While the Black and Coloured participants did have higher mean body mass indexes than the White groups, Analysis of Variance was needed to determine whether these differences were significant. The ANOVA indicated that the cultural groups significantly
differed from each other on mean BMI. Post hoc tests revealed that the Black girls had significantly different BMI’s from the Afrikaans White, English White and Coloured groups, who did not significantly differ from each other regarding BMI. The Black participants had significantly higher body mass indexes than the other three cultural groups.

Thus, it seems that Hypothesis 4.2 was partially true for the present sample. The reason for this difference in BMI is unknown. It could be due to biological or hereditary differences between the cultural groups, lifestyle or cultural differences or due to the groups supporting different ideal bodies. Or it could be due to the fact that the Black groups’ average age was significantly higher than the White group’s age in the present study. Yet, this remains only speculation, but whatever the reason, this phenomenon seems to have also occurred in previous studies with South African and overseas samples. The mean body mass index of 22.73 for the Black group in the current study is similar to the 22.6 which Senekal et al. (2001) found in their study on Black South African university students. Sheward (1994), in a sample of South African male and female university students, found Black students to have a significantly higher BMI (22.99) than both White (21.30) and Coloured (21.37) students who did not differ from each other. These body mass indexes are similar to findings from Zahoul’s study (1996) on South African Black (22.93) and White (21.32) male and female university students. Haynes (1995), in a sample of university-aged South African women, also found Black women to have significantly higher BMI’s than the White group of women. Geach’s (1995) sample of University students also reflected these differences with Black women (25.6) being significantly heavier than White women (21.3). More Black (30%) than White (26.3%) or Coloured (25.3%) South Africans were found to be obese (CME, 2002) while more than 50% of Venter’s (2003) sample of Black women between ages 25 to 44 were overweight.

Research on racial differences regarding BMI with overseas populations has also shown Black women on average to have significantly higher body mass indexes than White women across all ages (Franko & Striegel-Moore, 2002; Harris et al., 1991; Kumanyika,
1987; Rand & Kaldua, 1990; Rosner et al., 1998; Smolak & Levine, 2001; Striegel-Moore et al., 2000).

Even though Black women are usually heavier than White women, many studies with American and British samples indicate that White children, adolescents, college students and adults are more likely to be dissatisfied with their weight, are more worried about being overweight, show more overweight preoccupation, and are more likely to want to lose weight than Black people of the same age (Cash & Henry, 1995; Cash et al., 2004; Dounchis et al., 2001; Grogan, 1999; Neff et al., 1997; Rucker & Cash, 1992; Serdula et al., 1993; Wardle & Marshland, 1990). Studies also show that Black females diet less, engage in less disordered eating, and are less likely to develop eating disorders than White females (Crago et al., 1996; Franko & Striegel-Moore, 2002; Parker et al., 1995; Rucker & Cash, 1992). It thus seems that although Black females are usually heavier than their White counterparts, they still have fewer weight-related emotional problems.

8.5 Body Image and Body Mass Index

8.5.1 Body Image and Body Mass Index Groups

Hypothesis 5.1: Participants with higher body mass indexes will score more negatively on measures of body image than will participants with lower body mass indexes.

Analysis of Variance tests indicated that there was no significant difference in the Face ratings of the body mass index groups. Underweight, normal weight, overweight and obese participants thus all viewed their faces as equally attractive. Yet, Analysis of Variance tests indicated that there were significant differences in the Body ratings of the body mass index groups. This finding makes sense as a person’s body weight does not influence a person’s face to the same extent as her body in terms of weight and therefore attractiveness. Previous research also shows a relationship between weight and satisfaction with general body appearance and attractiveness (Hoyt & Kogan, 2001).
Post hoc tests showed that obese participants’ self-ratings of bodily attractiveness were significantly lower than both the underweight and overweight participants and lower, but not significantly lower, than the normal weight participants. The underweight participants were the group that viewed their bodies as the most attractive in comparison with the other groups while obese participants viewed themselves as least attractive. The hypothesis was thus proved to be true for the current sample. Cash and Green (1986) also found overweight women to be significantly more dissatisfied with the appearance of their bodies than were lighter women. Stake and Lauer (1987) found overweight subjects to rate themselves as less attractive than did normal weight subjects. Hoyt and Kogan’s (2001) study indicated that normal weight people were more satisfied with their appearance and physical attractiveness than either under- or overweight people, which is in contrast with findings from the current study.

Previous studies has indicated that Western society currently views extreme thinness as the ideal for attractiveness (Cash & Henry, 1995; Fallon & Rozin, 1985; Furnham et al., 2002; Garner et al., 1980; Grogan, 1999; Kallen & Doughty, 1984; Monteath & McCabe, 1997; Morris et al., 1989; Parkinson et al., 1998; Rosenblum & Lewis, 1999; Silverstein et al., 1986; Striegel-Moore et al., 1986; Thompson, 1990; Webster & Tiggemann, 2003; Wilfley & Rodin, 1995; Wiseman et al., 1992) while obesity is viewed as unattractive (Allon, 1973; Fisher, 1986; Grogan, 1999; Harris et al., 1982; Harris et al., 1991; Wooley & Wooley, 1979). Even though this ideal of thinness is viewed as “unrealistic” and “unattainable” for many females (Cash & Green, 1986; Fallon, 1990; Hargreaves & Tiggeman, 2004; Pliner et al., 1990; Rosenblum & Lewis, 1999; Webster & Tiggemann, 2003; Williams, 2001), the thin-fat stereotype tends to be shared by overweight persons themselves (Tiggemann & Rothblum, 1988). According to Mostert (1995) these socially defined stereotypes strongly influence a woman’s views of her own appearance. Annis et al. (2004) believes that if a person’s social environment views her as unattractive, it should not be surprising that the obese individual will internalize this self-view. According to Thompson and Stice (2001) many women do internalize these cultural ideals and start assessing their physical and personal self-worth in terms of these unrealistic and extreme standards. It is, therefore, no surprise that girls who do not
conform to this thin ideal, eventually internalize it and come to view themselves as unattractive.

Western culture at this moment in time strongly associates beauty and thinness with each other (Mostert, 1995; Ricciardelli & McCabe, 2001; Siever, 1994; Wolf, 1990). Heavier body weights and shapes are viewed as socially undesirable and this is especially the case for females (Smolak & Levine, 2001). According to Hoyt and Kogan (2001) it might be that women who fit the societal ideal for female appearance are more satisfied with their appearance. Monteath and McCabe (1997) and Mostert (1995) also proposed that the closer the person’s subjective body image is to this internalized ideal, the more likely it would be that that person would have a healthy body image. This would predict that the thinner females would view themselves as more attractive than the heavier females, which is exactly what was found in the current study.

Analysis of Variance tests indicated that there was no significant difference in the Body Cathexis Scale scores of the body mass index groups. Underweight, normal weight, overweight and obese participants did not statistically differ in their level of body dissatisfaction as measured by the Body Cathexis Scale. Yet, Analysis of Variance results indicated that there were significant differences in the EDI scores of the body mass index groups. It seems that participants’ body dissatisfaction, as measured by the EDI’s Body Dissatisfaction subscale, increased as their weight increased, as the underweight participants showed the least body dissatisfaction, followed by the normal weight participants, with the overweight participants showing the second highest body dissatisfaction and the obese participants the highest.

Previous research has shown a significant negative relationship between body mass index and body satisfaction for female adults and also adolescents, with overweight women constantly reporting the most body dissatisfaction (Annis et al., 2004; Byely et al., 2000; Demarest & Langer, 1996; Jones, 2001; Kostanski et al., 2004; Monteath & McCabe, 1997; Muth & Cash, 1997; Schwartz & Brownell, 2004; Smolak, 2004). The current finding is in contrast with Monteath and McCabe (1997) who found that women in the
normal weight range had an equal amount of dissatisfaction with specific body parts as heavier women.

Currently the ideal female is very thin, with slim hips, buttocks, and thighs (Furnham et al., 2002). Coincidentally, these are the same aspects of the body that women indicated most dissatisfaction with in previous studies (e.g., Cash & Henry, 1995; Cash et al., 1986; Garner, 1997; Grogan, 1999; Hoyt & Kogan, 2001). The middle or lower torso (buttocks, thighs, hips, waist, and stomach), weight, and muscle tone are mentioned most frequently in studies regarding women’s body dissatisfaction (Cash & Henry, 1995; Cash et al., 1986; Garner, 1997; Grogan, 1999; Hoyt & Kogan, 2001; Rosenblum & Lewis, 1999). These are also the parts of the body which are most commonly affected by weight gain in women (Cash et al., 1986). Heavier women would thus have bigger hips, thighs, stomachs and buttocks, which would probably lead to increased dissatisfaction with these body parts, which was also found in the current study. These are exactly the body parts that the EDI’s Body Dissatisfaction subscale measures dissatisfaction with, and in this study the heavier women indicated more dissatisfaction on this scale than did the lighter women. Stake and Lauer (1987) found that overweight women rated their waist, abdomen, hips and buttocks more negatively than did normal weight women.

Showers and Larson (cited in Lokken et al., 2003) believe that degree of body dissatisfaction is frequently measured as the discrepancy between self-perceived, real and ideal body. This discrepancy which women observe between their own bodies and the internalized ideal, influences their body image evaluation and leads most women to be dissatisfied with their bodies (Cash et al., 1997; Heinberg, 1996; Muth & Cash, 1997; Sobal et al., 1995; Williams, 2001). Therefore, as the current ideal body is very thin, the discrepancy between a thinner woman’s real body and her ideal body would be smaller than that of a larger woman. And as the current ideal is thin to the point of being underweight (if Miss America contestants are taken as an example of the current “ideal” body, Garner et al., 1980), it is no wonder that the underweight females in the current study show the least body dissatisfaction.
Some researchers view the prevalence of body image dissatisfaction among adolescent and adult women as a normative part of life (Rodin, Silberstein, & Striegelmoore cited in Kostanski et al., 2004). Some even believe that the majority of women are dissatisfied with their bodies (Grogan, 1999; Markey et al., 2004). Furthermore, this thin ideal is unattainable for many females (Cash & Green, 1986; Fallon, 1990; Hargreaves & Tiggeman, 2004; Pliner et al., 1990; Rosenblum & Lewis, 1999; Webster & Tiggemann, 2003; Williams, 2001). Therefore, it comes as no surprise that even the normal weight participants in the current study show dissatisfaction with their bodies.

Societies’ stigmatization of those who are overweight may create an awareness of fatness in those who do not conform to the societal ideal for females and the more a woman departs from this ideal, thus the heavier she becomes, the more dissatisfied she will be with her body (Banfield & McCabe, 2002). A large body of literature points to more negative body image experiences among overweight or obese women (Cash & Roy cited in Cash et al., 2002; Milkewicz & Cash cited in Cash et al., 2002). There is strong evidence for a link between obesity and poor body image (Schwartz & Brownell, 2004).

8.5.2 Body Image and Body Mass Index

Hypothesis 5.2: There is a relationship between a girl’s body image and her body mass index. This relationship will be different for each cultural group.

8.5.2.1 Total Sample
Correlational analysis revealed no relationship between participants’ body mass indexes and their self-ratings of facial attractiveness. This is in line with the finding from Hypothesis 5.1, which showed that there was no significant difference in the Face ratings of the BMI groups. As mentioned earlier, a person’s body weight does not influence a person’s facial attractiveness very much.

Yet, correlational analysis indicated that there exists a significant negative relationship between participants’ body mass indexes and self-ratings of bodily attractiveness. This
indicates that the more attractive these females viewed their bodies to be, the lower was their body mass indexes and vice versa. This finding is also similar to the results found on self-ratings of bodily attractiveness and body mass index in Hypothesis 5.2. Previous studies have found dissatisfaction with weight-related aspects of a person’s body to be a predictor of dissatisfaction with the entire body (Berscheid, Walster, & Bohnstedt cited in Banfield & McCabe, 2002).

Correlational analysis also showed a significant negative relationship between the participants’ body mass indexes and their body dissatisfaction as measured by the Body Cathexis scale. This finding indicates that the lower participants’ body mass indexes, the more satisfied they were with their bodies, and vice versa. This finding is in contrast with that of Hypothesis 5.2, which indicated that underweight, normal weight, overweight and obese participants all had similar BCS scores. Lastly, a significantly positive relationship was found between participants’ body dissatisfaction, as measured by the Eating Disorder Inventory Body Dissatisfaction subscale, and their body mass indexes. Thus, the higher participants’ body mass indexes, the more dissatisfied they were with their bodies, and vice versa.

A relationship between body dissatisfaction and body mass index has also been found in numerous previous studies. Brodie and Slade (1988) found a positive relationship between body dissatisfaction and three different measures of body fat. Previous research with international samples has found a significant negative relationship between BMI and body satisfaction for female adults and adolescents (Annis et al., 2004; Byely et al., 2000; Demarest & Langer, 1996; Jones, 2001; Kostanski et al., 2004; Monteath & McCabe, 1997; Muth & Cash, 1997; Schwartz & Brownell, 2004; Smolak, 2004; Wardle & Marsland, 1990). Rosenblum and Lewis (1999) found a low but significant correlation between body mass index and body dissatisfaction for 13 and 15-year old adolescents, but no relationship at 18 years. An adolescent’s body mass index has been found to be a significant predictor of dissatisfaction with body/figure/shape (Furnham et al., 2002; Kostanski et al., 2003).
Many researchers have found that weight plays an important role in women’s body image. Abell and Richards (1996) believe a woman’s feelings about her weight to be a very significant part of her body image, while Jackson believes women’s dissatisfaction with their bodies is mainly caused by the belief that they are overweight (cited in Hoyt & Kogan, 2001). Support for Jackson’s statement has been found in quite a few studies (Garner, 1997; McCaulay et al., 1988; Mintz & Bentz, 1986). Others like Furnham et al. (2002) state that women’s dissatisfaction with their body image is usually indicated by a wish to lose weight. Some studies even show a significant relationship between dissatisfaction with weight and dissatisfaction with the entire body (Banfield & McCabe, 2002; Garner, 1997; Muth & Cash, 1997; Thompson & Smolak, 2001). The stigma society places on being overweight may influence how women who are heavier than the thin ideal, feel about their bodies and the heavier a woman becomes, and so increasingly deviates from the societal ideal, the more dissatisfied she feels with her body (Banfield & McCabe, 2002; Monteath & McCabe, 1997; Neumark-Sztainer & Haines, 2004).

8.5.2.2 Individual Cultural Groups
As culture and race has been found to play a role in body image (Sondhaus et al., 2001; Thompson & Smolak, 2001) and as there is evidence for differences in the ways that obesity and overweight are viewed in different ethnic groups (Grogan, 1999), the relationship between body mass index and body image was also investigated for each cultural group individually.

No significant correlations were found between self-rated facial attractiveness and body mass index for any of the three racial groups. This was also found in correlational analysis with the total sample. Yet, significant negative correlations existed between participants’ body mass indexes and self-ratings of bodily attractiveness for the Afrikaans White, English White and Coloured groups. This indicates that the more attractive these females viewed their bodies, the lower were their BMI’s and vice versa. The correlation between self-rated bodily attractiveness and BMI was not significant for the Black group.
A possible reason for the discrepancy in findings for the cultural groups is because Black women might support a less severely thin ideal type of body. This has been found in a number of studies on Black and White American women (Franko & Striegel-Moore, 2002; Lopez et al. in Dounchis et al., 2001; Molloy & Herzberger, 1998; Rucker & Cash, 1992; Smolak & Levine, 2001; Thomas & James, 1988; Thompson et al., 1997). One possible reason for South African Black women’s more positive body image, even though they are heavier, is a more positive view of a heavier body size. Venter (2003) found almost a third of her participants to view the overweight body as the healthiest, while 40% believed that their community saw obese people as attractive. The majority of participants also believed that their community saw thinner people as poor and unhealthy. Cultural factors thus influenced views of body size (Venter, 2003).

Body type preference affects the degree of satisfaction with one’s body: The smaller the discrepancy between ideal and actual body image, the more satisfied the person will be with her body (Dounchis et al., 2001). American studies found White women to have a greater discrepancy between their actual and ideal body sizes, while the perceived self and ideal were not significantly different among Black women (Henriques & Calhoun, 1999; Rucker & Cash; 1992). There is some evidence that this might be the case in the current sample, as Black participants had significantly better body image than White participants, even though they had significantly higher body mass indexes than the other racial groups.

American research has also found Black women to have a more positive global appearance evaluation than did White women (Cash & Henry, 1995; Cash et al., 2004; Rucker & Cash, 1992), despite their significantly higher body mass indexes across all ages (Franko & Striegel-Moore, 2002; Harris et al., 1991; Kumanyika, 1987; Rand & Kaldúa, 1990; Rosner et al., 1998; Smolak & Levine, 2001; Striegel-Moore et al., 2000).

A number of American studies have proposed that Black women’s more positive body image could be attributed to African American culture’s wider range of accepted body sizes for women (Fallon et al. cited in Cash & Henry, 1995; Rucker & Cash, 1992).
African, African American, Black Australian, and Caribbean men, women, and girls also value a larger body size (Abrams et al., 1993; Harris, 1994; Rosenblum & Lewis, 1999; Thompson et al., 1997). Rosenblum and Lewis (1999) believe that the criteria for attractiveness are different in other non-western countries and in non-Caucasian subcultures, while Franko and Striegel-Moore (2002) believe that this is also the case for Black individuals.

Significant negative correlations between participants’ body dissatisfaction, as measured by the Body Cathexis Scale, and their body mass indexes were found for the Afrikaans and English White groups, but not for the Coloured and Black groups. This result shows that weight did not play such an important role in the Black and Coloured girls’ satisfaction with their bodies as it did with the White groups. The Black and Coloured participants both had higher body satisfaction, as measured by the Body Cathexis Scale, than the White groups although the Coloured group non-significantly so. This could be an indication that because the Black and Coloured groups’ body dissatisfaction, as measured by the BCS, was unrelated to their body mass indexes they had higher body satisfaction than the White groups whose body satisfaction was related to their body mass index. Black participants’ body weight thus had less effect on their level of dissatisfaction with their bodies.

Significant positive correlations were found between participants’ body mass index and their body dissatisfaction as measured by the Eating Disorder Inventory’s Body Dissatisfaction subscale. Therefore, for participants of all four cultural groups, it was found that if they had higher body mass indexes, they also had higher body dissatisfaction with the body parts usually of concern to females. Yet, these correlations were not equally strong for all groups. It was strongest for the English White participants, followed by the Afrikaans White, then the Coloured and lastly the Black participants. Senekal et al. (2001), in a study of Black students in a South African university, also found that the higher their body mass index, the higher their body dissatisfaction was.
Even though Black participants had the highest body mass indexes, they had by far the lowest body dissatisfaction, as measured by the EDI’s body dissatisfaction subscale, when compared to the other groups. As the White groups had the strongest correlation between body mass index and EDI scores and also the highest body dissatisfaction, Coloured participants the second lowest body dissatisfaction and the second weakest correlation between body mass index and EDI scores, and Black participants the lowest body dissatisfaction and weakest correlation, it might be that the more a participant’s body dissatisfaction is influenced by her weight, the more dissatisfied she becomes. The Black participants had the highest body mass indexes and a higher weight leads to bigger buttocks, stomach, and thighs (Cash et al., 1986). These are the exact body parts that the EDI measures satisfaction with, yet the Black participants still indicated the lowest dissatisfaction with these body parts when compared to the other, significantly thinner, cultural groups. This might be an indication that Molloy and Herzbeger’s (1998) statement that Black and White American women have very different views of beauty, could also be true in explaining South African differences in body image.

8.5.3 Summary of Body Image and Weight

Western culture’s current ideal body is unrealistically thin and extremely difficult for most women to attain (Pliner et al., 1990; Thompson & Stice, 2001; William, 2001). As this ideal is constantly advocated in the media, countless females internalize these cultural ideals and start to measure their physical and personal self-worth in terms thereof (Thompson & Stice, 2001). The more a woman believes that she looks like this internalized ideal, the more likely it is that she will have a good body image (Monteath & McCabe, 1997; Mostert, 1995). Yet, as this ideal is so unrealistic, and because people have been increasing in weight over the last decades, very few people achieve this goal (Corey & Corey cited in Mostert, 1995) and so many people are dissatisfied with their bodies. Therefore a relationship between a woman’s body size, as indicated by body mass index, and her body image was also found for the current sample. Yet, as not all people identify to the same degree with the culture that propagates this ideal, not all people will associate increased weight with unattractiveness. According to Striegel-Moore et al. (1986, p. 247), “the more a woman believes that “what is fat is bad, what is thin is
beautiful, and what is beautiful is good,” the more she will work toward thinness and be distressed about fatness.” Rucker and Cash (1992) believe body image to happen in a cultural context and cultures supply standards for physical attractiveness, body weight, and body shape for each gender (Fallon, 1990). Therefore, it is no wonder that the relationship between body image and weight was not the same for each cultural group.

8.6 Age and Relationship Status

Hypothesis 6: There will be a relationship between a girl’s age and her relationship status.

Crosstabulation was used to examine the relationship between age and relationship status. The number of the participants who was dating one person exclusively at the time of the study seemed to rise with age from almost a quarter of 13-year-olds to more than half of 18-year-olds. Chi-Square tests indicated a significant relationship between participants’ age and their relationship status.

Oneway Analysis of Variance found that there were significant differences in the mean ages of the relationship statuses. Post hoc tests indicated that the mean ages of the participants who were not dating anyone currently and those who were dating one person exclusively or engaged, were significantly different from each other. Participants who were exclusively dating one person were significantly older than participants who were not dating anyone at the time of the study. The number of people in a committed relationship increased with age during adolescence. There seems to be an increased interest in dating and the selection of dating partners as adolescents move through the grades (Biehler & Hudson, 1986; Roscoe et al., 1987). A study with a sample of Israeli adolescents also found older adolescents to be more likely to be involved in a romantic relationship than were younger adolescents (Shulman & Scharf, 2000) and so did Montgomery and Sorell (1998) in a sample of American adolescents.
Rice (1984), in a sample of American students, found that by high school level at any given time about a quarter of all students were in a steady, exclusive relationship. In the current study, 36.6% of the total sample was involved in exclusive relationships. Yet, as Kail and Cavanaugh (2000) mentioned, cultural factors strongly influence dating patterns. Very few studies focusing on the dating relationships of adolescents have been done with South African samples and so little is known about the prevalence of dating for each age in this population.

The establishment and maintaining of romantic relationships is an important part of adolescence and is also named by both Havighurst (1972) and Newman & Newman (1997) as one of the developmental tasks of this period.

8.7 Body Mass Index and Relationship Status

Hypothesis 7: There will be a relationship between body mass index and relationship status. This relationship will be influenced by culture.

The Kruskal-Wallis test indicated that there existed no statistically significant differences in mean body mass index between the relationship status groups. This finding indicates that girls who were single at the time of the study, or who have never had a boyfriend, were not significantly larger or smaller than girls who were in a committed relationship at the time of the study. The status group most underweight, normal weight and overweight participants selected as the one that currently applies to them, was the ‘dating one person exclusively’ one, yet the one most obese participants selected was the ‘not dating anyone currently’ choice. Yet, Chi-Square tests found that no significant relationship existed between participants’ body mass index group and their relationship status.

Thus both the Kruskal-Wallis and the Chi-Square tests indicated no relationship existed between adolescent girls’ body mass index and their relationship status for this sample. This finding is in contrast with the popular belief that a female who is even slightly
overweight, is at a significant disadvantage in the interpersonal relationship market (Allon, 1973).

Many studies have shown female attractiveness to play an important role in the relationships between men and women, and especially in romantic or dating relationships (Berscheid & Walster, 1972; Byrne et al., 1970; Cash et al., 1997; Mostert, 1995). Men prefer attractive women as dates, girlfriends, romantic partners and wives to unattractive women (Berscheid et al. cited in Stelzer et al., 1987; Brislin & Lewis, 1968; Hoyt & Kogan, 2001; Jensen 1985; Spreadbury & Reeves, 1979; Walster et al., 1966). A few studies also show that the woman’s body size, shape, and physical attractiveness are quite influential when a man decides whether to initiate a romantic relationship (Singh & Young, 1995; Smith et al., 1990; Wiederman 2000).

Attractiveness for women is often viewed as being thin (Lamb et al., 1993). Research shows American men to generally find thin women most sexually appealing (Harris et al., 1991; Spillman & Everington, 1989; Wiederman, 2000). According to Stake & Lauer (1987) the “ideal” woman as rated by average men, is slightly below average in weight. In Western society, an extremely negative stereotype of overweight people exists (Monteath & McCabe, 1997; Smolak & Levine, 2001). Adolescents of both sexes viewed weight as a prominent attractiveness feature for females (Jones, 2001). All of these studies indicate that a woman’s body weight would probably affect her ability to attract a romantic partner and because of the current cultural ideal for female beauty, which influences a woman’s attractiveness to men, girls frequently believe that being successful in dating is dependent on being thin (Gershon et al., 2004).

Researchers have found heavier women to be stigmatized in the field of dating and sexuality (Harris, 1990; Neumark-Sztainer & Haines, 2004; Regan, 1996; Sobal et al., 1995; Wiederman & Hurst, 1998). Studies have indicated that women with higher BMI’s are less likely to be involved in a steady dating relationship (Sheets & Ajmere, 2005; Stake & Lauer, 1987; Wiederman & Hurst, 1998), while others found that people who were dating had a significantly lower BMI than those who were single (Harris et al.,
All of these findings are in contrast with the results of the current study. Research found that obesity may lessen women’s opportunities for dating (Gortmaker et al., 1993; Stake & Laurer, 1987), yet, the present research showed no relationship between adolescent girls’ body mass index and their relationship status.

Quite a few studies have found a potential girlfriend’s weight to be very important to the majority of men (Harris et al., 1991; Lerner et al., 1973; Sobal et al., 1995). Overweight adolescent females have been found to be viewed as less desirable partners for romantic relationships (Neumark-Sztainer & Haines, 2004). Yet, a larger percentage of overweight than underweight or normal weight girls were involved in a committed relationship in the present study. Singh and Young state that in general, perceived obesity seems to be the most negative factor for men choosing a partner (cited in Hoyt & Kogan, 2001). Although a smaller percentage of obese participants than underweight, normal weight and overweight participants were involved in a committed relationship in the current study, this difference was not significant. Almost 28% of obese females were currently involved in a committed relationship while only 11% had never had a boyfriend.

It thus seems that for the present sample the stigmatizing effect of weight in the domain of romantic relationships, which has been found in so many previous studies, did not really play a significant role in the romantic relationships of South African adolescent females. Some studies have found that women get what they think men would prefer women to look like quite wrong (Markey et al., 2004). American research has found that women believe men prefer thinner women than they really do (Bergstrom et al., 2004; Demarest & Langer, 1996; Fallon & Rozin, 1985; Rozin & Fallon, 1988) and so women generally tend to underestimate males’ preferred female figure (Bergstrom et al., 2004; Cohn et al., 1987; Markey et al., 2004). Dwyer and Mayer (1973) believe that although men do stigmatize overweight women, women’s fear of this could be out of proportion to the stigmatization that takes place in reality. Yet, it is unknown what size figure South African men prefer a woman to be.
As cultures supply gender-specific standards for what is viewed as physically attractive, and what body weight and body shape are viewed as desirable (Fallon, 1990; Rosenblum & Lewis, 1999), it is likely that men of different cultures would find different sizes and shapes attractive in a woman. Therefore, the relationship between body mass index and relationship status was also investigated for each cultural group separately. Analysis of Variance found no significant differences in the mean body mass indexes of the relationship status groups for any of the four cultural groups.

It is unknown how South African men of different cultural groups differ in terms of what size they prefer women to be. Little research was found on the dating relationships of South African adolescents and there exists no previous studies with which to compare the findings from the current study. It could be that for South African Black people, heavier women are viewed as attractive. Venter (2003) found 40% of her Black female participants to believe that their community view obese people as attractive. Past studies have shown that White American men prefer thinner body types than Black American men (Greenberg & LaPorte, 1996) and more White than Black men did not want to date an overweight woman (Harris et al., 1991; Powell & Kahn, 1995). Harris et al. (1991) found Whites who were dating were significantly thinner than Whites who were not dating, while Blacks who were dating, were non-significantly fatter than Blacks who were not dating. No difference in mean BMI for the different relationship statuses was found for any of the cultural groups in the current study. Thus, while it is unknown what South African men’s preferences are in terms of women’s weight, it does not seem that they are less willing to date heavier women, as large numbers of overweight and obese women did have boyfriends in the current study. Furthermore, the girls who were currently single or who had never had a boyfriend, did not significantly differ in size from the girls who were currently involved in a stable relationship.

8.8 Culture and Relationship Status

Hypothesis 8: The cultural groups will not differ in their frequency of being in a dating relationship.
From the crosstabulation table it can be seen that the relationship status group which the most Afrikaans White participants selected as currently belonging to was the ‘not dating anyone currently’ one. This is also the status that the most, although fewer than the Afrikaans girls, English White girls selected. The status group which the most Coloured and Black participants selected was the ‘dating one person exclusively and engaged or planning to marry’ one. The percentage of participants dating one person exclusively was different for each cultural group. The Afrikaans White participants had the lowest percentage of girls who were in an exclusive relationship, with the English White girls having the second lowest, the Coloured group the highest percentage of girls dating someone exclusively, and the Black group the second highest. There are thus clearly differences in the frequency of girls dating in each cultural group.

The Chi-Square tests also indicated a significant relationship between participants’ cultural group and their relationship status. Therefore, Hypothesis 8 was not found to be true for the current sample as large differences existed in the number of girls from each group who was in a relationship, with Coloured girls being the most and Afrikaans White girls the least. The reason for these cultural differences in frequency of relationship status is unknown. It may be that cultural differences regarding adolescent dating, e.g. parental permissiveness regarding dating, play a role. As mentioned earlier, very little research has been done on the dating relationships of South African adolescents and so there exists no previous studies with which to compare current findings.

8.9 Age and Relationship Satisfaction

Hypothesis 9: There will not be a relationship between a girl’s age and her satisfaction with her dating relationship.

Analysis of Variance indicated that there were no significant differences in the mean Relationship Assessment Scale scores of the age groups for the total sample. Simple regression analysis showed that age was not a significant predictor of participants’ level of satisfaction with romantic relationships. Thus, neither of these two methods showed a
relationship between a girl’s age and her satisfaction with her relationship and so Hypothesis 9 was not true for the total sample.

To determine if this finding was true for all cultural groups involved in the study, Analysis of Variance was repeated for each of the cultural groups individually. Statistical analysis showed that age was not a significant predictor of Afrikaans White, Black or Coloured participants’ level of satisfaction with their romantic relationships. Yet, it was found that age was a significant predictor of English White participants’ level of romantic relationship satisfaction, although it did not account for a large variation in RAS scores. Thus, it seems that Hypothesis 9 was only true for the English White group of participants in the current study.

As no studies could be found on the romantic relationship satisfaction of South African adolescents, there exists no studies with which to compare findings from the current study for Hypotheses 9, 10 and 11.

8.10 Body Mass Index and Relationship Satisfaction

Hypothesis 10: There will be a relationship between a girl’s body mass index and her satisfaction with her dating relationship.

Although normal weight participants were more satisfied with their romantic relationships than underweight, overweight and obese participants, Analysis of Variance indicated that these differences in the mean Relationship Assessment Scale scores of the BMI groups were not significant. Simple regression analysis also found no relationship between body mass index and relationship satisfaction as body mass index was not found to be a significant predictor of participants’ level of satisfaction with their romantic relationships. Therefore, Hypothesis 10 was not found to be true for the present sample.

“Whether viewed from a sociobiological or sociocultural perspective, women’s physical aesthetics are influential in dating, mating, and other facets of heterosexual relations”
Attractiveness for a woman is often viewed as being thin (Lamb et al., 1993) and attractiveness, in the form of body weight, seems to continue being influential even well into a relationship. Gortmaker et al. (1993) found that heavier women are less likely than lighter women to get married, while women worry more than men that their partners’ attraction to them will decrease if they gain weight (Cambell cited in Sheets & Ajmere, 2001). This seems to be a valid concern for women, as Margolin and White found that weight gain in women led to decreased sexual interest and sexual satisfaction among their husbands (cited in Wiederman, 2000). Blumstein and Schwartz (1983) found men’s happiness with a marital or cohabiting relationship to be better predicted by how they perceived their partners’ attractiveness than women’s happiness was. Thus, previous research has found women’s weight and attractiveness to be quite influential in even an established relationship, predicting aspects ranging from sexual satisfaction to general happiness with the relationship.

Yet, what women believe men would like them to look like also seems to affect their preferences for, and feelings about, their own appearance within an established relationship. Blumstein and Schwartz (1983), in a sample of adult couples, found most wives to be very aware of how important their appearance is to their husbands, while Murray et al. (cited in Markey et al., 2004) found that once in a relationship, women report being more upset by their partner’s comments about their weight. Women also report being more likely than men to change their eating behaviours and feelings about their bodies in keeping with what they perceive their partner’s preferences to be (Tantleff-Dunn & Thompson, 1995). It could be that as women are aware that their appearance and weight are important to their partners, and this knowledge influences their feelings and behaviours surrounding their bodies, they would be less satisfied with their relationships if they thought that they did not fit the ideal body size that men, and probably their partner, prefers. Thus it was predicted that if a girl had a body size that was larger than the societal ideal, she would be less satisfied with her relationship, as she would believe that her partner would be less satisfied with her. Stake and Lauer (1987) also found that overweight women, in contrast with normal weight subjects, believed that their partners were less satisfied with them, while Sheets and Ajmere (2005) found that
heavy women experienced their romantic relationships as less satisfying. Yet, this hypothesis was not found to be true for the current sample, as participants’ body mass index was unrelated to their satisfaction with their romantic relationship.

8.11 Culture and Relationship Satisfaction

Hypothesis 11: The cultural groups will not differ on their level of satisfaction with their dating relationships.

Welch’s Robust Tests of Equality of Means indicated that there existed significant differences in the different cultural groups’ level of satisfaction with their relationships. Post hoc tests showed that the only significant culture difference was that the Afrikaans White and Black girls’ Relationship Assessment Scale means significantly differed from each other, with the Black participants being significantly less satisfied with their romantic relationships than the White Afrikaans participants. Hypothesis 11 was thus found to be false for the current sample. As very little research has been done on adolescents’ romantic relationship satisfaction and none has been done in South Africa, no studies could be found with which to compare the current findings.

8.12 Body Image and Relationship Status

Hypothesis 12: There will be a relationship between a girl’s body image and her relationship status.

Analysis of Variance indicated that there were significant differences between the mean Face scores of the relationship status groups. Post hoc tests indicated that participants dating one person exclusively or engaged, had significantly higher Face scores than did participants who were not currently dating. It thus seems that for the current sample, girls who had steady boyfriends viewed their faces as significantly more attractive than did girls who did not have boyfriends at the time of the study. Wiederman and Hurst (1998) found women who were involved in romantic relationships to rate their faces as more
attractive than women who were not in a relationship, but these differences were not significant.

Analysis of Variance also showed that significant differences existed between the mean Body scores of the relationship status groups. Post hoc tests showed that participants dating one person exclusively or engaged, had significantly higher Body scores than did participants who were not currently dating or who had never dated. It appears that in the current study, girls who were in a stable relationship saw their bodies as significantly more attractive than did girls who did not have boyfriends at the time of the study, or who had never been in a relationship. According to Wiederman and Hurst (1998) females involved in a romantic relationship were found to perceive themselves as having more attractive bodies than females not involved in a relationship at the time of the study. According to Hoyt and Kogan (2001) women who view themselves as attractive and seem attractive to others are more likely to be involved in romantic relationships.

Analysis of Variance showed that there were no significant differences between the mean Body Cathexis Scale scores of the relationship status groups. Therefore, it seems that whether a participant was currently involved in a relationship or not, had no influence on her level of overall body dissatisfaction. Wiederman and Hurst (1998) found general body dissatisfaction to be unrelated to dating and sexual experience. They proposed that as body dissatisfaction has become so normative for western women, this may cancel out any potential relationships that exist between body image and heterosexual experience.

Lastly, Analysis of Variance also indicated that there were significant differences in the mean Eating Disorder Inventory Body Dissatisfaction subscale scores for the relationship status groups. Post hoc tests showed that participants who were dating one person exclusively at the time of the study, had lower EDI scores than participants who were involved in casual relationships or who had never been involved in a relationship, and had significantly lower scores than participants who were not currently involved in an exclusive relationship. It thus seems that girls who had steady boyfriends indicated less dissatisfaction with those body parts usually of concern to females than did the other girls.
in the study. Wiederman and Hurst (1998) also found women in romantic relationships to indicate less body dissatisfaction (as measured by the EDI) than single women, but these findings were not significant. Hoyt and Kogan (2001) found that participants’ current dating situation had no effect on their satisfaction with their appearance, yet, women who were most dissatisfied with their dating situations were also most dissatisfied with their overall body image.

As mentioned previously, few studies have focused on the role of body dissatisfaction in interpersonal relationships and specifically romantic relationships (Hoyt & Kogan, 2001). Yet, some believe that girls with a positive view of their bodies are more willing to engage in interpersonal relationships than their peers with poor body images (Mostert, 1995). Davison and McCabe (2003) found a negative body image to be strongly related to poor interaction with members of the opposite sex during adolescence. Berscheid et al. (1973) also found adolescents who were satisfied with their bodies to relate better to other people and particularly to members of the opposite sex than did those who were dissatisfied with their looks. Mostert (1995), in a sample of South African female adolescents, found their body image to be strongly related to their social involvement. Girls with a positive perception of their bodies seem to be more eager to engage in social activities and interpersonal relationships than their peers with poor body images (Mostert, 1995). Hoyt and Kogan (2001) were of opinion that a lot of people with poor body images are uncomfortable in intimate situations. These individuals often do not want to be seen without clothes by their partner, and they are frequently preoccupied with bodily features with which they are unhappy. Therefore Hoyt and Kogan (2001) believed that women with better body image would be more likely to be involved in romantic relationships. Williams (2001), in a study of female adolescents, found that the participants felt that the expression of love from boyfriends caused the girl to feel special and good about herself. These studies all tentatively show a relationship between adolescent females’ interaction with males and their feelings about themselves.

Therefore, it was proposed in the current study that adolescent girls’ body image would be related to their romantic relationship status. This hypothesis was found to be true for
the current sample for three out of the four measures of body image. Due to the scarcity of research on this topic, very few studies were found with which the current results could be compared and none of them used a South African sample.

**Secondary hypotheses 1:** The relationship between body image and relationship status will be different for the different cultural groups.

As was found in the current study and in numerous previous studies, body image is greatly influenced by culture and so different cultural groups differ on body image. Furthermore, cultures supply gender-specific standards for physical attractiveness, body weight, and body shape (Fallon, 1990; Rosenblum & Lewis, 1999) and so men of different cultures find different sizes and shapes attractive in a woman and women have different standards of attractiveness with which they try to comply (Greenberg & LaPorte, 1996; Powell & Kahn, 1995). Wiederman and Hurst (1998) also stated that the results of their study on body image and relationships cannot be generalized with regard to ethnicity. Therefore, it was also decided to repeat the previous analysis for each cultural group individually.

Analysis of Variance indicated that there were no significant differences between the mean Face ratings of the relationship status groups for the Afrikaans White, English White, Coloured or Black groups individually. It thus seems that Afrikaans White girls who had steady boyfriends, did not significantly differ from girls who selected other status groups in their views of the attractiveness of their faces. This was also found to be true for English White, Coloured and Black girls. There were also no differences with regard to the mean Body ratings of the relationship status groups for any of the four cultural groups. Therefore, Afrikaans White girls who had steady boyfriends did not significantly differ from girls who selected other status groups in their views of the attractiveness of their bodies. This finding was also true for English White, Coloured and Black girls. This was also the case with both the Eating Disorder Inventory and Body Cathexis Scale scores for each cultural group.
Thus, although there was a relationship between body image and romantic relationship status for the total sample, this did not seem to be the case for any of the cultural groups when they were analyzed separately. This could be the case because the combination of the different cultural groups’ mean body image scores in the total sample might cause the mean body image scores of the different relationship status groups to be more discrepant than they would be if the cultural groups were analyzed separately.

Secondary hypotheses 2: The relationship between body image and relationship status will be different for the different body mass index groups.

Body mass index was found to play a significant role in body image in the current study and also in many previous studies (see section 2.3.4 Negative Body Image and Weight). Women are also well aware that men prefer their partners to be thin as portrayed in the popular belief that a woman who is only slightly overweight is at a significant disadvantage in the interpersonal relationship market (Allon, 1973). Thus the previous analysis was also repeated for each body mass index group separately.

Analysis of Variance indicated that for the Underweight group of participants there were no significant differences between the status groups on Face ratings, Body ratings, BCS scores and EDI scores.

For the Normal Weight group Analysis of Variance indicated that there existed no significant differences between the status groups on BCS scores and on EDI scores. Yet, significant differences were found between the status groups on both the Face ratings and also the Body ratings of the Normal Weight participants. Post hoc tests showed that the participants who were not dating anyone at the time had significantly lower self-ratings of facial attractiveness than the participants who were dating one person exclusively at the time of the study. For the Body ratings, the only significant result that the post hoc tests showed was that the participants who were not dating anyone currently, had significantly lower mean self-ratings of bodily attractiveness than the participants currently dating one person exclusively.
Analysis of Variance showed that for the Overweight group of participants there were no significant differences between the status groups on Face ratings, Body ratings, BCS scores or EDI scores. This was also the case for the Obese group of participants.

Therefore, it seems that the only weight groups for which the status groups significantly differed from each other in terms of mean score for a body image measure, was the Normal Weight group. The status groups for this weight group significantly differed from each other in terms of mean Face and Body ratings. This hypothesis did therefore seem to be true for the current sample as the relationship between body image and relationship status was different for the different body mass index groups. The reason for this occurrence is unknown. As no previous studies could be found to have dealt with this specific topic, any discussion regarding the reason for the influence of weight group on the relationship between status and body image would be mere speculation. This is clearly a field that needs to be given further attention from researchers in the future.

8.13 Body Image and Relationship Satisfaction

Hypothesis 13: There will be a relationship between a girl’s body image and her satisfaction with her dating relationship.

Simple regression analyses were done to determine if any of the four body image measures predicted relationship satisfaction in romantic relationships. It was found that only the Body Cathexis Scale scores significantly predicted participants’ satisfaction with their romantic relationships. Yet, these scores could account for only 3.5% of the variation in Relationship Assessment Scale scores which is a very small amount. Self-rated facial and bodily attractiveness and Eating Disorder Inventory Body Dissatisfaction subscale scores did not significantly predict participants’ level of satisfaction with their romantic relationships.
As has been mentioned previously, very little research has been done in this field with which findings from the current study can be compared. Few studies have investigated the role of body dissatisfaction in interpersonal relationships (Hoyt & Kogan, 2001). Davison and McCabe (2003), in a study of adolescents, found negative body image to be strongly associated with poor relations with members of the opposite sex. The only study which was found to be even remotely similar to the current study was that of Hoyt and Kogan (2001), who found that individuals, who were dissatisfied with their relationship status, were more dissatisfied with their body appearance than were those satisfied with their relationship status. Yet, this finding was not significant (Hoyt & Kogan, 2001). They also believed that women who saw themselves as attractive would be more likely to enjoy romantic relationships (Hoyt & Kogan, 2001).

Hoyt and Kogan (2001) explained this relationship by stating that a lot of people with poor body image are less comfortable in intimate situations, as it confronts them with levels of bodily intimacy with which they are uncomfortable. It could also be that this relationship between body dissatisfaction and relationship satisfaction could be mediated through self-esteem, with which it has been found to be related to on numerous occasions (see section 2.8 Associated Problems). Yet, this is only speculation and more in-depth research has yet to be done about the link between body image and relationship satisfaction and causality issues surrounding this relationship. For the same reasons it would be unwise to speculate about the statistically insignificant relationship between both self-rated attractiveness and body dissatisfaction with those body parts usually of concern to women, and satisfaction with romantic relationships in the current study.

Therefore it seems that Hypothesis 13 was found to be true only for the Body Cathexis Scale measure of body image and even this measure did not predict a very large part of the variation in RAS scores.

The hypothesis regarding a possible relationship between participants’ body image and their relationship satisfaction, was also investigated for the different cultural and body mass index groups.
Secondary hypotheses 1: The relationship between body image and relationship satisfaction will be different for the different cultural groups.

Simple regression analyses were conducted for each cultural group individually to find if any of the four body image measures predicted relationship satisfaction. Analysis indicated that none of the four measures of body image (self-rated facial and bodily attractiveness, and body dissatisfaction as measured by the BCS and EDI) were significant predictors of Afrikaansspeaking White participants’ level of satisfaction with their romantic relationships. This was also found to be the case with Englishspeaking White participants.

For Afrikaansspeaking Coloured participants it was found that self-rated facial and bodily attractiveness were not significant predictors, yet both measures of body dissatisfaction (BCS and EDI scores) were. Body Cathexis Scale scores accounted for 11.9%, while Eating Disorder Inventory Body Dissatisfaction subscale scores accounted for 8.5% of the variation in Coloured participants’ relationship satisfaction. Self-ratings of bodily attractiveness and body dissatisfaction as assessed by the Eating Disorder were not significant predictors of isiXhosaspeaking Black participants’ level of satisfaction with their romantic relationships, while self-ratings of facial attractiveness and body dissatisfaction as assessed by the BCS were. Face ratings accounted for only 11.5% and BCS scores for 8.0% of the variation in Relationship Assessment Scale scores for the Black participants.

Culture thus clearly played a role in the relationship between body image and relationship satisfaction, with body image only playing a role in the romantic relationship satisfaction of Coloured and Black participants. The reasons behind these culture differences in the influences of body image are currently unknown.

Secondary hypotheses 2: The relationship between body image and relationship satisfaction will be different for the different body mass index groups.
Simple regression analyses were conducted for each body mass index group individually to find if any of the four body image measures predicted relationship satisfaction. Analysis indicated that none of the four measures of body image (Face, Body, BCS, or EDI) were significant predictors of Underweight participants’ level of satisfaction with their romantic relationships. This was also found to be the case with the Normal Weight group.

For the Overweight group it was found that self-ratings of bodily attractiveness and body dissatisfaction as assessed by the EDI’s Body Dissatisfaction scale were not significant predictors of their level of romantic relationship satisfaction. On the other hand, self-rated facial attractiveness and body dissatisfaction as assessed by the BCS were significant predictors of overweight participants’ level of satisfaction with their romantic relationships. Both of these measures of body image were found to account for a significant portion (19.1% and 16.5% respectively) of the variation in RAS scores for this group. Neither self-rated attractiveness, both facial and bodily, nor body dissatisfaction as assessed by the EDI, were significant predictors of Obese participants’ level of satisfaction with their romantic relationships. Yet, body dissatisfaction as assessed by the BCS was a significant predictor of Obese participants’ level of satisfaction with their romantic relationships, which accounted for more than 90% of the variation in these participants’ RAS scores. The results for the Obese participants should be interpreted with caution as only five of the obese girls in the current study indicated that they had boyfriends and thus completed the Relationship Assessment Scale. The small sample size could thus have influenced the results.

Body size thus also seemed to play a role in the relationship between body image and relationship satisfaction, as only Overweight and Obese participants’ body images played a role in their romantic relationship satisfaction.
CHAPTER 9
CONCLUSION

9.1 Introduction

The purpose of this chapter is to re-emphasize this study’s aim and then summarize the most significant findings that resulted from the study, also to highlight the implications of this study, to discuss its limitations, make recommendations for further research in this field and lastly to discuss its contribution.

9.2 Summary

Body image and dating relationships are some of the most important aspects of adolescent development (Havighurst, 1972; Newman & Newman, 1997). This might be the case as both of these are developmental tasks of this period (Havighurst, 1972; Newman & Newman, 1997) and are also involved in the adolescents’ identity development (Daniluk, 1993; Douvan & Adelson cited in Biehler & Hudson, 1986; Erikson cited in Lerner et al., 1976; Furman, 2002; Potash, 2002). The focus of the current study was on female adolescents, as the literature indicates that this is the group for whom physical appearance and body image are not only the most important, but also of the greatest concern (as discussed in Chapters 2 and 4). Physical appearance also seemed to have the greatest influence on females’ dating lives and relationships (Buss, 1994; Feingold, 1990; Hatfield & Sprecher cited in Siever, 1994; Jackson, 1992; Jones, 2001; Mazur, 1986; Miller & Rivenbark, 1970; Nezlek, 1999; Roscoe et al., 1987; Walster et al., 1966; Wiederman & Hurst, 1998). Yet, despite the importance of body image and dating relationships in adolescence, this is a topic that has been sadly neglected in South African research, and in the case of adolescent dating, also international research. The current study aimed to investigate various aspects regarding both these themes and especially the relationship between them.
There is currently a strong movement in the Western world towards a preference for a thin ideal female figure which is strongly propagated by the media (Mostert, 1995; Ricciardelli & McCabe, 2001; Siever, 1994; Wolf, 1990) and adolescents are especially susceptible to these media messages (Grogan, 1999). Therefore, it is no wonder that a strong relationship exists between a woman’s body image and her weight (Banfield & McCabe, 2002; Garner, 1997; Muth & Cash, 1997; Thompson & Smolak, 2001). Yet, this societal ideal towards thinness also seems to play a role in women’s romantic relationships, as it is widely believed that men find thinner women more sexually attractive and prefer them as romantic partners (Harris et al., 1991; Sobal et al., 1995; Spillman & Everington, 1989; Wiederman, 2000).

Previous studies have shown racial and cultural differences to exist with regard to both body image attitudes (Sondhaus et al., 2001; Thompson & Smolak, 2001) and what is viewed as attractive in a female (Fallon, 1990; Greenberg & LaPorte, 1996; Rosenblum & Lewis, 1999). Thus it seems that culture and weight both have the potential to influence body image and dating relationships and possibly the interaction between the two.

Thus, the primary aim of the study was to investigate the relationship between body image, as measured by self rated attractiveness and body dissatisfaction, and relationship status and romantic relationship satisfaction in a sample of South African female adolescents. No previous research could be found that dealt with the relationship between either body image and relationship satisfaction or adolescent romantic relationships and body image. This was the case both internationally and locally. The secondary aim of the study was to investigate both body image and romantic relationships especially with regard to participants’ age, cultural group, and body size. With the increasing westernization of South African Black people, it is even more important than before also to study their body image, especially as other South African research has pointed to westernization as an important influence in body image (Haynes, 1995; Szabo, 1998). Furthermore, as 30% of Black, 26.3% of White and 25.3% of Coloured South African women were found to be obese (CME, 2002), it is clearly important to determine the
influence of body weight on both body image and romantic relationships. Results from the studies’ secondary aims will be looked at first.

Race was found to be related to body image, body mass index, relationship status and relationship satisfaction. In general, Black and Coloured participants were found to have significantly better body images than both English- and Afrikaans-speaking White girls, while Black participants had significantly higher body mass indexes than Afrikaans White, English White and Coloured participants, who did not significantly differ from each other regarding body mass index. This finding is interesting when considering the strong relationship between weight and body image found in previous studies (see section 2.3.4 Negative Body Image and Weight). Culture also seemed to play a role in relationships. Large differences existed in the number of girls from each culture who were in a relationship, with Coloured girls being the most, followed by Black girls, then White girls. The only significant cultural difference regarding relationship satisfaction was that the Afrikaans White girls indicated that they were significantly more satisfied with their romantic relationships than the Black girls. Thus, culture clearly played a role in both body image and romantic relationships for this sample of adolescent females.

Age was found to be related to body mass index and relationship status, but unrelated to body image and relationship satisfaction. Body mass index was found to increase with increasing age while older girls were more likely to be involved in an exclusive relationship than were younger girls. There were no significant trends when studying the relationship between age and the four measures of body image used in this study, yet it did seem that 18-year-olds reported significantly less body dissatisfaction than 16- and 17-year-olds as measured by a subscale of the Eating Disorder Inventory. No significant differences existed in the relationship satisfaction of the different age groups. Age was thus found to influence some aspects of adolescents’ body image and relationships, but not others.
Body mass index was found to be related to body image, but unrelated to both relationship status and relationship satisfaction. There was a relationship between body mass index and body image for both of the measures of body dissatisfaction and for self-rated bodily attractiveness, but not for self-rated facial attractiveness. Bigger participants in general had less positive body image than smaller participants. Participants’ body size was not related to whether they were currently in a romantic relationship or not and neither was it related to whether they were satisfied or not with their romantic relationships.

Although these results found from the secondary aims of this study cannot be generalized beyond this particular sample, they might indicate that future researchers in this field should keep in mind the culture, age and body mass index distribution of their sample, as these three aspects have been found to play a role in the body image and romantic relationships of the current sample. Results from the primary aims of the study will be considered next.

Results indicate that there were significant relationships between some of the measures of body image and relationship status for the total sample. It was found that participants who were dating one person exclusively or engaged, viewed their faces as significantly more attractive than did participants who were not currently dating at the time of the study. Participants dating one person exclusively or engaged also viewed their bodies as significantly more attractive than did participants who were not currently dating or who had never dated. Yet, no differences in body dissatisfaction as measured by the Body Cathexis Scale were found between the relationship status groups. Participants who were dating one person exclusively at the time of the study had less body dissatisfaction as measured by the EDI’s Body Dissatisfaction subscale, than participants who were involved in casual relationships or who had never been involved in a relationship. Thus, in general it seems that the girls who were involved in exclusive relationships at the time of the study had better body image that the girls who were not.

Yet, although there was a relationship between body image and romantic relationship status for the total sample, this did not seem to be the case for any of the cultural groups
when they were analyzed separately. When the analyses were repeated for each weight group separately, it was found that the only weight group for which the status groups significantly differed from each other in terms of body image was the Normal Weight group. The status groups for this weight group significantly differed from each other in terms of mean Face and Body ratings.

Findings indicated that only the Body Cathexis Scale scores significantly predicted participants’ satisfaction with their romantic relationships. So a very small portion of the variation in participants’ Relationship Assessment Scale scores could be predicted by their body dissatisfaction as measured by the BCS. None of the other measures of body image were found to be predictors of participants’ level of satisfaction with their romantic relationships for the entire sample.

The relationship between body image and relationship satisfaction was also investigated for each of the cultural and body mass index groups individually. Results indicate that none of the four measures of body image were significant predictors of either Afrikaans- or Englishspeaking White participants’ level of satisfaction with their romantic relationships. Yet, both measures of body dissatisfaction were found to be significant predictors of Coloured participants’ level of satisfaction with their romantic relationships, while self-ratings of facial attractiveness and body dissatisfaction as assessed by the Body Cathexis Scale were significant predictors of Black participants’ level of satisfaction with their relationships. Findings indicate that body image was not a significant predictor of romantic relationship satisfaction for either underweight or normal weight participants. For the Overweight group self-rated facial attractiveness and body dissatisfaction, as assessed by the Body Cathexis Scale, were significant predictors of level of romantic relationship satisfaction. Results indicate that body dissatisfaction, as assessed by the Body Cathexis Scale, was a significant predictor of obese participants’ level of satisfaction with their romantic relationships.

Thus it seems that there only existed a relationship between body image and relationship satisfaction for Coloured and Black participants and for overweight and obese
participants. Weight and culture thus clearly played a role in the relationship between body image and relationship satisfaction.

9.3 Implications and Recommendations for Further Research

As the study’s results have already been discussed in detail in the discussion chapter, there will only be looked in brief at the implications of the study.

9.3.1 Body Image

Results from the current study with adolescent participants were in line with previous studies with older South African females, which found race differences regarding body image. In general, Black and Coloured girls reported more positive body image than White girls (Geach, 1995; Haynes, 1995; Sheward, 1994). Previous researchers have been divided in their opinion on race and culture differences regarding body image (Caldwell et al., 1997; Duncan et al., 2004). The relationship between body weight and body image which has been found in numerous previous studies and which also existed for the current sample, was different for the different cultural groups.

It is thus clear that culture is related to multiple aspects of body image. Yet, the reasons for these cultural differences in South African samples are largely unknown. The differences between the body image of the different South African cultural groups and also the differences in relationship of body image to body weight is thus clearly a field that needs to be explored in the future.

9.3.2 Romantic Relationships

The current study indicated that 36.6% of the participants were currently involved in an exclusive relationship, which is more than the 25% of American High School students found by Rice (1984). As it seems that more than a third of all South African adolescents (if numbers from this study can be generalized) are currently involved in a relationship and as relationships are involved in adolescent identity development (Douvan & Adelson
cited in Biehler & Hudson, 1986; Furman, 2002), it is important to learn more about this phenomenon.

Although fewer heavier than thinner female adolescents reported to be involved in relationships in this study, this finding was not found to be significant. Thus, it seems that these overweight participants were not at a significant disadvantage in the dating market, which is in contrast with previous international research (Allon, 1973; Gortmaker et al., 1993; Harris, 1990; Neumark-Sztainer & Haines, 2004; Regan, 1996; Sheets & Ajmere, 2005; Stake & Lauer, 1987; Sobal et al., 1995; Wiederman & Hurst, 1998). As these results cannot be generalized to other samples beyond the scope of the target group, this study needs to be replicated with other samples of different ages and cultural groups in order to find if weight has an influence on a woman’s ability to attract a dating partner. Supplementary research also needs to be done on South African men of all cultures and ages’ preferences in terms of weight for a dating partner.

9.3.3 Body Image and Romantic Relationships
Although results indicate that there were significant relationships between some of the measures of body image and relationship status for the total sample, this was not the case for all cultural and body mass index groups. This is a field in which there is a paucity of research and the current findings cannot be generalized to other groups. More research needs to be done to determine the exact nature of these relationships and for which groups it exists.

Although only one measure of body image was a predictor of the total sample’s satisfaction with their romantic relationships and although it was found to predict only a very small portion of the variation in participants’ RAS scores, this was not the case for all body mass index and cultural groups. Body image was only a predictor of Coloured and Black, and Overweight and Obese participants’ level of satisfaction with their relationships. Thus, like with the findings of body image and relationship status, this is a field in which research is greatly lacking and in which current findings cannot be generalized to other groups. Therefore, more research needs to be done to determine the
exact nature of these relationships and for which groups it exists. Furthermore, this study needs to be replicated with a larger sample of obese participants, as the number of obese participants who indicated that they were involved in an exclusive relationship was too small to do valid statistical analysis.

9.3.4 Further Recommendations

9.3.4.1 Rural Versus Urban

The current study exclusively focussed on an urban sample. This was done as there are indications that rural and urban women might differ with regard to body image. This could be due to varying levels of exposure to the media, as the literature shows the media to have a large influence on body image (discussed in detail in section 2.4.3.3.1 The Media). Williams (2001) believes that bulimia in South Africa is more common in the part of the population that has access to television. According to Szabo (1998) urbanization plays a role in the appearance of eating disorders in South Africa’s Black community, while Haynes (1995) found urban Black women who were more westernized, to show more body dissatisfaction than the less westernized rural Black women. Therefore, research on the relationship between body image and aspects of romantic relationships also needs to be done with rural samples.

9.4 Limitations

Apart from the limitations of the study that have already been mentioned, the study has one other important shortcoming. The questionnaires were only available in English while participants consisted of Afrikaans, English and Xhosa first language speakers. The decision was made not to translate the questionnaires into Afrikaans and Xhosa to prevent the more subtle meaning of some of the questionnaire items to differ for the different language questionnaires which could bias participants’ responses. Furthermore, all the children did receive English tuition in school.
The researcher found that in general the English participants had very little difficulty understanding the questions, the Afrikaans participants had moderate difficulty while the Xhosa participants found the questionnaire quite difficult to understand. The researcher tried to compensate for this by adapting the number of research assistants, the size of the group of participants, and level of assistance with the reading and understanding of the questionnaire to the participants’ level of comprehension of the English language. In the case of the Xhosa participants, an isiXhosa research assistant also translated difficult to understand items to the entire group. Yet, although all possible measures were taken to prevent the language of the questionnaire from influencing the participants’ responses, there are no guarantees that this did not negatively influence the second language speakers. In future research the use of properly translated questionnaires is suggested.

9.5 Contribution of the Study

Apart from the contribution this study makes to the existing literature on South African adolescents’ body image, it also contributes to the little that is currently known about adolescents’ romantic relationships. Although this finding cannot necessarily be generalized to other samples, no previous South African studies could be found that investigated the prevalence of adolescent females being in an exclusive dating relationship.

Furthermore, both locally and internationally, no other studies could be found which investigated the relationship between a woman’s body image and her relationship satisfaction. As body image was found to be a significant predictor of relationship satisfaction for some groups in this study, this is clearly a valid area of research in which more studies need to be done.
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ADDENDA
ADDENDUM A: QUESTIONNAIRE

SECTION A

All information in this questionnaire will be kept secret and your information will be dealt with in such a way that nothing is made public.

Please make a cross (X) in the block that applies to you, or complete the statement in the space provided:

1. Gender
   - Male ☐
   - Female ☐

2. Age
   - 13 ☐
   - 14 ☐
   - 15 ☐
   - 16 ☐
   - 17 ☐
   - 18 ☐
   - 19 ☐

3. Grade in school
   - 8 ☐
   - 9 ☐
   - 10 ☐
   - 11 ☐
   - 12 ☐

4. What is your home language?
   - Afrikaans ☐
   - English ☐
   - Xhosa ☐
   - Other (specify) ………………………

5. With which racial group do you identify?
   - White ☐
   - Coloured ☐
   - Black ☐
   - Other (specify) ………………………

6. What is your present height? (in meters) ……………………

7. What do you weigh at the moment? (in kg) ………………………

SECTION B

If 1 = Well Below Average, 4 = Average, and 7 = Well Above Average, please answer the following questions by drawing a cross (X) in the box that you think applies to you.

In general (taking everything into account), I would rate the attractiveness of my body as….
   - 1 ☐
   - 2 ☐
   - 3 ☐
   - 4 ☐
   - 5 ☐
   - 6 ☐
   - 7 ☐

In general (taking everything into account), I would rate the attractiveness of my face as….
   - 1 ☐
   - 2 ☐
   - 3 ☐
   - 4 ☐
   - 5 ☐
   - 6 ☐
   - 7 ☐
SECTION C

On the following pages are listed a number of things characteristic of yourself or related to you. You are asked to indicate which things you are satisfied with exactly as they are, which things you worry about and would like to change if it were possible, and which things you have no feelings about one way or the other.

Consider each item listed below and encircle the number which best represents your feelings according to the following scale:

1. Have strong feelings and wish change could somehow be made.
2. Don’t like, but can put up with.
3. Have no particular feelings one way or the other.
5. Consider myself fortunate (Lucky).

<table>
<thead>
<tr>
<th>Feature</th>
<th>Strong feelings</th>
<th>Can put up with</th>
<th>No feelings</th>
<th>Satisfied</th>
<th>Feel fortunate</th>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Facial Complexion*</td>
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<tr>
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<td>5</td>
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<td>4</td>
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<tr>
<td>Elimination**</td>
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<tr>
<td>Body Build</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</table>

* complexion: appearance of the skin
** eliminate: to get rid of something that is not wanted
<table>
<thead>
<tr>
<th></th>
<th>Strong feelings</th>
<th>Can put up with feelings</th>
<th>No feelings</th>
<th>Satisfied</th>
<th>Feel fortunate</th>
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</thead>
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<td>4</td>
<td>5</td>
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<td>Keenness/Senses*</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>3</td>
<td>4</td>
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<td>2</td>
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<td>4</td>
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<td>4</td>
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<td>Voice</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Physical Skills****</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Knees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Flexibility*****</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Face</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Weight</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Sex Organs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

* Keenness/Senses: sharpness of the sight, hearing, smell, taste, touch
** Coordination: the ability to move different parts of the body smoothly and at the same time
*** Resistance/Illness: do not get sick easily
**** Skill: ability to do something well
***** Flexibility: whether your body can bend easily
**SECTION D**

Please indicate the category of your choice with a cross (X).

<table>
<thead>
<tr>
<th>I think that my stomach is too big.</th>
<th>Always</th>
<th>Usually</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think that my thighs are too large.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>I think that my stomach is just the right size.</td>
<td></td>
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<tr>
<td>I feel satisfied with the shape of my body.</td>
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<tr>
<td>I like the shape of my buttocks.</td>
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<tr>
<td>I think my hips are too big.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that my thighs are just the right size.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>I think my buttocks are too large.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that my hips are just the right size.</td>
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</table>

**SECTION E**

Indicate your relationship status at the moment by making a cross (X) in the box that applies to you: (Please choose only one)

| Has never dated anyone |        |         |       |           |        |       |
| Not dating anyone currently |        |         |       |           |        |       |
| Casually dating one or more people |        |         |       |           |        |       |
| Dating one person exclusively (only) |        |         |       |           |        |       |
| Engaged or planning to marry |        |         |       |           |        |       |

If you indicated that you are not currently dating anyone or dating casually, thank you for your participation. If you indicated that you are dating exclusively, living with your partner, or engaged, please also complete Section F.
SECTION F

Please circle on the answer sheet the letter for each item which best answers that item for you:

1. How well does your partner meet your needs?
   A  B  C  D  E
   Poorly  Average  Extremely well

2. In general, how satisfied are you with your relationship?
   A  B  C  D  E
   Unsatisfied  Average  Extremely Satisfied

3. How good is your relationship compared to most?
   A  B  C  D  E
   Poor  Average  Excellent

4. How often do you wish that you hadn't gotten in this relationship?
   A  B  C  D  E
   Never  Average  Very often

5. To what extent has your relationship met your original expectations?*
   A  B  C  D  E
   Hardly at all  Average  Completely

6. How much do you love your partner?
   A  B  C  D  E
   Not much  Average  Very much

7. How many problems are there in your relationship?
   A  B  C  D  E
   Very few  Average  Very many

*Is this what you expected your relationship to be like?

Thank you for your participation.
ADDENDUM B: CDC 2000 GROWTH CHART FOR GIRLS AGES 2-20

2 to 20 years: Girls

Body mass index-for-age percentiles

<table>
<thead>
<tr>
<th>Date</th>
<th>Age</th>
<th>Weight</th>
<th>Stature</th>
<th>BMI*</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

*To Calculate BMI: Weight (kg) / Stature (cm) = Stature (cm) x 10,000
or Weight (lb) / Stature (in) = Stature (in) x 703

Published May 30, 2000 (modified 10/16/00).
SOURCE: Developed by the National Center for Health Statistics in collaboration with
the National Center for Chronic Disease Prevention and Health Promotion (2000).
http://www.cdc.gov/growthcharts

SAFER • HEALTHIER • PEOPLE