

# The relationship between clothing advertisements, body image and self-esteem of adolescent girls

by

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# **DECLARATION**

I, Kenyafetse Maipelo Mokotedi, declare that this dissertation is my original work except where I
used or quoted another source -which has been acknowledged. I further declare that the work I am
submitting has never been submitted before for another degree to any other university or tertiary
institution for examination.
Signature:
Date:

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#### **ABSTRACT**

The research study investigated the relationship between clothing advertisements, body image and the self-esteem of adolescent girls in the Boteti sub-district of Botswana. Consequently, the purpose of the study was to determine whether or not adolescent girls' exposure to, and interest in, media clothing advertisements was related to their body image and self-esteem. A quantitative research approach was used and the population studied was adolescent girls at school. The sample was 195 adolescent girls, aged between 13 and 17 years, who were recruited from three secondary schools. The data collection instrument that was used was a questionnaire on demographics; bodily perception; and self-esteem consisting of questions with response scales. Statistical analysis was carried out using Statistical Analysis Software (SAS v 9.3). In terms of the research results, the mean age of the sample size (n=195) was 14.9 years (SD=3.06). Regarding semi-urban respondents, there was statistical evidence for relationships between media exposure and body image (behaviour and feelings). Thus, the null hypothesis  $(H_0)$  was rejected and an alternative hypothesis  $(H_1)$  was accepted at a 10% level of significance. For media interest and body image (thoughts) the p-value of 0.1944 was between 0.1 and 0.2 and shows a tendency to association. The null hypothesis  $(H_o)$ could not be rejected for semi-urban respondents; whilst rural respondents p=0.0268 which was <0.05, the  $H_o$  was rejected and the  $H_I$  was accepted at a 5% level of significance. For the relationship between self-esteem and media exposure the p-value was 0.1701, which was between 0.1 and 0.2 for semi-urban respondents, the  $H_o$  was not rejected because there is a tendency toward association. Evidence for relationships was found between media exposure and interest and three aspects of body image (behaviour, feelings, and thoughts). However, the study did not find statistical evidence for relationships between most aspects of body image and self-esteem instead tendencies were established. The relationships and tendencies varied among rural and semi-urban respondents.

### Key words:

Adolescent girls

Body image

Botswana

Clothing advertisements

Media exposure

Self-esteem

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# **CHAPTER 1**

#### 1.1 Introduction

This chapter provides the background information to the study; the problem statement; as well as the aims and the objectives of the study. It also addresses the motivation and gives an overview of the study.

# 1.2 Background Information

Botswana is a landlocked and semi-arid country. It is a former British colony, which was known as the Bechuanaland Protectorate before it became independent in 1966. It borders Zimbabwe, Namibia, South Africa and Zambia (Tlou & Campbell, 1984). Botswana means the place of the Tswana and the citizens are known as the Batswana. Setswana is the dominant language spoken in the country, despite the existence of other ethnic languages, and it is regarded as a national language while English is regarded as an official language. The Batswana include ethnic groups, such as the Bakalanga, Bayei, Bambukushu, Basubiya, Baherero, Batalaote, Batswapong, Bakgalagadi, Babirwa and Basarwa (Tlou & Campbell, 1984).

After independence Botswana was divided into a three-site system, namely: land, villages (rural areas), semi-urban and urban areas (towns and cities). Most of the Batswana are involved in agriculture and, therefore, land and cattle posts are designated areas for both farming and livestock production. Villages are distinguished from towns and cities by a significant engagement in agricultural production while cities are centred in a downtown area of shops, businesses and government offices. Some of the larger villages have come to be known as semi-urban villages or "agro-towns" because their structures look the same as those of the towns.

Although urban areas have grown rapidly in Botswana since independence most Batswana's prefer to stay in their villages and at cattle posts. Their traditional houses are composed mainly of roundavels which are made of mud, dung and wooden poles with thatched roofing and an attached courtyard known as a *lolwapa* (see Figure 1.2). This is where much activity of the household takes place, such as cooking; it is also a place for relaxing during the day (Larsson, 1996). Modern architecture, however, is different from traditional housing in the villages because it uses cement, bricks and manufactured roofing products and it involves the labour of specialised and commercial craftsmen (Larsson, 1996).



Figure 1.1: Political Map of Botswana

(Source: www.geographicalguide.net)

The Boteti sub-district is one of the districts in the centre of Botswana. It is made up of two major villages, Letlhakane and Rakops, and a semi-urban town called Orapa (see Figure 1.1). Rakops is a village on the edge of the Kgalagadi Desert, 700km north-west of Gaborone. Approximately 6,000 people live in this village which is the centre of the North Boteti sub-district. Letlhakane, which means reed, is also in the central district and it is known as the administrative centre for the Boteti sub-district. Orapa, a diamond mining town, is 20kms from Letlhakane Village; it is on the eastern edge of Kalahari Desert. It is the site of the Orapa Diamond Mine - one of the largest diamond mines in the world - and it is considered to be the diamond capital of the country. The town was built to accommodate mine workers after the discovery of a large diamond field in 1967. This study is based in the above areas in the Boteti sub-district, namely: Rakops, Letlhakane and Orapa.

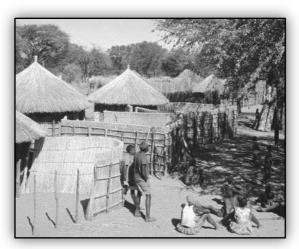


Figure 1.2: Botswana's Traditional Roundavels

Source: (Larsson, 1996)

The researcher chose to do the study in Botswana because previously in Botswana a girl or a woman was considered fit and attractive when she was fat and curvaceous. This perception appears to be common in the Batswana culture.

#### 1.3 Problem Statement

Most studies describe the common representation of the female body in the mass media as "unrealistically thin" (Cusumano & Thompson, 1997; Nemeroff, Stein, Diehl & Smilack, 1997). According to these authors, girls are frequently exposed to the "thin images" of models and often make negative comparisons of themselves with them. Furthermore, in their study Groesz, Levine and Murnen (2002) found that adolescent girls adopted the models presented in magazines as their ideal role models. Another study conducted in America by Turner, Hamilton, Jacobs, Angood and Dwyer (1997) suggests that body image satisfaction of women is influenced by their exposure to the "thin ideal body" presented in fashion magazines. This ideal body is described by Nichter and Nichter (1991) in their study as being 5ft 7in. (1.54m) in height; 100 lbs (45.45kg) in weight; a size 5 shoe; long blonde hair; and blue eyes. However, these authors are of the opinion that this ideal body might not be realistic for most women and may possibly pose a threat to their health. They argue that this kind of body is ultra-thin - if not anorexic.

Research strongly indicates that a thin body is promoted in the media, particularly in magazines aimed at teenage girls and adult women (Cusumano & Thompson, 1997; Nemeroff *et al.*, 1997; Nichter & Nichter, 1991). Cusumano and Thompson (1997) maintain that there is insufficient evidence that media exposure causes body image dissatisfaction in women. Nonetheless, Nemeroff *et al.* (1997) feel that there is compelling evidence to suggest that exposure to idealised images of slender women is more likely to interfere with the notion of body satisfaction in a certain group of women.

The findings of these research studies are an indication that further research is needed to explore factors that may influence the vulnerability of young women in terms of body image dissatisfaction.

A study conducted by Szabo and Allwood (2006) on eating disorder attitudes of South African adolescent girls reveals that of the 578 respondents, approximately 80% of white and black urban girls demonstrated a degree of body image dissatisfaction compared with only 69% of girls in rural areas. As the population of South Africa consists of a black majority, it is suggested that there may be a likelihood of the same degree of negative body image prevalence amongst adolescent girls in Botswana where they are exposed to the same type of media as the girls in South Africa. Research studies on media exposure and the drive for thinness, body dissatisfaction and eating disorders focus more on white girls in developed countries. There is limited research information concerning body image among adolescent girls in Africa, particularly in Botswana which is characterised by a predominantly black population with a different cultural and socio-economic status as well as exposure to different types of media and their advertisements for clothes. One wonders whether media clothing advertisements have an influence on the body image and self-esteem of adolescent girls in Botswana, particularly in the Boteti sub-district.

# 1.4 Aim and Objectives

The aim of the study was to investigate whether there is a relationship between clothing advertisements, body image and self-esteem of adolescent girls in the Boteti sub-district of Botswana. Therefore, the objectives are the following:

- To establish whether adolescent girls have access to media that advertises clothing.
- To investigate the extent of the exposure of adolescent girls to clothing advertisements.
- To investigate the interest of adolescent girls in clothing advertisements.
- To establish how adolescent girls perceive their body image.
- To establish whether exposure to, and interest of adolescent girls in, clothing advertisements is related to their body image.
- To establish whether exposure to, and interest of adolescent girls in, clothing advertisements is related to their self-esteem.

# 1.5 Research Approach

The research approach used for this study was a quantitative one. The statistical analysis conducted consisted of descriptive statistics to explore primary data. Primary data refers to the original data, which - in this case -was obtained from the self-administered questionnaires.

#### 1.6 Motivation for the Study

The debate on the influence of the media on the body image of adolescents is not a new one. It has been an on-going concern within the context of different topics, such as media and eating disorders and media and weight perceptions - to mention but two examples. Currently, no reported study has been conducted in Botswana with regard to the association between media exposure and body image among its black population. The majority of studies identified in the literature have been conducted predominantly among white girls in developed countries. It is, therefore, appropriate and relevant to investigate the relationship between media and clothing advertisements on the body image and self-esteem of adolescent girls living in the Boteti sub-district of Botswana.

McCabe and Riccardelli (2001) are of the opinion that adolescence can be an extremely confusing time for most teenagers. They further suggest that during this period of growth and development adolescents' physical body appearances alter as do their views, beliefs, identities and attitudes about their self and body image. Therefore, the results of these changes render them most vulnerable to media influence and, hence, the interest to discover how adolescent girls in Botswana respond to the media's clothing advertisements and how this affects them.

As research studies indicate, adolescents and young people are the most vulnerable sector of a society to developing body dissatisfaction and eating problems. It is for this reason, among others, that the researcher focused on adolescent girls to explore how they are affected in terms of their body image and self-esteem. Many feminists have argued that in a patriarchal culture women are subjected to various means of subordination, including objectification and the degradation of their bodies (Kilborne, 1999; Bordo, 1993). Ward (1995) found that the most common theme in television shows popular with North American adolescents is women attracting men through their physical appearance. According to the objectification theory, cultural objectification encourages self-objectification where women learn to monitor their bodies; this, in turn, can lead to body shame and is thought to put women at risk of developing eating disorders, depression and/or sexual problems (Fredrickson & Roberts, 1997; McKinley& Hyde, 1996). The findings of this study could be used to develop intervention programmes for adolescent girls in Botswana. Many people could benefit from the study, such as teachers, parents and other professionals who work with adolescents.

They will have access to information if they need to address the issues of eating disorders, body dissatisfaction and self-esteem.

#### 1.7 Definitions

The following terms are central to the study and, therefore, they are explained below:

- **Media** is the means of communication, such as television, newspapers, magazines and radio that are available to large numbers of people.
- **Media Exposure** is the total awareness of what media airs in terms of body image, self-esteem and clothing advertisements.
- Media Interest is the curiosity to find out what the media presents, particularly regarding its
  clothes advertisements.

#### 1.8 Overview of the Structure of the Dissertation

This dissertation consists of five chapters with Chapter 1 providing an outline of the research report. Chapter 2 focuses on the nature of early adolescence, looking specifically at the characteristic transitional challenges of the developmental stage. The chapter also reflects on issues that adolescents have to deal with, such as change, adjustment and tasks. Social comparison theory, as a theoretical framework for the study, is discussed. In addition, cultivation theory and social cognitive theory are used to highlight issues of media exposure and people's attitudes to media exposure.

Chapter 3 deals with the research design and methodology used in the study; how the participants of the study were recruited; and the assessment instruments used. This chapter also examines the use of a quantitative approach as well as the strategies of data collection and units of analysis of the study. The findings of the study are reported in Chapter 4 and are followed by discussion and their implications.

Chapter 5 contains observations made and deductions drawn from the findings of the study as well as an indication of the limitations of the study and recommendations for further research.

In conclusion, this chapter was meant to give the reader the direction of the study and to introduce Chapter 2, which deals with a review of the relevant literature.

# **CHAPTER 2**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter includes sections on adolescence; media exposure and interest; clothing advertisements and their influence on body image and the self-esteem of adolescent girls. It reviews the existing relevant literature on cognitive, psycho-social and physical aspects of adolescent development which are considered crucial for growth and the maintenance and regulation of the life of adolescents.

The approach adopted in this chapter is to examine the literature to identify main points of view; differences and areas of agreement regarding media exposure and interest; and clothing advertisements and their influence on the self-esteem and body image of adolescent girls. A focus is also placed on the theoretical framework applied to the study.

# 2.2 Adolescent Stage of Development

Vander Bos (2006) describes the adolescent stage of development as a critical period of life that begins at 10-12 years and ends at 19 years of age. Sadock and Sadock (2003) believe that adolescence is divided into three stages, namely: early, middle and late adolescence. These stages are related to the 10 to 13 year age group; 14 to 17 years; and late teens to early 20s, respectfully.

Vander Bos (2006) and Sadock and Sadock (2003) propose that adolescence is categorised by a certain degree of reasoning and emotional, bodily and attitudinal changes which could be a cause of conflict on the one hand and an affirmative personality development on the other. These authors point out that during the adolescent phase hormonal changes lead to major changes in sexual features, body image, sexual awareness, social roles, rational development and self-concept. Moreover, during this period of development girls tend to internalise cultural norms regarding body image more than boys do (Szabo, 2009).

According to Szabo (2009), body image appears to play a more significant role in the identity development of adolescent girls than in that of boys. Rosenblum and Lewis (1999) maintain that the combination of adolescents' changing bodily appearance, their increasing mental abilities and their capacity for self-examination may predispose them to an unnecessary and negative preoccupation with their own and other people's perceptions of their bodies.

# 2.2.1 Physical Development of Adolescents

According to McCabe and Riccardelli (2001), transition to adolescence is a time of change and while these changes are, generally, perceived as a positive normative step to adulthood, some individuals appear more vulnerable to the transitional changes than others and they struggle to adapt. They further note that adolescents are expected to adapt to the physical changes of puberty; recognise cognitive changes that result in a better understanding of cause and effect; and accept relationship changes whereby the individual becomes less dependent on family and more involved with peer groups. In reinforcing the above, Graber and Brooks-Gunn (1996) claim that the individual undergoes personality changes as cultural expectations are accommodated and self-identity develops.

#### 2.2.2 Growth Spurt

One of the earliest signs that puberty has begun is a spurt in physical growth. This usually occurs between 10 and 14 years of age. Santrock (2004) states that this stage of adolescence is accompanied by rapid bodily changes, such as intense increases in height, weight and body contour. In addition, William (2001) suggests that adolescence includes a spurt of growth in physical and skeletal growth; in muscular dimensions; in weight; and in height, which often occurs after the peak of growth in height. Furthermore, Williams (2001) indicates that as females experience the physical changes brought on by puberty, including breast development, an increase in height, the development of body hair and menarche, body fat percentages increase in a range of between 16% and 26% in a few years.

On average girls take three to four years to develop full breast size. Pubic hair appears more or less at the same time as the breasts begin to develop. Hair also appears on the other parts of the body, especially under the arms and on the legs (Atwater, 1996). In addition, an increase in the activity of sebaceous glands may result in an outbreak of pimples, roughening of the skin and drying of the hair, while the pitch of the voice deepens (Tanner - as cited in Muuss, 1990). This can be frustrating for adolescent girls who have had to undergo changes in their body shape (William, 2001). As the adolescent female body moves from a thin ideal shape, girls may be dissatisfied with their appearance and their overestimation of fatness may result in body dissatisfaction, which can lead to body image disorders and/or possible eating disorders (Richins, 1995; Stice & Shaw, 1994).

Guindon (2010), when commenting on the rapid changes occurring both internally and externally in adolescents, believes that it is not surprising that much of adolescence - for both males and females - is spent looking in the mirror and being preoccupied with other people's perceptions of their body and an overwhelming desire to fit in.

Sinton, Davison and Birch (2005) suggest that the onset of problematic eating behaviour and body dissatisfaction in females is closely linked to growth spurt periods when hormones stimulate natural increases in body weight and fat. It is at this stage that most adolescent girls become more self-conscious. They show greater self-esteem instability and lower self-esteem; they express more dissatisfaction with their bodies; and they perceive their overall body image less positively than adolescent boys do (Clifford, 1971; Tobin-Richards, Boxer, & Peterson, 1993; Simmons & Rosenberg, 1975). Therefore, body image seems to play a major role in the identity development of adolescent girls.

# 2.2.3 Adolescent and Identity Development

According to Vander Bos (2006), most adolescents struggle to find an identity that is unique, while at the same time they want to conform in terms of various societal pressures to which they are exposed. Hence, body image is regarded as vital in adolescent life as it is an important part of identity development, particularly at the stage of adolescence when accommodation to pubertal change is a key developmental task (Ferron, 1997). Erik Erikson (1968) developed the concept of personal identity in the 1940s and 1950s. He identified eight stages of psycho-social development. The fifth stage is that of identity versus role confusion, which relates to adolescence (Nakkula & Toshalis, 2006). According to Nakkula and Toshalis (2006), the process of identity development begins in early childhood and it becomes a developmental crisis demanding attention and resolution during adolescence and youth – if a clear definition and explanation of identity is to be achieved. They suggest that adolescent girls, in particular, may experience a very complex period of time in setting up an identity for themselves. They also maintain that identity is most critical in adolescent life. Thus, the adolescence stage appears to be a very complex time in the process of human development. For the purpose of this study, the focus was placed more specifically on girls who are in the early and middle stages of adolescence.

#### 2.2.4 Cognitive Development of an Adolescent

Jean Piaget played a significant role in exploring the development of cognitive development and discovered that the process of thinking changes with maturation. Therefore, cognitive development is referred to as the ability to think and reason. In support of Piaget, Atwater (1996) is of the opinion that cognition development gradually develops as a result of a combination of biological and environmental factors. Furthermore, Atwater (1996) maintains that adolescence marks the beginning of the development of more complex thinking processes called formal logical operations that include abstract thinking (thinking about the possibilities).

According to Atwater (1996), this is the ability to reason from known principles, such as forming own new ideas or the ability to questions in an abstract way; the ability to consider many opinions, i.e., comparing or debating ideas; and the ability to think about the process of rational thinking. As adolescents develop physically and sexually, they experience important changes in their thinking. Hook, Watts and Cockroft (2002) believe that thinking gradually becomes more hypothetical and rational, while the ability to solve problems develops.

According to these authors, cognition entails all intellectual abilities and the organization of thoughts that includes some modification of views, memory, rational thinking, creativity and linguistic usage. Cognition ability is concerned with how people process information at different stages of their lives and, subsequently, how people behave as they pass through the different stages of life. Cognitive theory also specifies that schemas, called mental structures, are ways of processing information that changes as people mature (Hook *et al.*, 2002).

Piaget believed that cognitive development unfolds in a sequence of four stages: the sensory-motor stage from birth to 2 years of age; the preoperational stage from 2 to 7 years; the concrete operational stage from 7 to 11 years; and the formal operational stage from 11 to 12 years and older (Atwater, 1996). This study opted to focus on adolescent girls who are in early and late adolescence because they are at the stage of awareness of both biological and social perceptions of dress, which is influenced by social media. Their thinking capacity is totally different from those who are still at a childhood stage of life.

According to Huitt and Hummel (2003), Piaget posits that formal thinking is only fully established at the age of 15 and that period between 11 and 15 years of age should be viewed as a period of preparation. This implies that the adolescent in the "preparation phase" may display concrete thinking and from 15 years onwards the individual's thoughts become flexible and effective. Formal operational is thought to assist adolescents in critical thinking as well as in decision-making although it does not function well at this stage. Adolescence is also the period during which individuals begin to make decisions about the future, particularly with regards to friends, dating, sex, drugs, etc. Their decisions require critical thinking as they impact directly on their future. Santrock (2004) asserts that older adolescents are more competent in their decision-making than younger ones.

#### 2.2.5 Psycho-Social Development

The physical, emotional and social changes that take place during adolescence, as well as the acquisition of greater self-consciousness and the ability to think abstractly, bring about changes in self-concept.

Adolescents become increasingly aware of who and what they are and explore the kind of person they want to be. They undergo a process of redefining themselves and various adjustments are made involving the affirmation of some self-images and the rejection of others (Atwater, 1996). At this stage family influence, peer pressure and teasing play a major role in the lives of the adolescents.

#### 2.3 Influences in the Lives of Adolescents

Prior to the onset of puberty, relationships are largely based on family and same-sex friendships. By early adolescence, boys and girls report a decreasing attachment to their parents and they begin to interact in terms of opposite-sex friendships and mixed-gender socialising. Social groups become a safe haven where adolescents can break away from their families and experience acceptance and security (Guindon, 2002). The adolescent's worth at this stage of puberty is dependent on societal values and it is shaped and maintained by perceived judgment of opinions of, and feedback from, significant others (Guindon, 2002). In other words, what family, friends and society say will have a negative or positive influence?

Family is one of many influences that help to interpret society's values and expectations for young individuals. Parental expectations set the standard for what behaviour is considered good. These expectations are explicitly expressed or implied in parental behaviour and cover most areas of the adolescent's life. Relationships with parents during adolescence, while infused with conflict, are critically important to the development of self-esteem and positive body-image. The families of body image dissatisfied individuals tend to focus on physical appearance as a means of evaluating self-worth and may encourage dieting and vigorous exercises in order to meet the societal expectation of slenderness (Stice, 1994).

#### 2.3.1 Family Influence

Stice (1994) supports the belief that parents appear to play an important role in transmitting socio-cultural messages regarding the ideal body image to adolescents. Similarly, Pritchard (2003) indicates that it is mothers, in particular, who give feedback in terms of dieting and who may have a strong impact on their adolescent daughters' overall development of body satisfaction. The socio-cultural ideal of a thin body for females is very clear, as mothers appear to have a strong influence on adolescent females' attitudes and behaviour (Cash & Henry, 1995; Monteath & McCabe, 1997; Slade, 1994; Wertheim *et al.*, 1997;). However, Makati (1996) and Moreno and Thelon (1993) indicate that less is known about the role of fathers in transmitting the socio-cultural idea of a "thin" body. In their research Moreno and Thales (1993) found that mothers and fathers did not differ much in terms of dieting encouragement given to their daughters. Most studies focus more on females than on males.

According to Schwartz, Phares, Tantleff-Dunn and Thompson (1999), among both adult males and females the perception is that family members, especially parents, are more likely to provide feedback for their daughters than for their sons regarding their appearance. The difference between males and females in this study on the perceived level of feedback received from mothers was not apparent, but it was assumed that females were likely to report receiving feedback from their fathers as well.

#### 2.3.2 Peer Influence

Peers are considered to have an important influence on behaviour during adolescence and peer pressure has been called a hallmark of the adolescent experience (Brown, 2004). According to Brown (2004), peer pressure is regarded as an influence that a peer group observes or an individual exerts that encourages others to change their attitudes, beliefs or behaviour to fit in with group norms. Usually, the term "peer pressure" is related to socially undesirable behaviour, such as experimentation with alcohol and drugs rather than socially desirable behaviour, such as academic success, although it could be either a positive or negative experience for the individual. The reason why peer pressure is very important in this study is because adolescents are vulnerable to peer influences or pressure and they are at a stage of development when they are leaving their parents' sphere of influence and they have not yet established their own values or understanding about human relationships or the consequences of their behaviour.

Other researchers, such as Brown (1989) and Kandel (1980), see peer pressure as the primary mechanism for transmitting group norms. It has been suggested that peers exert influence by offering desirable rewards to those who conform to group norms and/or undesirable consequences for those who resist them, i.e., social reinforcement (Brown, 1989; Kindle, 1980). Peers are acknowledged as a vital part of the lives of adolescents and they play an increasingly prominent role in defining social expectations related to establishing identity and evaluating self (Brown, Mory & Kinney, 1994).

Anderson and Olnhausen (1999) assert that peer acceptance is critical in the adolescent stage. According to these authors, interaction with peer groups is important because it can significantly influence their self-esteem- either positively or negatively. Bukowski, Hoza and Boivin (1993) propose that feeling accepted and supported by friends and classmates is one of the central concerns of adolescents. Therefore, peer influence can be regarded as playing an important role in the internalisation of the individual's values and norms. In reinforcing the above, Stice (1994) posits that adolescents tend to be particularly determined to conform to the norm and achieve social acceptance.

This makes them vulnerable to peer influence to be thin particularly the girls. Milkie (1999), Paxton, Schutz, Wertheimer and Muir (1999) and Merten (1996) claim that during adolescence girls have reported that they feel they are being judged on appearance and, as a result, they feel pressurised by peers to conform to appearance expectations.

Hill (1993) observes that most dieting episodes that occur at a young age could be as a result of peer pressure. The comments made by the authors who investigated peer influence creates the impression that as girls go through the adolescence stage their relationship with peers plays a significant role in making them compare bodies and may result in them developing a negative view of their body as well. This comparison of bodies by adolescent girls can be damaging in that it is likely to lead to low self-esteem and possible eating disorders. Field, Camargo, Taylor, Berkey, Roberts and Colditz (2001) suggest that for most adolescents to feel accepted in the group by their peers, they may resort to adopting the perceived beliefs and behaviour practiced by members of that particular group. Therefore, it is possible that the relationships they have with peers and family help shape how they perceive themselves. Davidson and McCabe (2006) observed that adolescent girls have the tendency to develop a feeling of low self-esteem because they do not look like their peers.

# 2.3.3 Teasing and Physical Appearance

Teasing is known as a universal activity that occurs in most group contexts, including family, friends, co-workers and teammates. Rosen, Oroson-Weine and Tang (1997) maintain that teasing related to body weight and shape is one of the most significant "critical experiences" influencing excessive self-consciousness about physical appearance. Kowalski (2000) raises a concern that people who are often teased on such matters as appearance, weight behaviour, ability and intelligence are often hurt - irrespective of the intention. Levine *et al.* (1994) observe that the more frequent and upsetting the teasing, the greater the likelihood is of body dissatisfaction, which provides a catalyst for restrictive dieting.

Furthermore, they believe that teasing relating to physical appearance is likely to make an individual more susceptible to media messages that depict cultural expectations of the "ideal body". They suggest that social comparison is encouraged which results in an awareness of perceived physical short comings and they conclude that the way one feels about one's body is an important part of one's overall self-image. Therefore, this means that negative comment can damage self-esteem, which can affect the overall self-image of a person.

#### 2.4 Body Image

Ogden describes body image as the "... picture of our body which we form in our minds, which includes perceptions of our physical confinement, a sense of appeal and the awareness of physical perceptions" (2003:84). Gerrig and Zimbardo (2002) define body image as an individual's subjective views of his/her appearance. According to these authors, the perception of one's body includes thoughts, beliefs, emotions and behaviour, which imply that people's perceptions, thoughts, and beliefs affect the manner in which they see and treat their bodies. In terms of the above, it appears that body image consists more of psychological aspects than physical aspects.

As indicated earlier in this section, body image can be viewed from three perspectives, namely: the psychological, conceptual and emotional. The psychological aspect refers to the brain's ability to detect weight, shape, size and form. Gleaves, Williamson, Eberenz, Sebastian and Barker (1995) endorse some of the psychological aspects of body image as consisting of dimensions, such as the fear of being fat; body alteration or distortion; preference to be thin or slender; and body dissatisfaction, in general. The conceptual aspect is the mental picture of the body held by the individual while the emotional aspect refers to the feelings the individual has about his/her weight, shape and size (Brouwers, 1990).

Frost and McKelvie (2004) and Polce-Lynch, Myers, Kilmartin, Forssmaan-Falck and Kliewer (1998) found that body image correlates positively with adolescent self-esteem. They are of the opinion that where these psychological aspects are over-emphasised, pathological beliefs about beauty and thinness can sometimes compromise one's health. On the other hand, Thompson, Heinberg, Altabe and Tantleff (1999) see body image as a multi-dimensional construct, covering cognitive, affective, and behavioural dimensions. Thompson *et al.* (1999) suggest that dissatisfaction with one's body can range from a mild preference for different body characteristics to severe distress associated with extreme behaviour to change the body or avoid negative judgments. According to Thompson *et al.* (1999), body image disturbance can vary depending on the specific body characteristic targeted, including concern over body shape, weight, various parts, facial characteristics, fitness and strength.

In an attempt to understand these different influences of body image Pruzinsky and Cash say: "The vital role of body image means that it has the potential to dramatically influence our quality of life and from early childhood on, body image affects our feelings, opinions or views, and our everyday conduct" (2002:7).

According to Guindon (2010), body image studies show that of all age groups, adolescents have the strongest physical appearance orientation and the most negative self-evaluation of appearance. Fawcett and Frye (1980) maintain that physical attractiveness and beauty standards are the most important factors in interpersonal relationships and interaction.

#### 2.4 1 Body Image Disturbance

Body image has been found to be central to both clinical and sub-clinical eating disturbances, which are, especially, prevalent among young women (Muth & Cash, 1997). Cash (2004) points out that body image is a subjective construct that people create of their appearance. Body image differences are manifested in the way women see their bodies, i.e., perceptual body image (Dawson, Madrigal, Sanchez-Villegas Martinez-Gonzalez, Kearney, Gibney, Irala, 1985) and how they feel about their bodies, i.e., attitudinal body image (Altabe, 1998; Caradas, Lambert, Charlton, 2001; Henriques & Calhoun, 1999). Therefore, body image may affect adolescents' responses to weight change and their attitudes towards weight control (Henriques & Calhoun, 1999).

Cash (2004) is of the opinion that perceptual, cognitive, emotional and behavioural components of body image interact and influence each other. Hence, eating disorders are thought to be caused and maintained by a negative body image (Williamson, Steward, White & York-Crowe, 2002).

Stice, Schupak-Neuberg, Shaw and Stein (1994) believe that the promotion of the so-called 'thin ideal' in the media can lead to a negative body image and this can contribute to eating disorders. Hence, there has been increased interest in the role of socio-cultural factors in the development of body-image disturbance (Rosen, 1990). Socio-cultural factors are seen as playing a significant risk role in the development and etiology of eating disorders, such as anorexia nervosa, bulimia nervosa and body dysmorphia (Garner, 2004; Steinhausen, Boyadjieva & Neumaker, 1995). Body image disturbance may also be associated with depression (Mints & Betz, 1986) and lower self-esteem (Cash, Wanstead & Jana, 1986; Going & Going, 1986). A study by Mciza *et al.* (2005) suggests that body image appears to be a significant factor associated with the increasing occurrence of obesity – a suggestion shared by Caradas, Lambert and Charlton (2001), Henriques and Calhoun (1999) and Altabe (1998).

Obesity refers to extremely heavy body weight in relation to height, BMI>30kgm<sup>-2</sup> (Takamura, Hirai & Koboyashi, 2002). In comparison, overweight is defined as the deviance in body weight above a standard of suitable weight relative to the height body mass index (BMI) = 25.0 -29.9kgm<sup>-2</sup> (Takamura, Hirai & Koboyashi, 2002).

According to a study conducted in South Africa by Puoane, Steyn, Bradshaw, Laubscher, Fourie and Lambert (2002) more than 56% of urban women and 29% of urban men are either overweight or obese. Black urban women are said to be at the greatest risk of obesity when compared to white women. Among the studied group 62% of black women were overweight and obese compared to the white urban women where the prevalence was lower at 53%. Charlton, Schloss, Visser, Lambert, Kolbe and Levitt (2001) provide overwhelming evidence that links overweight and obesity with the development of chronic non-communicable diseases, which include Type 2 Diabetes Mellitus, cardiovascular diseases, sleep apnoea and certain types of cancer.

In terms of the analysis by Mciza *et al.* (2005), Smolak and Thompson (2009) agree that body image problems appear to be a main etiological feature of eating disorders. They further indicate that body image issues seem to be connected to the psychological health and psycho-social functioning of over-weight and obese individuals. Stice, Presnell, Shaw and Rhohde (2005) agree with Smolak and Thompson (2009) who suggest that most individuals who are stressed by their body image are likely to be depressed and this can be a risk factor for both obesity and eating disorders in adolescents. In their research Ogden *et al.* (2006) deal with the overwhelming issue of child obesity; it is rated at 17% in the US, which increases the risk of cardio-vascular problems among children and adolescents. Their findings are supported by Freeman *et al.* (2007), Thompson *et al.* (2007) and Nader *et al.* (2006).

#### 2.4.2 The Influence of Culture on Body Image

As indicated earlier, Thompson *et al.* (1997) maintain that body image appears fundamental to adolescent girls' self-definition. The reasons advanced are that girls have been socialised to believe that appearance is an important basis of self-evaluation and assessment by others. The popular "culture of slenderness or thinness" advocates norms and values which determine attitudes and behaviour related to body size, shape and weight - particularly during periods of physical change which include the beginning and development of secondary sexual characteristics (Vandereycken & Meerman, 1984). Stice (1994) suggests that cultural pressures are related to "thin" and that the discrepancy perceived by the individual between the "actual self" and the internalised "ideal self" is a forerunner to body image dissatisfaction. According to Stice (1994), the individual's perception of failure to meet cultural standards of beauty leads to a depressive mood. This can be dangerous and results in dieting and bulimia. Stice's (1994) view is reinforced Muth and Cash (1997) who are of the opinion that cultural norms and expectations lead girls and women to invest psychologically in their physical appearance – which undermines their well-being and contributes to the development of various psychological problems (Muth & Cash, 1997).

An observation made by Wildes, Emery, and Simmons (2001) indicates that body image dissatisfaction and eating disturbances are commonly found among white female adolescents. However, they also point out that it seems that there is only one ethnic group protected from Western society's thin ideal, which is African-American teenage girls. According to their findings, the African-American girls' self-esteem does not appear to be heavily focused on appearance and shape or weight when compared to white teenage girls. In fact, it appears that African-American girls have a higher and more stable self-esteem and satisfaction with their physical appearance than white girls (Brown *et. al.*, 1998).

In terms of the findings to the study of African-American females, there is less dieting behaviour; they feel less pressurised to be thin; and they tend to have a more positive body image than white females (Sanchez-Johnson, Fitzgibbon, Martinovich, Stolley, Dyer & Van Horn, 2004; Cachelin, Rebeck, Chung & Pelayo, 2002; Fitzgibbon, Blackman & Avellone, 2000). Malloy and Herzberger (1998) appear to share the sentiments of these authors but they maintain that there is evidence of the influence of culture and ethnicity on body image and body size dissatisfaction among Caucasian American women and among the African-American women. However, the results of the studies they conducted show that Caucasian American women experience more body size dissatisfaction and higher body image discrepancies levels - even when they are not overweight - than African American women do after controlling in terms of age, education, socio-economic status and body weight. Cash *et al.* (1998) found that black college women had body size ideals that were larger and more congruent with their current body weight when compared to white college women (Cash, Grant, Shovlin & Lewis, 1998).

In their studies it is also suggested that African-American women, generally, have a higher tolerance of bigger body size and that they are more likely to associate obesity with attractiveness than their Caucasian counterparts when age, education and body weight are controlled (Cachelin *et al.*, 2002; Sanchez-Johnson *et al.*, 2004). Similarly, body image acceptance has been observed in developing countries; in certain traditions and cultures obesity is portrayed as a sign of wealth, beauty and fertility (Wang, Ho, Anderson & Sabry, 1999; Al Shammari, Khoja & Al Subaie, 1994). In addition to what the above authors say about developing countries, Seed, Allin, Olivier, Szabo and Nxumalo (2005) report that, traditionally, in southern Africa it was seen as desirable for women to have fuller figures. In the past weight was regarded as a symbol of prosperity and status, especially in rural South Africa. Now it appears that this perspective of an African woman (fat and curvaceous) is changing.

Seed et al. (2005) conducted a study at South Africa's University of Zululand in KwaZulu-Natal where they interviewed 17 black female students - all approximately 21 years of age - using inductive analysis based on the principles of grounded theory to elicit information relating to current body ideals identified in an earlier study. In addition to the data collected from the women in the above study, Seed' steam also wanted to establish male preferences for female body types and data was, therefore, also gathered from 40 black male students of 22 years of age. The earlier study by the above researchers found high levels of body dissatisfaction and disordered eating attitudes among black women in rural South Africa. The main reason advanced for this was that many women said that they were following the Western idea of "thinness equal beauty." Another reason cited was that many women wanted to be attractive to the opposite sex while others said they wanted to wear the latest designer fashions, which are only made in smaller sizes. The results of the study by Seed et al. (2005) indicate that the pursuit of thinness among the participant black females was strongly linked to the desire to attract men. There was a strong perception that black men preferred thinner women and, therefore, the women felt that they had little or no choice at all but to lose weight in order to appear attractive to the opposite sex.

They also had the desire to appear more modern and wear modern clothing, which - according to them - was only manufactured in smaller sizes. They indicated that they were tired of traditional Zulu dress which is designed to fit all and the impression was that wearing those outfits made them appear old-fashioned and as one participant pointed out often they look like "their mothers". According to the above study conducted by Seed *et al.* (2005), women are often teased by friends and family if they are considered to be overweight. In their conclusion they pointed out that the participant women wanted to be thin because for the first time ever they felt liberated to choose what size they want to wear for themselves. This study is considered to be an important and relevant contemporary one because the black male preference for female body type was identified as tall; slim female with long hair; a flat stomach; narrow waist; and long, slender legs.

Konstanski and Gullon (1998) report that in most studies involving gender females are found to have more body image dissatisfaction than males. They further suggest that this dissatisfaction may be the normative for Western society females because of the cultural value of attractiveness. Western society, when compared to other societies, stresses the desire for a thin physique. In most cases, the appetite for thinness may result in an unfortunate consequence, which is body dissatisfaction. In a study conducted among young New Zealand adults, comprising 62 men and 119 women respondents, regarding the relationship between awareness and internalisation of societal ideals, Miller and Halberstadt (2005) report that young New Zealand women experience body image dissatisfaction.

It was also found that women - not men preferred significantly smaller ideal figures than the ones they thought and felt their bodies reflected. The study recognized that both men and women were equally aware of the importance society places on physical attractiveness and being thin but that women reported a significantly greater internalisation of thinness norms. The study reinforces that women think that a thin body is the ideal. In a meta-analysis of 25 experimental studies Groesz, Levine and Murner (2002) found that women felt worse about their body after exposure to thin ideal images than to any other stimulus.

#### 2.5 Physical Attractiveness

According to Guindon (2010), physical attractiveness for adolescents is important as it can boost their body image and self-esteem. Guindon (2010) believes that adolescent girls' physical attractiveness is a selective component of self-esteem that is heavily weighted and influenced by the judgments of how they measure up to society's ideal. In addition, when evaluating an African-American girl, Adkison-Bradley and Sanders (2006) also indicate that when they are not being judged by their behaviour, they are evaluated by their level of physical attractiveness. This shows the societal pressure that an adolescent girl experiences in striving for media beauty. Robinson-Wood, cited in Guindon, suggests that many black females "spend an inordinate amount of time, psychic energy and money on huge amount of hair" (2010:197). As biological processes transform the physical body, mental and emotional shifts also occur. Mathes and Kahn (1975) indicate that physical attractiveness is more important for women than men and it appears that attractive women are happier, more psychologically healthy and prouder of themselves than unattractive women. Media images are said to be a central element of the appearance culture and have been identified as a powerful force shaping appearance standards (Field *et al.*, 1999; Levine, Smolak & Hyden, 1994).

#### 2.6 Self-Esteem

Self-esteem can be defined as an overall view of the self (Frost and McKelvie, 2005) or as a universal emotional placement of the self (Robin, Tracy and Trzenieqski, 2001). Whilst Schooler, Schoenbach and Rosenberg (1995) point out that global/universal self-esteem - as opposed to specific/precise self-esteem - is more related to mental well-being, Frost and McKelvie (2004) and Polce-Lynch, Myers, Kilmartin, Forssmaan-Falck and Kliewer (1998) found that body image associates positively with adolescent self-esteem. Cash (1991) suggests that body image is linked to body satisfaction and self-esteem and that a quarter to a third of self-esteem is based on the quality of one's body image. He highlights the significant role body image plays in determining a person's social behaviour.

Vander Bos (2006), Davis, (1999) and Rosenberg (1989) also describe self-esteem as the total assessment of a person's insight of him/herself with reference to self-worth or a positive self-image; physical self-image; accomplishment; capabilities or competences; and how others view and respond to the person. This view is echoed by Davis (1999) who points out that self-worth involves self-confidence, respect and gratification of oneself. This means that self-esteem is broad concept that includes body image. In support of this Rice (1996) argues that individuals derive their level of self-esteem from their self-concept and their ideal self.

Guindon defines self-esteem as "the attitudinal, evaluative component of self; the affective judgments placed on the self-concept consisting of feeling of worth and acceptance which are developed and maintained as a consequence of awareness of competence and feedback from external world" (2002:207) and sees self-esteem as attitude or the individual's evaluation of the self-concept. According to Guindon (2002), competence, abilities and accomplishment appear to be interwoven with a judgment of self-worth; self-esteem is not one unit or component, it is a system made up of global or universal component and selective components. Lawrence (2012) believes that self-esteem can be either global or specific and that it is related to a feeling of self-worth and confidence. Specific self-esteem refers to a feeling of self-worth and confidence with regard to a specific activity or behaviour. In addition, Guindon states that global self-esteem "is an overall estimate of general self-worth; a level of self-acceptance or respect for oneself; a trait or tendency relatively stable and enduring, composed of all subordinates traits and characteristics within the self'(2002:207). In other words, selective self-esteem is an evaluation or assessment of specific and constituent traits or qualities within the self - at times situational variable and transitory - that are weighted and combined into an overall evaluation of self or global esteem.

# 2.6.1 The Influence of Self-Esteem

Greenberg (2008) is of the opinion that self-esteem affects functional behaviour, inspiration and life fulfilment and is significantly related to well being throughout life. He highlights the fact that it is possible that behaviour meant to maintain or preserve and enhance a positive sense is universal or global and where self-esteem is basic to human need. What individuals choose to do and the way they do it, in part, may be dependent upon their self-esteem. Self-esteem is so serious that the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, American Psychiatric Association, 2000) includes self-esteem among diagnostic criteria for several mental disorder categories and it is known to correlate strongly with depression.

Guindon (2010) maintains that self-esteem is not something that can be seen with the naked eye but is believed to exist through its artefacts. Kearney-Cooke (1999) suggests that self-esteem declines in early adolescence, particularly in females who report lower rates of self-esteem and higher rates of depression. In agreement, Harter (2006) strongly believes that this decline is due to negative body images that emerge during pubertal changes. In general, researchers have found that women who express greater dissatisfaction with their weight and body shape tend to have lower self-esteem scores than women who have a healthier body image. In a comparison with men meta-analysis of self-esteem studies - conducted mostly in Western industrialized nations - have confirmed that women's self-esteem is moderately, but significantly, lower than men's (d = .21). Moreover, the average gender difference is greatest during middle adolescence (d = .33), peaking at around 16 years of age (Kling, Hyde, Showers & Buswell, 1999).

A woman's feelings about her weight may be a particularly crucial aspect of her body image. Harter (2006) suggests that physical appearance also contributes to self-esteem during the teenage years and that self-esteem crises during adolescent stage - if not handled well - can lead to an identity crisis of the young adult. Perceptions of appearance and self-worth are closely linked and perceived appearance constantly emerges as the strongest single predictor of self-esteem among both male and female adolescents. According to Harter (1999) the link is remarkably strong and robust with an average correlation of .65 in the US and .62 in other countries.

#### 2.6.2 Low Self-Esteem as a Risk Factor

Kearney-Cooke (1999) maintains that depression, suicide, delinquency and eating disorders are among some of the problems related to low self-esteem in youth and evidence suggests a strong association between low self-esteem and the risk of eating disorders. Although studies tend to vary in their method of evaluating self-esteem (global vs selective domain), they agree that particularly in adolescence low self-esteem is a risk factor in the development of eating disorders and body dissatisfaction (Guindon, 2002). Silverton (1992) is of the opinion that low self-esteem is a prerequisite to developing eating disorders. Low self-esteem and perfectionism have been identified as two of the highest risk factors for the development of eating disorders (Furnham, Badmin & Sneade, 2002). Furthermore, low self-esteem has been associated with a poor response to treatment and relapse (Fairburn, 2008). Studies repeatedly show an association between low self-esteem and eating disorders as well as an increased risk of suicidal ideation and a multiple compromising behaviour, including substance abuse and cigarette smoking.

Advertising and marketing images are said to contribute to the growing rate of eating disorders and this has reshaped the accepted standard of beauty (Gahman, 2008). Gahman (2008) further suggests that these external forces have placed tremendous strain on, and confusion in, the developmental experiences of certain adolescents and they have resulted in the onset of harsh self-criticism, lowered self-worth and distorted perceptions of their body (Gahman, 2008).

#### 2.7 Media

From the mid-1900s both the electronic and the print media have, essentially, emerged as a modern phenomenon whereby companies can reach mass audiences by means of radio, CDs, magazines, newspapers, television, movies, books, video games and the Internet. Television, movies and magazines are referred to as media, which plays an important role in the lives of most people, especially adolescents - both boys and girls. Global or universal media is an important communication system for consumers around the world and it is highly significant in the marketing/promotional strategies of the fashion industry. Print media, such as magazines, is considered to be important for endorsing brands and products because of its strong images are enhanced by advanced technology (Jung & Lee, 2009).

# 2.7.1 Media Exposure

A review by Cohen (2006) of media exposure and the subsequent effects on body dissatisfaction presents an important finding, i.e., those magazines appear to have a stronger impact than television. The reason for this could be that readers of magazines have more opportunity to browse through them repeatedly, while television programmes may just be viewed once. Fashion and beauty magazines, in particular, have been one of the most successful magazine genres around the world. Cosmopolitan, for example, is published in 28 languages with 110 editions reaching 36 million women worldwide (Carr, 2002). Because magazine advertisements are so pervasive, they can have a significant impact on consumers. Studies have shown that exposure to thin models in magazine reading contributes to body dissatisfaction; decreased self-esteem and confidence; negative feelings of guilt, anxiety, shame and depression (Pinhas, Toner, Ali, Garfinkel and Stuckless, 1999; Tiggerman and Mc Gill, 2004) and eating disorders in adolescent girls and adult women (Vaughan & Fouts, 2003).

According to Tiggemann and Pickering (1996), although the frequency of television exposure does not correlate with body image disturbance, the amount of exposure to specific types of programmes, such as soap operas and music videos, is related to body image problems and restrictive eating.

Gonzalez-Lavin and Smolak (1995) found that middle-school aged girls, who are exposed to a high degree of peer influence and more television that reflects the importance of attractiveness, reported greater body image dissatisfaction; use of weight management techniques; and pathological beliefs about eating. Their findings indicate that media exposure contributes to body image of a certain group of people, especially those who are exposed to thin ideal images in the media. This was also evidenced in an American survey of 500 adolescent girls, aged 9-16 years, which indicates that nearly 70% believed that magazine pictures influenced their idea of the ideal body shape and that, consequently, 47% of the sample wished to lose weight (Field *et al.*, 1999). Researchers at the University of California surveyed 500 girls in Grades 4 to 12 at San Francisco parochial schools about their attitudes and behaviour related to body weight. Their findings indicate that 31% of the 9yearolds said they were worried that they were, or would become, fat and that almost half of the 9yearolds and 80% of the 10and11yearolds reported dieting to lose weight. This is an indication that the thin ideal is mostly referenced by these youngsters and indicates that body image plays an important role in a young woman's self-esteem. It is also important when considering the additional impact of media influence and culture on perceptions of socially acceptable body types.

## 2.7.2 Media, Body Image and Self-Esteem

Media messages promote the idea that being thin and beautiful brings the reward of popularity with friends, success and romantic relationships (Orenstein, 1994; Garner & Garfinkel, 1991). There is a stigma in our society related to being fat as fatness is associated with failure, weakness and laziness while thinness is believed to suggest self-control, success, strength and power (Orenstein, 1994; Garner & Garfinkel, 1991). Hesse-Biber, Leavy, Quinn and Zoino (2006) agree that thinness often has a very positive implication that denotes success and social desirability. Hendriks and Burgoon (2003) support this assertion by indicating that attractive people are greater achievers in our society because they are seen as more successful and happier in their lives. Anti-fat campaigns deliver messages that suggest that to be fat is to be a failure, weak and out of control (Orenstein, 1994; Garner & Garfinkel, 1991).

The health industry in America has launched campaigns to persuade Americans to reduce fat intake, lose weight and exercise more (Orenstein, 1994; Garner & Garfinkel, 1991). Furthermore, media messages include the idea that beauty is a commodity to be pursued and that will provide self-worth and empower women. Media images appear to perpetuate the idea of 'the thin ideal' body type in females and a negative body image could result from the influence of the media. This emphasis on thin body type has led to an increase in diet articles and advertisements which all encourage weight loss which does not seem to be promoted for health reasons, but rather for aesthetic purposes.

Dorian (2002) maintains that there are many reports indicating high exposure to media images that portray extreme thinness as a link to strong body dissatisfaction, poor self-esteem and body image. According to Dorian (2002), this dissatisfaction has been internalised because it comes from a combination of internal and societal images of the 'thin ideal'. Television and magazines are forms of mass media that are, mostly, accused of consistently promoting the ideal of beauty. As a result, today thinness is considered the primary characteristic of the idealised female beauty standard in Western cultures (Irving, 1990).

Media thinness has become such a serious concern for the world that CNN World News (2006) reported that media models have become progressively thinner and that the typical model is now often as much as 20% underweight. This might be considered as extreme thinness because it is, generally, accepted that being 15% underweight is one of the criteria used to diagnose anorexia (American Psychiatric Association, 2000). Wiseman, Gray, Mosimann and Ahrens (1992) are of the opinion that while ideal female models have become thinner, average females of similar age in the US have become fatter. They maintain that the mass media reflects a host of potential models that appear to be attractive, powerful and glamorous. Similarly, Dittmar (2008) and Spitzer, Henderson and Zivian (1999) acknowledge that women are getting fatter while the female beauty ideal is to be thinner; this has widen the gap between actual body sizes and those of ideal images.

Irving (2008) shares the sentiments of other researchers, like Kilborne (1999), and is convinced that television and magazines have a tremendous effect on young girls' body image and attitudes by continuously and consistently using female models who are thin, young and attractive. While everyone from news reporters to talk show host shave a very high standard of beauty and strong and intelligent personalities, they hardly ever discuss the unglamorous and dark areas of their lives, such as diets, exercising, birth control, sexual transmitted disease, etc. (Irving, 2008). Dubowitz and Zuckerman (2005) feel that by not disclosing or addressing these issues many adolescent girls believe that life revolves around glamour and media - which is not the case. For females, the critical part of this standard is being thin.

According to Hendriks and Burgoon (2003), women who are exposed to a great amount of thin-ideal media are likely to accept the 'thin figure' as a norm. In following up, Holstrom (2004) points out that dissatisfaction arises when heavy media viewers begin to see this thin ideal not only as realistic, but also physically attainable/achievable. Researchers suggest that if women who accept these body shapes as the norm and judge themselves in relation to those images, body dissatisfaction is likely to result (Schooler, Ward, Merriwether & Caruthers, 2004).

Pipher (1994) adds that in recent year's theorists and social commentators have argued that girls, in particular, are vulnerable to negative self-perceptions and eating disorders as a result of cultural messages that define attractive as 'thin'. Kilborne (1999) agrees with them and believes that an increase of media exposure due to technological advancement and the increase of multi-media continue to exacerbate the situation. He further maintains that today individuals are confronted by an influx of ideas, standards and ideals from different cultures on which they base and support their identity and this may increase negative body image. Kilborne (1999) also emphasises the fact that messages from media and advertisers can interfere with the self-identity of adolescent girls because they encourage them to stand out and get noticed in terms of their looks and beautiful appearances rather than their intelligence and personalities.

Kilborne (1999) points out that an American child is exposed to over 3,000 advertisements a day and that to bombard adolescents with more than 3000 advertisement on fashion clothing can be confusing and overwhelming; it may expose them to many negative images that could influence their self-esteem and body image. The above is considered important as women's magazines are filled with articles and advertisements containing bizarre diets; encouragement to lose weight; and extolling the apparent virtues of exercise machines. The media is, therefore, accused of being a medium of transmitting modern cultural ideals to the general public and these ideals are directed at beauty and attractiveness.

#### 2.7.3 The Influence of Television on Body Image and Self-Esteem

American researchers have established that in a year children and adolescents spend more time watching television than any other activity, except sleeping (Harris, 1994). In an Australian study, female adolescents were found to watch an average of 22.72 hours of television in one week, including an average 5.43 hours of soaps or series and an average 1.62 hours of music videos in a week (Tiggeman & Pickering, 1996). Grabe, Ward and Hyde (2008) observed that in films and television thin actresses and models are over-represented, while normal-size and overweight ones are under-represented. The assumption is that when viewers - in particular adolescents girls - realise that they are not able to reach the standard portrayed by their roles models they tend to develop low self-esteem and body image dissatisfaction which can lead to more serious health issues - especially eating disorders, such as anorexia and bulimia. Grabe, Ward and Hyde (2008) are convinced that body dissatisfaction is on rise, with approximately fifty percent of American girls and undergraduate women reporting that they are dissatisfied with their body. This feeling has led to critical physical and mental health problems, such as depression, low self-esteem, obesity and various eating disorders.

#### 2.7.4 The Influence of Magazines on Body Image and Self-Esteem

Most well known magazines, such as *Glamour* or *Vogue*, are often filled with advertisements featuring models that appear to represent a standard of beauty, i.e., a thin, attractive body. Richins (1991) believes that most people tend to compare their appearance with that of highly attractive models in media images. Jung and Jung-Lee (2009) agree and indicate that girls and young women are particularly vulnerable to the ideal images in magazines because of their intense interest in fashion and beauty. Their study also suggests that college women frequently read fashion magazines as a leisure activity. In fact, according to Thomsen, McCoy, Gustafson and Williams (2002), the reading frequency of magazines is strongly predicted in terms of women's desire for self-improvement and Durkin (1999) confirms that it is an indication of how media influence the lives of the people.

# 2.7.5 The Psychological Aspects of Physical Changes

Louw (1995) defines self-concept as a person's subjective view of him/herself, including cognitive, emotional and evaluative aspects. According to Louw (1995), the emotional aspect of an adolescent must not to be underestimated because it plays a major role in the building of a self-concept. He further explains the characteristics of self-concept as self-identity (realisation of continuity of self); self-esteem (pride of worth); self-image (inner image and characteristics); self-efficacy (effectiveness in coping demands); an ideal self; and acceptance of self. Brooks (1996) reinforces the above theory of self-concept by agreeing that physical appearance is a specific area of competence that contributes greatly to feelings of self-worth. It includes awareness, evaluation, and feelings about the body and incorporates body image (view of own body). Brooks (1996) is of the opinion that a negative evaluation of, and feelings concerning, the body are found in body dissatisfaction. From the above information it appears that the adolescent's perception and reaction to changes in the body become more psychologically important than the actual physical changes. Apparently, many individuals remain reasonably unaffected by the physical changes during puberty, while some become anxious and struggle to accept the bodily changes. It is for this reason that a healthy adjustment to physical changes during puberty is necessary for the development of positive body image and self-esteem.

#### 2.8 Clothing Advertisements

Advertising can be defined as the business of drawing the attention of the public to goods and services (Messaries, 1997). Clothing advertisements focus on the promotion of fashionable clothes. This occurs in different form of media, such as magazines, television and the Internet. Advertising in media outlets is important in influencing public opinion because it has a lasting visual and/or auditory impact on the consumer (Kang, 1997).

The visual images are important in advertising because they are cues to translate and convey message that words cannot effectively communicate (Kang, 1997) and, therefore, advertisements related to fashionable clothing are a source of visual persuasion. This is probably one of the reasons why women's magazines, such as *Cosmopolitan*, *Vogue* and *Glamour*, frequently feature images that depict idealised life-styles (Hawkins, Richards, Granley & Stein, 2004).

Cash (1990) describes clothing as a very important tool of aesthetic self-management and it is, therefore, regarded as a strong element that enhances individual appearance. Furthermore, Kwon and Shim (1999) strongly believe that through their choice of clothing women seek to enhance their mood and self-image on a daily basis. This may imply that women judge their body image on the basis of how well the clothes they are wearing suit them. Therefore, clothes and accessories seem to become increasingly important during early adolescence.

To underline the importance of clothes for women, Faber, O'Guinn and Krych (1988) suggest that although men seem to spend more on cars and electronics, women tend to spend more on clothing and jewellery. Kaiser (1997) documented the purpose of clothes in relation to identity formation in early adolescent human development. He indicated that each transitional stage has its different changes. The transition between childhood and early adolescence, for instance, involves physical, psycho-social and cognitive challenges. These entities have been addressed at the beginning of this chapter in terms of how they affect body image perception and self-esteem. There has been a serious debate on, and much criticism of, the use of ultra-thin models in the advertising industry.

# 2.8.1 The Influence of Clothes on Body Image

Nash (1994) reports that advertisers of cosmetics, diet and fashion constantly focus on body weight, shape and beauty and any deviation is portrayed as a flaw; women are persuaded that they have the power to change their appearance with the aid of the advertised products. Research done by Stice and Shaw (1994) suggests that exposure to the thin ideal promotes awareness of the disparity between an individual's actual weight and the ideal. Comparisons between individuals and the ideal on a particular dimension leads to negative self-evaluation and negatively biased attitudes of self-worth and value. Furthermore, Stice and Shaw (1994) conclude that this often results in stress, guilt, shame, a decrease in confidence and body dissatisfaction and it is the link to negative effect, body dissatisfaction, the internalisation of the thin ideal and eating disorders. An on-going argument is that 'thinness' sells whereas 'fatness' does not. When the spokesperson for the agency representing top models, such as Naomi Campbell and Claudia Schiffer, were interviewed in this regard they asserted that displaying a beautiful skinny girl on the cover page of a magazine sells more copies.

Thus, this notion of 'thin is beautiful' is considered profitable for business (Halliwell & Dittmar, 2004). The advertising industry is reluctant to alter this lucrative approach; adolescents are prime targets, accounting for a sizeable market share. Because of this, advertisers are not prepared to show images of a wide diversity of body types, size and ethnicities. However, since advertising tends to depict images of idealised girls in the hope of selling more products, these can greatly deter the real body image for young women.

## 2.8.2 The Influence of Clothing on Self-Esteem

Researchers, such as Martin and James (1997), believe that teen advertising negatively impacts teenagers'/adolescents' self-esteem by setting unrealistic expectations for them concerning their appearances by using idealised models. Other researchers, such as Posavac, Posavac and Posavac (1998), acknowledge this but are of the opinion that it only applies to adolescents who already have low self-esteem or a poor self-image. However, other researchers, like Bristol and Mangleburg (1998), discovered that most adolescent are generally not affected by the advertisements as repeated exposure to advertisements can create an immunity to their images and messages.

Media is particularly hazardous for those who have a low self-esteem and feel inadequate as well as for those who use the media as a means of measuring self-worth (Berel & Irving 1998). Jung and Lee (2009) indicate that the effects of advertising are not limited to the idealization of beauty standards but that they include the message spreading the gender role ideology of the female body. In these advertisements, women are often de-personified and their bodies are reduced to an aesthetic object to be looked at, or to serve, as an object of desire for men.

In summary, the discussion in the above sections shows that white girls in Western countries and South African adolescent girls of all races display body dissatisfaction. Body image and low self-esteem is identified as a risk factor for the development of different disorders, such as eating pathology and depression among adolescent girls. No studies on body image and self-esteem among Batswana girls seem to have been attempted and, therefore, this study addresses the gap in the literature on the subject of body image and self-esteem as a result of advertisements related to fashion and clothing in Botswana. The study also explored Social Comparison Theory to check whether or not it was a contributing factor in the body image issues of adolescent girls in Botswana. The findings indicate that many girls are exposed to television and magazines that advertise fashionable clothing, and that they want to look like the models.

### 2.9 Theoretical Framework

Social Comparison Theory is the theoretical framework underlining this study and a review of this theory is given below. As the study focused on media and how it influences adolescent girls, Cultivation and Cognitive theories are also included to complement the Social Comparison Theory.

## 2.9.1 Social Comparison Theory

The study uses the Social Comparison Theory proposed by Leon Festinger in his original paper on the theory of social comparison, published in 1954. The Social Comparison Theory was originally developed in the field of social psychology. Festinger began a project studying communication and social pressure in a housing project at the Massachusettes Institution of Technology, shortly after the World War II. In addition, Festinger had also written a paper, Social Pressures in the Informal Groups, with Stanley Schanter and Kurt Back in 1950. By integrating the findings from the previous research project, Festinger and Thibaut (1951) proposed the concept of "social reality" which was, then, studied in-depth and became the Social Comparison Theory in 1954.

The Social Comparison Theory holds that people have a drive to evaluate themselves in terms of those who are more beautiful; have money; and have more material possessions. Woods (1989) considers social comparison as cognitive judgments that people make about their own attributes when compared with others. According to Woods (1989), the comparisons are pivotal to self-evaluation and depend less on objective circumstances than on how one judges the self in relation to others in terms of a particular attribute. In reinforcing this theory, Martin, Suls, and Wheeler (2001) indicate that people compare themselves with others when they are unable to evaluate their opinions and abilities on their own. Body image is, therefore, one domain where negative effects of social comparison appear likely in making comparisons. In his initial theory, Festinger hypothesised several things, including that humans have a drive to evaluate themselves by examining their opinions and abilities in comparison to others. His hypotheses also suggest that a shift in the importance of a comparison group will increase pressure towards uniformity within that group. There are two main types of social comparisons that are mentioned in this theory, namely: upward and downward comparison.

### 2.9.1.1 Upward comparison

According to Wills (1991), people make upward comparisons, both consciously and subconsciously, with other individuals that they perceive to be better than them in order to improve their views of self or to create a more positive perception of their own personal reality. The media has been found to play a major role in social comparison.

Researchers examining the social effects of the media have used the Social Comparison Theory and have found that in most cases women tend to engage in upward social comparison with those they idolise, and this result in a more negative feeling about themselves. In upward comparison individuals compare themselves with people who are better; they want to believe that they are part of the elite or superior group and they make a comparison to show similarities between themselves and the comparison group. However, upward social comparison tends to increase depression and anger as well as low self-esteem for those particular individuals (Baumeister, 2008).

It has also been suggested that upward comparison may provide the inspiration to improve. A good example of upward social comparison is related to women and their perception of the self and of others. For instance, a woman looks at the images of idealised others and feels that she is not their equal. Although men do make upward comparisons, research has found that more women make upward comparisons and compare in terms of the unrealistic high standards presented in the media (Strahan, Wilson, Cressman & Buote, 2006). As women are exposed to more mainstream media images of powerful, successful and thin women, they perceive the 'Ideal' to be the norm of society's views of attractiveness. Jones (2001) indicates that social comparison has become a relevant mechanism for learning about the appearance-related social expectations of peers and for evaluating the self in terms of those standards. In this case the researcher assumes that adolescent girls would prefer to use upward comparison because they want to be associated with someone they view as a role model and aspire to be like them someday. Furthermore, the phenomenon of "unidirectional drive upward" explains how humans are motivated to continual self-improvement, which is another main component of Festinger's Social Comparison Theory. Individuals compare themselves to peers, co-workers, magazine models and/or celebrities.

### 2.9.1.2 Downward comparison

Downward social comparison is a defensive mechanism that people use as a means of self-evaluation. It occurs when an individual compares him/herself to someone who is worse off (Baumeister, 2008). These individuals look to other individuals or comparison groups who are considered to be worse off in order to dissociate themselves from perceived similarities and to make them feel better about their self or personal situation. Social comparison research suggests that comparisons with others who are better off or superior on an upward comparison can lower self-regard; this is likely to lead to heightened self-esteem and decreased anger. Downward Comparison Theory emphasizes the positive effects of comparison increasing one's subjective well being. One typical example given in this comparison is where a cancer patient has made many comparisons with patients who are less fortunate than themselves (Wood, Talor & Lichtman, 1995).

Cattarin, Thompson, Thomas and Williams (2000) maintain that social comparison helps to explain the drive for thinness many women with eating disorders have as well as to explain a possible correlation/link between media exposure and its subsequent effects on body image; drive for thinness; and other eating disorders. Botta (2000) believes that whenever girls see individuals on television or in magazines that they perceive to have the qualities that are highly discrepant from their own body-image, they are increasingly motivated to close the gap. Social comparison with media images may lead many women to experience negative feelings about their own failure to meet the standard; to have a greater desire to be attractive in order to be positively evaluated by others; and to consume more appearance-related products (Richins, 1995).

## 2.9.1.3 Types of motive in Social Comparison Theory

The original motive used to evaluate the self, proposed by Festinger (1954), was self-evaluation. Festinger suggested that individuals had an innate drive to compare their abilities and opinions with others in order to evaluate the self. Following Festinger's original study in 1954, the theory of social comparison has been substantiated, expanded and revised by numerous researchers, including Tesser (1990) and Wood (1989). In addition to Festinger's original study Buunk and Mussweiler (2001), Suls and Wheeler (2000) and Thompson *et al.* (1999) reinforce the theory of self-evaluation by stating that it is a normative phenomenon yielding information important to survival in, and adaptation to, one's environment, social interaction and relationships, cognitive self-exploration and affective self-assessment. This indicates that humans self-evaluate by means of social comparison whereby they compare themselves with others in terms of a given dimension, such as ability, attitude, and physical appearance.

Wood (1989) expands the theory by positing that in addition self-evaluation comparison may serve as: (1) Self-enhancement which is an individually biased attempt to maintain positive views in order to enhance self-esteem; and (2) Self-improvement that is the motive to learn how to improve certain attributes and that may occur with respect to personal traits and circumstances. Pre-adolescents and adolescent girls may compare themselves to models in advertisements for any three motives: self-evaluation, self-improvement and self-enhancement (Martin & Gentry, 1997). The study also suggests that as girls mature their motives for comparison may differ.

Collins (1991) is of the opinion that upward comparison may be both self-enhancing and self-deflating, depending on how comparisons are interpreted by individuals. However, downward comparison often tends to be self-enhancing, while upwards comparison may be damaging to one's self-esteem (Lyubomirsky & Ross, 1997).

Self-enhancement may be defined as an individual's biased attempt to maintain a positive view in order to enhance self-esteem. Self-enhancement theory explains that there is a human desire to protect and enhance feelings of self-worth and the frustration of this creates psychological distress (Rosenberg *et al.*, 1995). This is mostly likely to occur when downward comparisons are made, such as comparisons with others who are inferior, because these comparisons often make individuals feel better about themselves (Wood, 1989).

Self-improvement may be defined as an individual's effort to learn how to improve a specific characteristic which may be physical -for example, body shape - or mental. Individuals seek to improve themselves and their bodies and researchers suggest that self-improvement encourages upward comparison (Wood, 1989). However, when self-improvement is used as a motive for comparison, people are forced to face their faults (Wood, 1989). According to Cash and Hendry (1995), there is great pressure on women to reduce their weight to achieve the ideal body image and they are, therefore, affected because they are comparing themselves to the models in fashion magazines. Goodman (2005) indicates that women who do not have ideally thin bodies may act against their natural self by dieting and exercising to force their body to conform to the norm of the thin ideal.

## 2.9.2 Cultivation Theory

The Social Comparison Theory framework is complemented by the Cultivation Theory, which was first developed in the mid-1960s as a method of studying mass communication using cultivation analysis and referring, mostly, to television exposure. Cultivation analysis looks at the influence that television has on the public's perception of social reality. The theory suggests that the more television a person watches the more that person will believe that the life portrayed on television is 'real' (Gerner, Gross, Morgan & Signorielli, 1994). Those who follow the Cultivation Theory offer an explanation of the relationship between media and body image, maintaining that exposure to thin images leads people to believe that the "thin form" is both "realistic and ideal". Both observational learning and cultivation theories suggest that young people will accept the ideals portrayed in the media as indicators of the values in the wider world. The world of entertainment television is populated by physically attractive, affluent people and the men in the industry are usually young or middle age while the women are predominantly young and thin. Overweight men are two to five times more likely to appear on television than overweight women (Kaufman, 1980; Signorielli, 1993; Silverstein, Peterson, & Perdue, 1986). Signorielli (1993) is convinced that even commentators and anchors appear to be selected partly for physical attractiveness.

The Cultivation Theory predicts that people who are exposed to greater degrees of television will have attitudes that are more reflective of the media realities and less so of real world social realities. Therefore, celebrities and media figures are often portrayed as living more glamorous and fulfilling lives than ordinary human beings. The more adolescent girls are exposed to such individuals, the more they upwardly and socially compare themselves with them. Hendrix (2002) indicates that women who watch television programmes that emphasise thin body images will be more affected when they perceive the content to be realistic in nature.

In a recent study on the effect of Cultivation Theory on young women and cosmetic surgery makeover, Nabi (2009) criticises cosmetic surgical procedures which are said to be low risk to the patients and are considered to be an acceptable way of improving one's body.

There was a shocking story in *Move* magazine (07 September 2011:18) where a South African artist, Mshoza, had undergone plastic surgery eighteen times and still wants more done in the name of beauty. When she was asked: "Why so much plastic surgery?" she answered: "I love to be beautiful and I want to fix the areas of my body that are fixable." A question that might be posed is: "Is it because she has money to do it or is it that she is under pressure to look beautiful just because she in the limelight?" When she was asked about the message she was conveying to her young fans, she paused for a moment and then said: "These kids will grow up one day and understand I had to do it." The researcher has reached the conclusion that her younger fan will probably grow up thinking that this is a way to go if one wants to achieve the media's ideal image.

In studying Korean teenagers Kim (2003) also found that an increasing number of plastic surgery procedures, such as nose and double eyelid operations, among Koreans - including teenage girls - may be attributed to the desire to be like celebrities and models seen in magazines. The most interesting part of her study was that 13% of the general public in Korea has undergone cosmetic surgery, whereas the rate in the US it is only 3% (Kim, 2003).

Further studies that use the Cultivation Theory suggest that watching television influences body image dissatisfaction; for example, a study conducted by Gonzales-Lavin and Soak (1995) indicates that girls who watched more than 8 hours of television per week reported a significantly greater body-image dissatisfaction than those with less television exposure. Other studies have revealed that exposure to television is not related to body-image disturbance, but rather that exposure to specific television programme types, such as soap operas and music videos, correlates with body image problems and restrictive eating (Tiggemann & Pickering, 1996).

### 2.9.3 Social Cognitive Theory

In reinforcing the above theories Bandura (1994), who believes in Social Cognitive Theory, suggests that people learn and model the behaviour of attractive others. He believes that most social behaviour is learned by watching the behaviour and behavioural consequences of others and that these observations direct future behaviour. They found that this type of social learning was strengthened if the observer identified with their "model." This meant that children were more likely to repeat behaviours they have seen other children their age do, although they might model adults as well. Learning is also strengthened if someone models behaviour he or she has seen rewarded. This leads to motivation for the person to model the behaviours in order to get a similar reward. Within society mass media is one of the most influential sources of social learning – by using verbal and visual symbolic models that show people how to exhibit desirable behaviour (Bandura, 1994; 1997). Proponents of Social Cognitive Theory posit that young women find thin models more attractive and that they try to imitate them by dieting which, eventually, results in the development of eating disorders. If young women do attempt to imitate those that they see on television and in magazines, they are likely to exhibit a greater degree of body dissatisfaction and an eating pathology.

In conclusion, the cognitive, psycho-social and physical aspects of adolescent development are crucial for growth and the maintenance and regulation of the life of an adolescent. Although these aspects are discussed independently, they are not categorized but are interwoven in our lives and those of the participants of this study. Each aspect functions within the 'whole' and, as in all phases of human development, these processes work together to facilitate 'who' we are.

With reference to the relevant literature, this chapter has attempted to illuminate what early adolescence means. Social Comparison Theory has been used as a theoretical framework for the study whereas some aspects of Cultivation and Social Cognitive Theories have been used to explain how media influence adolescent girls. The subsequent chapter discusses the research methodology of the study.

# **CHAPTER 3**

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter discusses the research methodology and the research design used in the study. The research approach, correlational research design, the population and the sample are discussed as well as the recruitment and selection of participants and the instruments used in the study. The data collection process and statistical analysis are briefly described and preliminary statistics are presented. Issues of reliability, validity and ethical considerations are also examined.

## 3.2 Research Approach

The research approaches used in Social Sciences are usually quantitative, qualitative and mixed methods. Quantitative research generates data that can be converted into numbers while qualitative data is mainly narrative (Schwedt, 2001). The quantitative approach is associated with the analysis of data through mathematical statistics (Howell, 2002). Maree (2011) maintains that the aim of the quantitative research approach is to look at relationships between variables. According to Schwandt (2001), the use of standard means in quantitative research implies that any research may be replicated, analysed and compared with other similar studies. Furthermore, the quantitative method allows large amounts of information to be easily summarised. It also allows for greater accuracy and objectivity of results and it eliminates bias. Therefore, the quantitative approach was deemed to be more appropriate for this study. With regard to the nature of the research, the researcher wanted to identify the relationships among variables and determine whether or not the identified variables correlated

### 3.2.1 Nature of the Research

According to Ditsa (2003), exploratory, descriptive and explanatory are regarded as three common types of research in social research. Exploratory research is usually conducted in order to develop an initial rough understanding of a certain phenomenon; a descriptive study is undertaken to describe the precise measurement and report on the characteristics of a certain population or phenomenon under study; and explanatory research is conducted in order to discover and report some of the relationships among different aspects of the phenomenon under study. The purpose of this study was to look at the relationship that exists between clothing advertisements, body image and the self-esteem of adolescent girls. Therefore, the nature of the study was both explanatory and descriptive which needed to be done within a certain time dimension.

### 3.2.2 The Time Dimension

Babbie (2001) and Ditsa (2003) are in agreement that time plays an important role in the design and execution of research. They further suggest that researchers are, basically, faced with two options in terms of time dimension, i.e., cross-sectional and longitudinal. In a cross-sectional study the unit of analysis is observed at only one point in time while in a longitudinal study the unit of analysis is investigated over a long period of time. With regard to this study, the researcher's intention was not to follow the adolescent girls for a long period of time as they were completing their three year junior certificate and then proceeding to high school which has a different environmental setting. Thus, a cross-sectional approach was considered appropriate and viable.

## 3.2.3 Unit of Analysis

A unit of analysis refers to the primary empirical object, individual or group that a researcher wants to study (Davis, 1996; Ditsa, 2003; Babbie & Rubin, 2005). According to Whitley (2002), the unit of analysis should be accurately described for the conceptual and methodological operation of the research. Ditsa (2003) is of the opinion that an inappropriate unit of analysis could influence the researcher to choose erroneous tools and, thus, distort the results and confound the conclusions of the research. Units of analysis mostly investigated in Social Sciences include - among others - individuals, groups, organisations and social artifacts (Babbie, 2001; Ditsa, 2003). Since the researcher was interested in adolescent girls, the unit of analysis is individuals.

## 3.3 Research Design

According to De Vos, Strydom, Fouche and Delport (2011), research design is a blue print or strategy in terms of which data is collected to investigate a phenomenon or hypothesis. In addition to the above definition, Delong (2008) defines research design as a plan outlining how observations will be made and how the researcher will carry out the project. The research design of this study is correlational.

### 3.3.1 Correlational Research Design

A correlational design is referred to as a passive research strategy in which variables of interest are observed and measured without being manipulated (Wampold, 2002). Aron and Aron (1999) agree that a correlational research design is a scientific method that is concerned with observing and describing the behaviour of a subject without any attempt at experimental manipulation. Whitley states that "a correlational design strategy looks for relationship between variables that are consistent across a large number of cases" (2002:40). The correlational research design used in this research was not to determine causality but to explore whether a relationship exists among variables

In terms of the research question, the researcher wanted to establish whether there was an association between clothing advertisements, body image and self-esteem of adolescent girls. Therefore, it was apparent that using the correlational design strategy would enable the researcher to answer the research question.

### 3.3.1.1 Research questions

The research questions were the following:

- Do adolescent girls in the Boteti sub-district of Botswana have access to media that advertises clothing? To what extent do adolescent girls have an interest in clothing advertisements?
- What is the extent of the exposure of the adolescent girls to clothing advertisements? Is adolescent girls' exposure to, and interest in, clothing advertisements related to their body image?
- Is adolescent girls' exposure to, and interest in, clothing advertisements related to their selfesteem?
- How do adolescent girls perceive their body image?

### 3.3.1.2 Research hypotheses

The hypotheses were:

- Null hypothesis  $(H_o)$ : The exposure to, as well as the interest of, adolescent girls in media clothing advertisements is not related to their body image and self-esteem.
- Alternate hypothesis ( $H_I$ ): The exposure to, as well as interest of the adolescent girls in, media clothing advertisements is related to their body image and self-esteem.

## 3.3.1.3 Recruitment of study subjects

To answer the research questions, given above, the researcher had to identify a relevant setting where the study could be conducted. Before the study commenced, the researcher had a meeting with the Ministry of Education and Skills Development (Secondary Education Department) in June 2012. She informed them about her intention to conduct research in the Boteti sub-district of Botswana. Subsequently, the researcher wrote a letter to the Ministry of Education asking for permission to conduct research among 13 to 17 years of age learners in three schools in the Boteti sub-district. Permission was granted and letters were written to the school principals by the relevant office of the Ministry of Education and Skills Development (Secondary Department) to allow the researcher to proceed with the research. The letters were given to the researcher who delivered them to the relevant schools.

During recruitment, information leaflets containing a brief description of the study and asking for volunteers as well as assent and consent forms were handed out to Forms 1 to 3 learners. The researcher requested that all consent forms be returned whether or not they were signed by parents. Two hundred research information leaflets, including consent and assent forms, were handed to the girls who volunteered. The response was good because all assent and most consent forms from both the learners and their parents were returned. Unfortunately, five consent forms were not signed by the parents. The learners whose consent forms were not signed were withdrawn from the study. This made the final sample of girls one hundred and ninety-five instead of two hundred - as initially planned.

## 3.3.1.4 Study population

The schools involved in the study were Orapa Community Junior Secondary School, Ditsweletse Community Junior Secondary School and Rakops Community Junior Secondary School. Orapa Community Junior Secondary School was chosen as a sample in this study because of its situation in the mining town of Orapa, 20 kilometres from the village of Letlhakane. Apparently, parents who work in Orapa have a high income. As a result, their adolescent girls would be able to afford magazines of their choice - unlike their counterparts who live in villages. Ditsweletse Community Junior Secondary School was chosen because some of the parents of children attending that schoolwork earn a monthly income while other parents are unemployed and depend on their farms. Rakops Community Junior Secondary School has children who are, mostly, from marginalized groups - especially from the Basarwa tribes who rely on government assistance. Therefore, most students from this group may not be able to afford fashion magazines or have access to television. They are, probably, not even aware of fashion magazines or magazines containing fashionable clothing. Thus, the study consisted of a sample of students from a population of three schools in the Boteti sub-district of Botswana. Each school had six hundred (600) black students only, of which half were girls.

### 3.3.1.5 Research subjects

Subjects were selected by means of a non-probability sampling technique known as convenience sampling. Non-probability sampling focuses on techniques that are based on the judgment of the researcher (Maree, 2011). In supporting Maree, Babbie (2008) indicates that in convenience sampling the population is selected on the basis that they are convenient and accessible. Therefore, a convenient sample is simply one where the units that are selected for inclusion in the sample are the easiest to access. In this study the researcher opted to use convenient sampling, as it is easy to manage with only a few rules governing how the sample should be collected. Also, the relative costs and time for a convenient sample are small in comparison to probability sampling techniques.

The disadvantage of convenience sampling, however, is that it does not result in representative samples (Maree, 2011). The convenient sample in this study consisted of adolescent girls between the ages of 13 and 17 years who volunteered to be participants in the study. They all signed informed assent forms and their parents signed informed consent forms. The intended sample for the study was two hundred but the final convenient sample was one hundred and ninety-five girls, as five students did not qualify because their parents had not signed the consent forms to allow their children to participate. The description of the respondents is captured in the demographic information described in the Section 4.1. A self-administered questionnaire (see Appendix E) was used to collect demographic data.

### 3.3.1.6 Inclusion criteria

The girls had to be from the three chosen schools in the Boteti sub-district of the Central District in Botswana. They also had to be between the ages of 13 to 17 years. Those who were eligible had to be available when the assent and consent forms were distributed and signed by both themselves and their parents, respectively.

### 3.4 Measurement

A self-administered questionnaire was used for the collection of data, which included questions on media exposure and interest (see Appendix F); a body image assessment scale; a figure rating scale; a self-esteem assessment scale (attached as Appendix H), and a body mass index (see Appendix E). The study leader/supervisor and the Research Committee reviewed the questionnaire before it was distributed and administered. It was piloted with twenty girls who were not from the schools where the research was to be conducted. This was done to ensure that the questions asked were comprehensible and that they assessed what they were meant to assess. The comments from the girls who participated in the pilot study were positive, suggesting that respondents had no difficulty in understanding the questions. The scales used were tested and found to be reliable and valid (see Section 3.5.3).

## 3.4.1 Media Exposure Scale

Media exposure was assessed using Questions A1, A2, A3, A6 and A7. The scale consisted of statements that refer to media, advertised clothing and models that advertise fashionable clothes (see Appendix F). There were five items for this category of the questionnaire; a 5-pointLikert scale was used for the subjects to rate their responses. As indicated in the questionnaire, the scale ranges from *always*, to *often*, *sometimes*, *rarely* and *never*. *Always* is a score of 5 while *never* is a score of 1.

The reliability of this category of the questionnaire has been confirmed for all respondents, using Cronbach's alpha test (Garner, 2004). The results of the test indicated that media awareness/exposure has a high internal consistency score of .07, which suggests that the scale used is reliable and consistent.

### 3.4.2 Media Interest Scale

Media interest was assessed in Questions A4 and A5 using a 5-pointLikert scale (see Appendix F). The scale ranges from *always*, to *often, sometimes, rarely* and *never*. *Always* is a score of 5 while *never* is a score of 1. Questions A4 and A5 required the respondents to express how the media affected the way they saw themselves.

The reliability test for the two items, A4 and A5 of the questionnaire, was performed for all respondents using Cronbach's alpha test. Unfortunately, the test score was .04, which showed that the scale was poor or had a low internal consistency. Hence, the results of this category of the questionnaire are not included in the discussion chapter.

### 3.4.3 Bodily Perception Scale

The body image assessment scale is presented in Appendix G. In this scale seven questions were used to assess the body image of the respondents. The scale is further divided into three sub-scales where the questions attempted to establish how the learners *think* (Questions B5 and B6), *feel* (Questions B11, B12 and B13) and *behave* (Questions B16 and B18). The questions were based on the 5-pointLikert scales with Questions B5 and B6 ranging from *always* to *often*, *sometimes*, *rarely* and *never*. For Questions B11, B12 and B13 (*feel*) and Questions B16 and B18 (*behave*) the scale ranged from *strongly disagree* to *disagree*, *don't know*, *agree* and *strongly agree*.

### 3.4.4 Figure Rating Scale

A figure rating scale of silhouettes was used to examine body image (see Appendix G). The reason for using this scale is that it is a simple, low-cost instrument, which does not include the use of high-technology equipment, and it has been used, mostly, for assessment of body size and weight-related components of body image (Tehard, Van Liere, Com Nougué & Clavel-Chapelon, 2002; Swami, Salem, Furnham & Tovée, 2008). The scale was used in the American Indian Pathways study with girls and adapted and modified by Mciza *et al.* (2005) for the diverse South African population they were researching. Their sample consisted of the Cape Town Metropole's mothers and daughters. This researcher obtained permission from Mciza *et al.* (2005) to use their figure rating scale.

The initial figure rating scale of silhouettes used 8 figures of white girls from American Indian Pathways study. However, the scale in this study was modified and adapted to suite the study of adolescent girls in Botswana. Hence, only 8 figures of black girls were used within the scale to represent body shapes ranging from A to H, this scale was piloted as indicated earlier in this chapter.

In terms of the above scale, A is the thinnest body type while H is the largest or obese type. All participants were shown silhouettes that increase incrementally in size from very thin to obese. They were also asked to choose two letters, one representing their actual, and the other their ideal, body image figures. Cronbach's Alpha Test was utilised to test the reliability of the scale for all respondents. The outcome of the test was that the scale was reliable with the alpha at.07, which is a satisfactory value.

## 3.4.5 Self-Esteem Scale

Rosenberg (1965) devised a self-esteem assessment scale, which was used to assess the inner feelings of the adolescent girls. It is a 10-item self-report measure with Likert-type responses, which was developed and standardised to assess the level of global self-esteem. The scale contains five questions that measure high self-esteem and five that measure low self-esteem. Each item is rated on 5-point Likert scale that ranges from *strongly agree* to *strongly disagree*. This instrument has been used with various ethnic groups and has internal consistency reliability when administered to adolescents (Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001).

Self-esteem was assessed by Questions C1-C10 with 5 positive and 5 negative questions (see Appendix H). The negative scores were reversed so that a total score for self-esteem could be calculated. The response codes were changed for the five negative questions as follow:

- 1 was changed to 5;
- 2 was changed to 4;
- 3 did not change;
- 4 was changed to 2; and
- 5 were changed to 1.

These changes made the response codes for all 10 questions follow the same direction, i.e., 1was *low self-esteem* and 5 was *high self-esteem*. The mean of the response code for all 10 self-esteem questions was calculated.

Furthermore, the total self-esteem scores were classified as follow:

- 1 2 were low;
- 3 was medium; and
- 4 5 were high.

The reliability of the self-esteem scale was determined and the Cronbach value obtained was .07, which indicates a high internal consistency. This means that the self-esteem scale used was reliable and consistent.

## 3.4.6 Body Mass Index (BMI)

The BMI is weight in kilograms divided by height in meters squared (Treasure, 1997). According to Treasure (1997), the difference between one's present and preferred BMI is considered as body discrepancy, while the difference between one's wanted and real BMI is regarded as body dissatisfaction. The real BMI is based on the weight and the height of the participants (Kakeshita & Almeida, 2008). In this study, the participants' perceived BMI was represented by the silhouette or figure with which they identified (see Appendix F). To establish the participants' real BMI, a room was used at the schools where the weight and the height of the girls were measured privately, and the BMI calculation was made.

### 3.5 Data Collection

Once the signed assent and consent forms were received from the participants and their parents/guardians, the self-administered questionnaires were distributed whereby the data was collected. According to Kumar (2005), a questionnaire is a written list of questions, the answers to which are recorded by the respondents. In a questionnaire, respondents read the questions, interpret what is being asked and then they write down their answers. The most common form of self-administered questionnaire is a mail survey. Traditionally, a mail survey is administered by mailing the questionnaire and/or by personal delivery to respondents. In this case, the questionnaires were personally delivered to the respondents at the schools.

Before completing the questionnaire the participants were provided with the following instructions. They were requested not to write their names on the questionnaire and not to copy from each other's papers. During the brief meeting prior to the study, confidentiality and anonymity of the completed questionnaire was emphasised. Participants were informed that there were no right and wrong answers to the questions and they were requested to answer honestly. No discussion was permitted between the participants. The questions that they answered included ones related to

exposure to media and clothing advertisements, body perception, thoughts, feelings and behaviour as well as questions on self-esteem. The questionnaires were administered during study time. Learners were also informed of their rights to withdraw from the study if they so wish. The researcher was present to answer any question concerning the questionnaire and the study; and the research questions took 30 to 40 minutes for the girls to complete. After filling in the questionnaire, the girls were taken to a special room where their height and weight was measured. In terms of privacy and confidentiality, the researcher allowed only one participant in the room at a time. A bathroom scale and measuring tape attached to the wall was used. The researcher observed that the girls enjoyed the experience of measuring their weight and their height.

As the questionnaires were completed they were checked by the researcher for incomplete answers and the girls were debriefed after completing the questions. Debriefing is an important part of the research process where participants are informed about its purpose and the expected results in order to add educational and personal value to their experience as well as to address any questions and misconceptions (Mc Burney, 2001). Durrheim and Wessenar (2003) are of the opinion that debriefing is essential as it emphasises the dignity and autonomy of the participants. All questions regarding the questionnaires and their feelings regarding their participation were addressed.

### 3.6 Statistical Analysis

The data from the questionnaire was captured using Excel and analysed using Statistical Analysis Software (SAS v 9.3). The reason for using SAS is that it is a comprehensive and flexible statistical analysis and data management system. It can accommodate almost any type of data set format to generate tabulated reports, distribution charts and trends, descriptive statistics and complex statistical analyses (Rees, 2001). The data was checked for errors before it was subjected to statistical analysis.

As indicated in Section 3.4, descriptive statistics was used to explore and describe the data responses collected from the questionnaires. In this regard the statistics were used to calculate frequency and percentage distribution as well as create a summary of statistics for variables, such as age, academic category, residential area, weight and height. Sample means and standard deviations for the body mass index were calculated.

## 3.7 Testing for Relationships or Associations

The hypothesis was that there is a relationship between the respondents' ratings of their *body image* and their degree of *media exposure* and *media interest*. In assessing *body image* (think, feel, and behaviour) of the respondents the following 7 questions were posed:

### • Thoughts/think

o B5: I think I am thin

o B6: Friends tell me I am thin

# Feelings/feel

o B12: I think I am underweight

o B13: I think my weight is normal

o B14: I think I am overweight

#### Behaviour

o B16: I am trying to lose weight

o B18: I am trying to gain weight

A further analysis was undertaken to test for association between each of the above seven questions (see Appendix F).

Media exposure was assessed using Questions A1 (*I watch fashion shows on television or live fashion shows*), A2 (*I read any fashion clothing magazine or magazines which contain fashion clothing*), A3 (*I read fashion clothing magazines and/or magazines that contain fashion clothing*.), A6 (*I watch fashion on television and/or live shows*) and A7 (*I read print media that contain fashion clothing*) while media interest was assessed in Questions A4 (*I buy fashion clothing that I see on television, internet and/or print media*), and A5 (*I want to look like models who advertise fashion clothing on television, internet and/or print media*). Since the rural and semi-urban respondents seemed to respond differently, a separate test was done on these two groups.

The Chi-square (x²) or Fisher's Exact Test was used to establish the association between media exposure and media interests of the adolescent girls participating in the study. Fourteen sets of tests were done: seven *body image* ratings for degree of *media exposure* of rural and semi-rural respondents and another seven *body image* ratings for degree of *media interest* of rural and semi-rural respondents. The rest of the questions that assess body image were not used because there was no statistical evidence for relationships with media exposure or media interest.

### 3.8 Validity and reliability

According to Aron and Aron (1999), reliability refers to the consistency and stability of a measure while validity refers to the changes, which a study accurately reflects, or it assesses the specific concept that the researcher is attempting to measure. Babbie (2008) stresses that reliability is concerned with the accuracy of the actual measuring instruments or procedures and that it

determines the study's success in measuring what the researcher set out to measure. Validity and reliability are essential tools for social researchers to evaluate the quality of their measurement methods. He also emphasises that by ensuring the validity and the reliability of the measures used in the data collection phase of research helps to guarantee the overall quality of the research process and the end product. Babbie (2008) suggests that reliability estimates the consistency of the measurement. In other words, it is the degree to which an instrument measures a construct the same way each time it is used under the same conditions with the same respondents (Key, 1999). Validity, on the other hand, involves the degree to which researchers are measuring what they are supposed to measure (Gravetter & Forzano, 2006).

Reliability tests were performed to establish the internal consistency of media exposure, media interest and self-esteem. This is discussed fully under findings. According to this research, the instruments used are both reliable and valid since they were used several times by different researchers in a different setting. The study used several measurements, such as the self-esteem scale, which is used to assess inner feelings. The scale was developed and standardised by Rosenberg (1965) to assess global esteem and the tool is considered reliable and valid because it has been used by many researchers.

The figure rating scale by Stunkard (1983) was used to assess media exposure, bodily perception, thoughts, feelings and behaviour. Mciza *et al.* (2005) granted permission to use the scale. The tool was used to measure the Body Mass Index (BMI) of the participants. The weight of the participants in this study was measured using a bathroom scale while the height was measured using the scale attached to the wall.

#### 3.9 Ethical Considerations

Participation in this study was voluntary. This implies that the respondents were free to withdraw from the study at any time, for whatever reasons and without fear of any consequences. Consent to participate was formally obtained using informed consent and assent forms which were written in simple and clear language (see attached forms). Information in the two forms covered issues, such as the title of the study; how prospective participants would be selected; the contact details of participants - should the need for further questioning arise; the nature of the participation; how the results would be used and published; what the potential benefits for participants were; assurances of confidentiality and the right to withdraw from the study; and the assurance that information disclosed during the study would not be used against the participants.

In terms of the issues of confidentiality and data privacy, the information was coded and the respondents' names were not used. The researcher would make sure that no one had access to her research information without her permission. The results of the study were to be kept in a secured place at the University of Pretoria for 15 years before being be disposed of.

### 3.10 Conclusion

In this chapter, quantitative research and correlation research design - as applied during the study process -were discussed. The research questions and the hypotheses were highlighted. Measurements, validity and reliability as well as ethical consideration were also considered. The next chapter, Chapter 4, focuses on presenting the outcomes of the statistical analysis of the data collected during the research survey.

## **CHAPTER 4**

### RESEARCH RESULTS

### 4.1 Introduction

The purpose of this chapter is to describe the results of the study in terms of the findings obtained from statistical analysis. The statistical results described in this chapter were determined by the research questions and the use of statistical analysis software (SAS V9.3). The results of the descriptive statistics and the inferential statistics for testing research hypotheses are also described.

## 4.2 Descriptive Statistics

The descriptive statistics indicate the distribution of data as well as the characteristics of the respondents as shown in the tables below.

## 4.2.1 Demographic Data

The demographic data includes the age of the respondents, their weight and height as well as their residential areas and their academic levels.

Table 4.1		
Age Distribution of Respondent	's	
Age in years	<u>N=195</u>	Percentage a
13	13	6.67
14	59	30.26
15	70	35.90
16	44	22.56
17	9	4.62
<sup>a</sup> The column on the right is the percentages repr	esenting the number of respondents who fall within	n a particular age group

As shown in Table 4.1, the age distribution of the sample ranges between 13 and 17 years. The majority of the respondents were 15 years old (35.9%), and the smallest group (4.62%) were 17 years old.

Table 4.2 Veight Distribution of Respondent	S	
Weight in kilograms	<u>N=195</u>	Percentage <sup>a</sup>
30-40	40	20.5
41-50	90	46.10
51-60	56	29.00
61-71	9	5.00

As indicated in Table 4.2, the majority of girls (46.1%) were in the weight range of 41-50 kg's whereas the smallest percentage of girls (5%) was in the weight range of 61-71kg's.

Table 4.3								
Height Distribution of Respondents								
<u>Height in meters</u>	<u>N=195</u>	Percentage a						
1.25 - 1.40	12	6.1						
1.43 – 1.50	44	23						
1.51 – 1.60	107	55						
1.61 – 183	32	16						
<sup>a</sup> The column on the right is the percentages repr	esenting the number of respondents who fall within	a particular height range						

Table 4.3 reflects the height of the respondents; the majority (55%) were within the height range of 1.51-1.60m, while the minority of the girls (6.1 %) were in a height range of 1.25-1.40m.

Table 4.4 Academic Levels (Forms) of the R	Respondents	
Academic level	<u>N=195</u>	Percentage <sup>a</sup>
1	67	34.30
2	78	40.26
3	50	26.00
<sup>a</sup> The column on the right is the percentages represer	nting the number of respondents who fall withi	n an academic level

Table 4.4 shows that the academic levels of the respondents fell in three categories: Forms 1, 2 and 3. Of the girls who participated in the study, most (40%) were in Form 2 and the fewest (26%) were in Form 3.

Table 4.5 Residential Areas of Respondents						
Residential area	<u>N=195</u>	Percentage a				
Rural	83	42.5				
Semi-urban	112	57.4				
<sup>a</sup> The column on the right is the percentages representing the number of respondents who fall within a particular area						

Table 4.5 in terms of residential areas, 112(57.4%) of the girls came from a semi-urban area and 83(42.5 %) were from a rural area.

Table 4.6								
Sample Characteristics of Respondents								
<u>Variable</u>	<u>N=195</u>	<u>Median</u>	<u>Mean</u>	Std Dev	<u>Minimum</u>	<u>Maximum</u>		
Age (in years)	195	19,4771468	14.8754163	3.0585253	14.6599.282	32.6400000		
Weight (kg)	195	46	47.1948718	7.8025223	31	71		
Height (cm)	195	1.54	1.5410256	0.0763266	1.25	1.83		

Table 4.6, above, shows that the mean age of the sample is 14.9 (SD = 3.06); the mean weight is 47.19 kg (SD = 7.8), and that of height is 1.54 m (SD = 0.076). The above variables of weight and height were used in the calculation of the BMI.

Table 4.7								
Body Mass Inde.	Body Mass Index (BMI) Categories for Rural and Semi-urban Respondents							
BMI Category	Number	<u>%</u>	Number	<u>%</u>	Number	<u>%</u>		
Underweight	7	8.43	3	2.68	10	5.13		
Normal weight	72	86.75	98	87.50	170	87.18		
Overweight	3	3.61	8	7.14	11	5.64		
Obese	1	1.20	3	2.68	4	2.05		
<u>Total</u>	<u>83</u>	100.00	<u>112</u>	100.00	<u>195</u>	100.00		

The body mass index was calculated using the formula: weight (kg)/height (meters<sup>2</sup>). As illustrated in Table 4.7, 7(8.43%) of the rural respondents viewed themselves as underweight while only 3(2.68%) of the semi-urban shared this view. For the rural area 72(86.75%) respondents were found to have a normal weight in contrast with 98(87.5%) from a semi-urban area. In terms of the overweight category, 3(3.61%) and 8(7.14%) of respondents were from rural and semi-urban areas, respectively. There was 1(1.2%) obese respondent from the rural area and there were 3(2.68%) from the semi-urban area.

Table 4.8  Body Mass Index of Respondent	ts	
BMI	No. of Girls	Percentage
Underweight	10	5.13
Normal Weight	170	87.18
Overweight	11	5.64
Obese Weight	4	2.05

Using the cut off points of BMI, Table 4.8 illustrates that 5.13% of respondents are underweight, while 87.18 have a normal weight, 5.64% are overweight and 2.05% are obese. The cut off points used during the analysis were as follows:

- A value less than 18.5 fell within the underweight range
- A value of between 18.5and 24.9 fell within the normal average range
- A value of between 25.0and 29.9 fell within the overweight range
- A value of above 30.0 fell within the obese range.

Table 4.9  Statistics for B	MI Distribution					
<u>N</u>	Med	<u>M</u>	SD	Min	Max	
195	19.48	19.86	3.06	14.66	32.64	
N = sample size Med = Median M = Mean						
SD = Standa	ard Deviation	Min = N	1inimum	Max = M	aximum	

In Table 4.9 the total number of the respondents was 195 and the mean for BMI was 19.86 with the SD = 3.06 which indicates that the data points tended to be close to the mean. The minimum value in a set of values was 14.66 and the maximum value in a set of values was 32.64.

<b>Table 4.10</b>									
Extent of Media Exposure of Respondents									
Media Exposure	Rural Respondents Number	<u>%</u>	Semi-urban Respondents Number	<u>%</u>	Total Overall	<u>%</u>			
Low	17	20	25	22	42	21			
Medium	44	53	49	44	93	48			
High	22	27	38	34	60	31			
<u>Total</u>	<u>83</u>		<u>112</u>		<u>195</u>				

Table 4.10, reveals the extent to which the respondents were exposed to media. In terms of the analysis, the extent of media exposure was assessed as low, medium and high. The results suggest that 17(20%) of rural and 25(22%) of the semi-urban respondents had low media exposure. With regard to medium exposure, rural respondents numbered 44(53%) as opposed to semi-urban respondents who numbered 49 (44%). High media exposure for rural and semi-urban participants numbered 22(27%) and 38(34%), respectfully.

Table 4.11 Extent of Media Interest of Respondents							
Media Exposure	Rural Respondents Number	<u>%</u>	<u>Semi-urban</u> <u>Respondents Number</u>	<u>%</u>	Total Overall	<u>%</u>	
Low	17	20	33	29.4	50	26	
Medium	33	40	41	37	74	38	
High	33	40	38	40	71	36	
<u>Total</u>	<u>83</u>		112		<u>195</u>		

Table 4.11, above, reveals the extent to which the respondents in the study were interested in media. According to this table, 17(20%) rural and 33(29.4%) semi-urban respondents had a low media interest; 33(40%) rural and 41(37%) semi-urban respondents had a medium media interest; and 33(40%) rural and 38(40%) semi-urban respondents had a high media interest.

# 4.3 Statistics Analysis of Association

In order to analyse for relationships or association concerning media exposure, media interest, body image and self-esteem, a *Chi-square Test* or Fisher's Exact Test was used but the Chi-square test was not deemed appropriate.

### 4.3.1 The Relationship between Body Image and Media Exposure

In testing the research hypotheses (see Section 3.3.1.2), only seven questions to assess body image (*thought*, *feelings* and *behaviour*-as stated in Section 3.7) and two questions related to media interest were used. Rural and semi-urban participants appear to have responded differently and, hence, separate tests were run for the two groups.

Table 4.12 Extent of Media Interest of Respondents							
Thought x Media Exposure	Rural (n=83)	p-value	<u>%</u>	Semi-urban (n=112)	p-value	<u>%</u>	
I think I am thin x media exposure	Chi-square	0.5782		Chi-square	0.5473		
My friends often tell me I am thin x media exposure	Fisher's Exact Test	0.345		Chi-square	0.1101	*	
X = association	N	N = sample size  (1)	95)		* p-0.1101		

The statement, I think I am thin  $\mathbf{x}$  media exposure, did not register a significant level for respondents from both the rural and the semi-urban areas while the statement, My friends often tell me that I am thin  $\mathbf{x}$  media exposure, had a significance level, p-value 0.1101, for semi-urban respondents which is between 0.1 and 0.2.

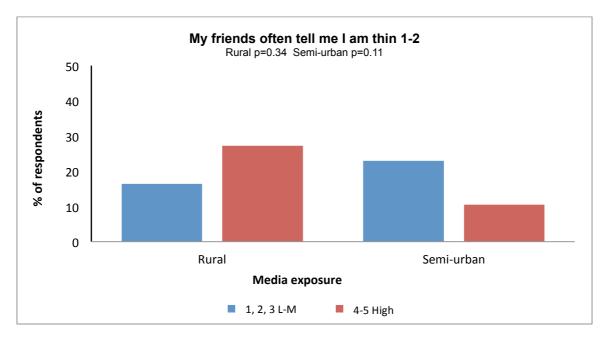


Figure 4.1: Media Exposure and Respondents' Friends often telling them they are thin  $L = Low\ Exposure$ ,  $M = Medium\ Exposure$  and  $High = High\ Exposure$ 

My friends often tell me I am thin 1-2 = combined respondents' responses 1 and 2; 1, 2, 3 L-M = combined respondents' responses 1, 2, and 3; 4-5 High = combined respondents' responses 4 and 5.

As illustrated in Figure 4.1, semi-urban respondents with high media exposure tend to have a lower percentage of friends who often tell them that they are thin, i.e; media exposure goes with semi-urban respondents not being thin. Therefore, for this group  $H_o$  cannot be rejected because there is a tendency for association regarding media exposure and body image.

Table 4.13 Media Exposure and Trying to Lose or Gain Weight (Behaviour)							
Behaviour <i>x</i> Media Exposure	<u>Rural (n=83)</u>	p-value	<u>%</u>	Semi-urban (n=112)	p-value	<u>%</u>	
I am trying to lose weight x media exposure	Chi-square	0.6395		Chi-square	0.0703	10%	
I am trying to gain weight x media exposure	Chi-square	0.8328		Chi-square	0.0654	10%	
X = association	N = sample size  (195)		95)	p-0.1101			

Table 4.13 shows that for the statement, I am trying to lose weight x media exposure, for the semiurban respondents the p-value = 0.0703 which is <0 .1; the  $H_o$  is rejected and the  $H_I$  is accepted at a 10% level of significance, i.e., there is a relationship.

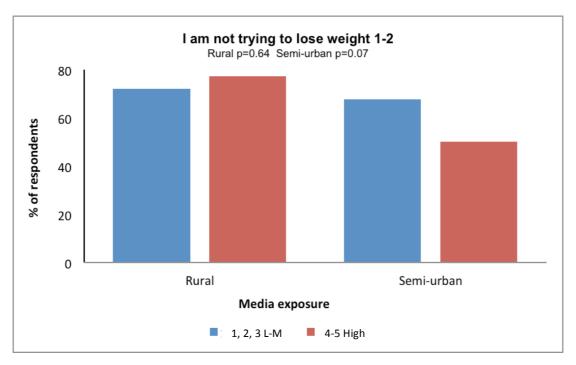


Figure 4.2: Media Exposure and Respondents not trying to Lose Weight (behaviour)  $L = Low \ exposure, \ M = Medium \ exposure, \ High = High \ exposure$ 

I am not trying to lose weight 1-2 = combined respondents' responses 1 and 2; 1, 2, 3 L-M = combined respondents' responses 1, 2, and 3; 4-5 High = combined respondents' responses 4 and 5. Figure 4.2 shows that a lower percentage of respondents with high media exposure were not trying to lose weight; i.e., exposure goes with trying to lose weight.

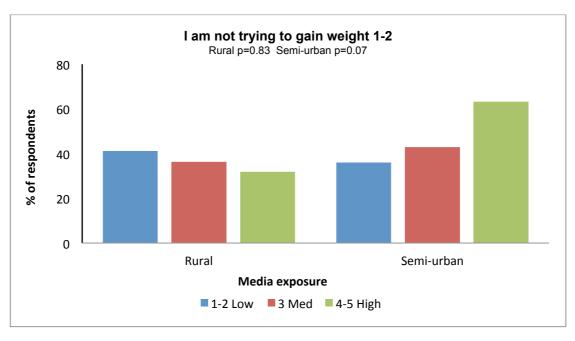


Figure 4.3: Media Exposure and Respondents not trying to Gain Weight (Behaviour)  $L = Low \ exposure, \ M = Medium \ exposure, \ High = High \ exposure$ 

I am not trying to gain weight 1-2 = combined respondents' responses 1 and 2; 1-2 L = combined respondents' responses 1 and 2; 3 M = respondents' response 3; 4-5 High = combined respondents' responses 4 and 5.

Figure 4.3 shows that as media exposure increase the percentage of respondents not trying to gain weight also increases.

Table 4.14 Relationship between Think (Body Image) and Media Interest							
Think x Media Interest	Rural (n=83)	<u>p-value</u>	<u>%</u>	Semi-urban (n=112)	p-value	<u>%</u>	
I think I am thin x media interest	Chi-square	0.1944		Chi-square	0.8751		
Friends tell me I am thin x media interest	Chi-square	0.0268	5%	Chi-square	0.1944	*	
X = association					* p < 0.05	•	

As indicated in Table 4.14, that is, *media exposure and behaviour* (I am not trying to gain weight) for semi-urban respondents' p-value = 0.0654 which is <0 .1; the  $H_o$  is rejected while the  $H_I$  is accepted at a 10% level of significance and this means that there is an association.

With regards to the statement, my friends tell me I am thin x media interest, Table 4.14 indicates that in the semi-urban respondents the p-value is 0.1944, which is between 0.1 and 0.2. Therefore, the  $H_o$  is not rejected because there is a tendency for association.

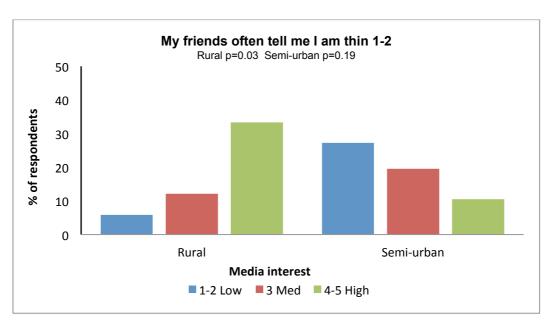


Figure 4.4: Media Interest and Respondents' Friends Often Telling Them They Are Thin L = Low interest, M = Medium interest, High = High interest

My friends often tell me I am thin 1-2 = combined respondents' responses 1 and 2; 1-2 L = combined respondents' responses 1 and 2; 3 M = respondents' response 3; 4-5 High = combined respondents' responses 4 and 5.

In Figure 4.4, semi-urban respondents with *high media interest* tend to have a lower percentage of friends often telling them that they are thin, i.e., *media interest* goes with respondents not being told they are thin. With regard to the same statement above, rural respondents' p-value is .0268 which is <0 .05, the  $H_0$  is rejected while the  $H_1$  is accepted at a 5% level of significance. There is an association; this implies that, as media interest increases the percentage of friend's often telling respondents that they are thin also increases. The *media interest* goes with respondents being told they are thin.

### 4.3.2 The Relationship between Self-Esteem and Media Exposure

A Chi-square Test was used to test the relationship between self-esteem and media exposure. Like the other variables described above, the semi-urban and rural respondents were tested separately.

Table 4.15 Analysis of Self-esteem and Media Exposure							
Self-esteem x media exposure	<u>Rural (n=83)</u>	p-value	<u>%</u>	Semi-urban (n=112)	p-value	<u>%</u>	
Self-esteem x media exposure	Chi-square	0.3766		Chi-square	0.1701	*	
X = association	•						

In the semi-urban respondents there is a p-value of 0.1701, which is between 0.1 and 2.0. As a result of this value, the  $H_o$  cannot be rejected. The results show that there is a tendency for association between self-esteem and exposure.

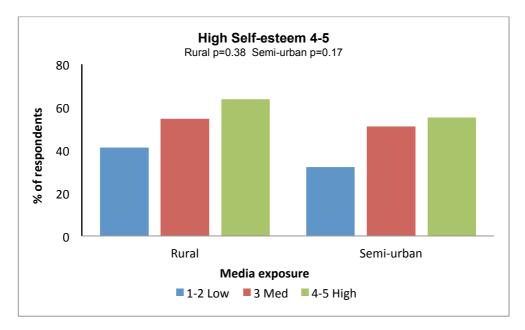


Figure 4.5: Media Exposure and Self-Esteem

L = Low exposure, M = Medium exposure, High = High exposure

High Self-esteem 4-5 = combined respondents' responses 4 and 5; 1-2L = combined respondents' responses 1 and 2; 3M = respondents' response 3; 4-5 High = combined respondents' responses 4 and 5. Figure 4.5 shows that the percentage of respondents with high self-esteem tends to increase as media exposure increases, i.e., media exposure goes with self-esteem.

### 4.4 Reliability Coefficient

Aron and Aron (1999) refer to reliability as the consistency and stability of a measure. A measure of reliability is the Cronbach Alpha (Neuman, 2003). According to Neuman (2003), Cronbach's Alpha determines the internal consistency or average correlation of items in a survey instrument to gauge reliability. Internal consistency reliability is a measure of reliability used to evaluate the degree to which different test items that probe the same construct produce similar results. An average interitem correlation is a sub-type of internal consistency reliability which is obtained by taking all the items on a test that probes the same construct, such as reading comprehension; determining the correlation coefficient for each pair of items; and, finally, taking the average of all of these correlation coefficients. This final step yields the average inter-item correlation.

Reliability can also be defined as the overall consistency of a measure; a measure is said to have a high reliability, if it produces similar results under consistent conditions. Garner (2004) indicates that Cronbach's Alpha coefficient is used to estimate internal consistency where composite reliabilities are calculated and reliability ranges between .90 and .97. Cronbach's reliability test in this study measured media exposure, media interest and self-esteem. The results from this study show that media awareness or exposure has a high internal consistency of .07 while media interest scores .04, which is a poor or low internal consistency. The low media interest shows that the responses to these 2 questions were not strongly correlated or not consistent. Self-esteem scored .07, which indicates high internal consistency. This means that the self-esteem scale used was reliable and consistent.

### 4.5 Conclusion

In conclusion the results of this study indicate that there is statistical evidence of dependence as well as association between exposure and behaviour of the respondents who were trying to lose or gain weight, especially in the semi-urban respondents. The results also show that there is a tendency for association between self-esteem and media exposure in the semi-urban respondents. The more the media exposure increases, the higher the self-esteem of the semi-urban respondents is. Many participants in the study revealed that they are affected by their friends telling them that they are thin. This means their friends are a driving force in their need and desire to look good.

Chapter 4 has analysed the data. The next and final chapter, Chapter 5, is a discussion of the findings; looks at the limitations of the study and makes recommendations for further study.

### **CHAPTER 5**

### DISCUSSION, RECOMMENDATIONS AND LIMITATIONS OF THE STUDY

### 5.1 Discussion of the Findings

In this section the research results are discussed with a focus on the research questions and objectives as well as the hypotheses. The limitations and recommendations of the study are indicated as well.

## 5.1.1 Characteristics of the Respondents

The total number of respondents in this study was 195. Their ages ranged between 13 and 17 years with the majority of respondents (35.9 %) being 15 years old. The mean age was 14.9 with a standard deviation (SD) of 3.06. In terms of weight, the majority of girls were between 30 and 40kgs, with a mean weight of 47.19kg and a standard deviation of 7.8. Five per cent of the respondents' weight was between 61 and 71kg, which can be classified as the highest weight range. The height of the respondents indicated that the majority of the girls (55%) were in the range of 1.51-1.60m with a mean height of 1.54m and a standard deviation of 0.076. In terms of academic level, Form 2 was well represented with (40.26%) in comparison with Forms 1 and 3. As far as residential areas were concerned, the semi-urban area was well represented in the study (57.4%) while the rural area had a 42.5% representation. The purpose of measuring weight and height was to ultimately compute the Body Mass Index for each respondent.

## 5.1.2 Body Mass Index (BMI)

The Body Mass Index (BMI) is a measurement of nutritional status using the following formula: weight (kgs)/height (metres²) (Szabo, 2002). The BMI of each participant in study was calculated. According to the final calculations, the mean BMI was 19.86 with a standard deviation of 3.06. The results of the BMI show that most of the respondents (87.1%) had a normal weight while 5.13%were underweight; 5.64% were classified as overweight and 2.05% fell in the obese category. The study also considered the relationship between rural area and semi-urban respondents.

According to the results there was a significant similarity between the BMI of girls in rural and semi-urban areas. Only 7of 83 respondents (8.43%) in the rural area perceived themselves as underweight while 3 of 112 respondents (2.68%) from the semi-urban area considered themselves to be under-weight. Seventy-two of 83 rural respondents (86.75%) and 98 of 112 semi-urban respondents (87.5%) perceived themselves as being a normal weight.

However, the results also show that of the rural respondents 3 of 83 (3.61%) indicated that they were over-weight while 8 of 112 respondents (7.14%) from the semi-urban area believed that they were over-weight. In the obese category both groups had a low score: 1 of 83 respondents (1.2%) from the rural area and 3out of 112 respondents (2.68%) from the semi-urban area suggested that they were obese.

# 5.1.3 Body Image

The majority of the respondents (87%) had a normal weight; 5.1% were underweight; 5.7% were overweight; and 2.05% could be considered obese. However, the results of this study reveal some aspects of body image dissatisfaction among respondents with a normal BMI. This is not surprising because studies by Huon (1994) and Paxton, Wertheim, Gibbons, Szmukler, Hillier and Petrovich (1991) maintain that most girls who feel dissatisfied with their bodies fall within the 'normal' weight. In another study by Szabo and Hollands (1997), using a multi-racial urban sample of adolescent schoolgirls in South Africa, it was found that almost 50% perceived themselves to be overweight and yet their BMI was 20.01 - placing them within the normal range. Only 24% of respondents with a normal BMI thought that their weight was normal. Graham, Eich, Kephart and Peterson (2000) agree with the current results; they found in their study in North America that 29% of adolescents selected ideal bodies that corresponded with their actual bodies.

In this study some of the respondents (19%) with a normal BMI thought they were overweight. This is supported by Paxton *et al.* (1994) who discovered that 27% of the girls (N=341) who fell within the normal weight range still classified themselves as over-weight. Grigg, Bowman and Redman (1996) suggest that many normal weight adolescent girls are dissatisfied with their weight; they desire to be thinner; and, therefore, they may turn to extreme weight control strategies. Similarly, this might be the case with the adolescent girls in this study who think they are overweight when their weight is within a normal range. On the other hand, 39% of the respondents with a normal BMI thought they were thin; 28% with a normal BMI thought they were underweight; 32% with a normal BMI were trying to lose weight; and 57% with a normal BMI were trying to gain weight. The findings point to body dissatisfaction among the adolescent girls. Paxton *et al.* (1994) found a strong relationship between BMI and body dissatisfaction among adolescent girls. The case of some respondents with a normal BMI (18%), where their friends often tell them they are thin, is an indication that the adolescent girls in the Boteti sub-district of Botswana have body image concerns. The findings of other studies have shown conflicting results concerning the perception of body image amongst their participants.

Wertheim, Paxton, Maude, Szmukler, Gibbons and Hiller (1992) found that high school girls in Australia (N=606) who engage in extreme weight loss behaviour experience greater body image dissatisfaction and perceive themselves to be heavier and have a higher BMI than their peers.

## 5.2 Media Exposure

Media exposure was chosen as a variable as print media, including magazines, is considered to be important in endorsing brands and products; their strong images are enhanced by advanced technology (Jung & Lee, 2009). Media images are considered to be central elements of the appearance culture and have been identified as powerful forces, which shape appearance standards, such as gaining or losing weight (Field *et al.*, 1999; Levine, Smolak, & Hyden, 1994). Therefore, one of the objectives of the study was to find out whether the respondents were exposed to, and/or interested in, media that advertises fashion clothing.

## 5.2.1 The Degree to which Respondents were exposed to Media

The results of the study indicate that all the respondents have been exposed to media to a certain degree. Respondents who had low media exposure were: 17(20%) in the rural area and 25(22%) in the semi-urban area. Furthermore, in terms of medium exposure, 44(53%) were rural respondents and 49(44%) were semi-urban respondents. Regarding high media exposure, 22(27%) were rural respondents while only 38(34%) were from a semi-urban area.

These results show that all the girls were exposed to media that advertises fashionable clothing. However; the findings imply that semi-urban respondents were more exposed to media that advertises fashion clothing than rural respondents. The reasons for the difference could be that the respondents in the semi-urban have more access to television and magazines that advertises fashion and clothing. Apparently, most parents of the girls from the semi-urban area have high incomes and can afford to buy magazines -particularly parents who are working for the mine compared to those who depend on government subsidies.

## 5.2.2 Media Exposure and Body Image

As indicated in Section 3.7, body image had seven questions, which were related to media exposure. The hypothesis was that there is a relationship between the respondents' ratings of their body image and self-esteem and their degree of media exposure and media interest. Responses pertaining to media exposure and body image were analysed and the association between the two was established.

### 5.2.3 Media Exposure and Respondents' Friends telling them they were thin

Berndt and Keefe (1995) are of the opinion that conversations with friends about appearance, including being thin or fat, can be especially influential because of the intimacy of friendships during adolescence and the importance of close friendships in shaping their social context. With regard to the statement: "Friends often tell me that I am thin" x media exposure, for the semi-urban respondents it has a significance level p-value of 0.1101 which indicates that there is a tendency for association. The results show that respondents with high media interest tend to have a lower percentage of friends often telling them that they are thin. The finding here is that their interest does not go with being told that they are thin. The findings of this study for rural respondents suggest that as exposure to media increases, the percentage of friends often telling them that they are thin also increases. This was not expected - especially from the rural respondents. It might mean that cultural issues should also be taken into consideration when addressing the issues of body image and self-esteem.

As indicated earlier under background information, it was noted that previously in Botswana a girl or a woman was considered fit and attractive if she was fat and curvaceous. So, in a way adolescent girls in the Boteti sub-district seem to be holding on to the culture of being fat and curvaceous and that is why their friends are telling them that they are thin instead of telling them that they are fat. Anderson and Olnhausen (1999) assert that peer acceptance is critical during adolescence. Therefore, it is not surprising that as media increases the percentage of friends telling them that they are thin also increases.

This study agrees with Cusumano and Thompson (1997) who maintain that there is insufficient evidence of whether media exposure causes body image dissatisfaction in all women. This result is interesting because while the percentage of the girls in the rural area who tell friends that they are thin increases with media exposure, the semi-urban respondents with high media exposure tend to have a lower percentage of friends often telling them that they are thin.

## 5.2.4 Media Exposure and Respondents not trying to Lose Weight

As far as body perception and behaviour amongst these adolescent girls is concerned, the study did not find statistical evidence for relationships with most of the aspects of body image and self-esteem - as indicated earlier in the text. However, there was evidence of relationships between media and 3 aspects of body image. With media exposure and behaviour the variable, "I am trying to lose weight x media exposure", in semi-urban respondents, indicates p-value of 0.0703 at a 10% level of significance.

The null hypothesis ( $H_0$ ) is rejected and the alternative ( $H_1$ ) is accepted. Therefore, the findings show that there is an association. These results further indicate that a lower percentage of respondents with high media exposure were not trying to lose weight. In a study involving adolescents in South Africa, Szabo and Ellwood (2006) demonstrated that in their sample of urban white and black girls there were substantially more participants with body dissatisfaction than amongst the black rural girls. According to the study, urban white girls had the greatest level of body dissatisfaction while the black rural girls were the least satisfied with their bodies; black urban girls were closer to their white counterparts in terms of body satisfaction. Selmer (1997) also conducted a study comparing schoolgirls of different races. The results show that white girls are more dissatisfied with their body shapes when compared with Blacks and Indians. However, black girls who appear to be the heaviest in the group were more eager to lose weight. The results of the above study indicate that the greater the BMI, the more dissatisfied the person is with her weight status and she desires to lose weight. The present study appears to differ from the studies conducted by other researchers because most of the girls in Boteti sub-district do not wish to lose weight despite being exposed to media that advertises fashion clothing.

### 5.2.5 Media Exposure and Respondents not trying to Gain Weight

In terms of media exposure and behaviour, the statement: "I am not trying to gain weight x media exposure" for **semi-urban respondents** indicates the p-value of 0.0654 at a 10% level of significance which means that there is an association; the  $H_o$  is, therefore, rejected and  $H_I$  is accepted. According to these results, as the media exposure increases the percentage of respondents not trying to gain weight also increases. The results are interesting because the more these girls are exposed to media the less they want to either lose or gain weight. In other words, the finding is that those adolescent girls are happy with the way they look.

This study's findings seem to concur with those of Seed, Allin, Olivier, Szabo and Nxumalo (2005) from research undertaken in developing countries. They report that, traditionally, in Southern Africa it was seen as desirable for women to have fuller figures. They suggest that in the old day's weight was regarded as a symbol of prosperity and status, especially in rural South Africa. Now it appears that this perspective of the African woman (fat and curvaceous) is changing. Seed *et al.* (2005) conducted a study at South Africa's University of Zululand in KwaZulu-Natal where they interviewed 17 black female students of approximately 21 years of age, using inductive analysis based on the principles of a grounded theory to elicit information relating to current body ideals identified in an earlier study.

Although the study was conducted in rural South Africa, the South African population does not different much from that of Botswana. However, from this researcher's point of view one cannot rule that the perception of fat and curvaceous is slowly but surely changing amongst our adolescent girls.

#### 5.3 Self-Esteem

Conti *et al.* (2005) maintain that media pressure and social influences of family and friends can decrease female adolescents' self-esteem and confidence in terms of the way they view their bodies. According to these authors, those who do not fit the beauty standard are doomed to live with personal dissatisfaction. They also emphasise the need to consider experiences with peers to internalising body image as crucial, especially when peer relationships play an increasing prominent role in well being and adjustment during adolescence. Moreover, Kearney-Cooke (1999) suggests that self-esteem declines in early adolescence. Anderson and Olnhausen (1999) are of the opinion that interaction with peer groups is very important because it can have major impact on adolescents' self-esteem by influencing it positively or negatively.

### 5.3.1 Media Exposure and Self-Esteem

According to the results of this study, 51% of the respondents have a high self-esteem as a result of being exposed to media while 49% have a low to medium self-esteem. These results are an indication that the level of self-esteem and media exposure in both rural and semi-urban is not high. The results show that there is a tendency for an association between self-esteem and media exposure in the semi-urban respondents. Therefore, the results indicate that the p-value is 0.1701 and that the  $H_o$  cannot be rejected. The results further suggest that there is a tendency for association between self-esteem and exposure. For the semi-urban respondents the percentage with high self-esteem tends to increase as media exposure an increase, i.e., the perception is that exposure goes with self-esteem.

Harter (2006) holds a strong belief that there is a decline, which is probably due to negative body images that emerge during pubertal changes. In general, researchers have found that women who express greater dissatisfaction with their weight and body shape tend to have lower self-esteem scores than women who have a healthier body image. Studies have also shown that exposure to thin models through reading magazines contributes to body dissatisfaction; a decreased self-esteem and confidence; and negative feelings of guilt, anxiety, shame and depression (Pinhas, Toner, Ali, Garfinkel and Stuckless, 1999; Tiggerman and Mc Gill, 2004); and eating disorders in adolescent girls (Vaughan & Fouts, 2003).

In previous studies a correlation has been found between advertisements and exposure to unrealistic beauty standard and a high number of eating disorders and lower self-esteem in women - especially adolescent girls (Thompson & Stice, 2001). However, this study seems to be different because the results suggest that the more the respondents are exposed to media, the higher their self-esteem, a finding that was not expected by the researcher.

#### 5.4 Media Interest

Another objective of this current study was to find out whether the respondents had an interest in media that advertises fashion clothing.

## 5.4.1 Levels of Respondents' Interest in Media

The results reveal that the semi-urban respondents had a higher media interest (29.4%) when compared to rural respondents (20%). When rated under medium media interest there were 33 (40%) rural respondents while there were 41 (37%) semi-urban respondents. However, on a high media interest there were 33 (40%) rural respondents and 38 (40%) semi-urban respondents. These results indicate that both groups of respondents had an interest in media that advertises clothing, but to varying degrees.

## 5.4.2 Media Interest and Thoughts about Body Image

The statement: "My friends tell me I am thin" x media interest for the semi-urban respondents shows a p-value of 0.1944. This is an indication that there is a tendency for association. The results further suggest that semi-urban respondents with a high media interest tend to have fewer friends often telling them that they are thin, i.e., media interest goes with respondents not being told they are thin. In the same statement: "My friends tell me I am thin" x media interest for the rural respondents the results indicate a p-value of 0.0268 at a 5% level of significance. Therefore, these results mean that there is a tendency for an association. As their media interest increases the percentage of friend's telling the respondents that they are thin also increases. It can be concluded that in the rural area the interest goes with being told that they are thin. Unfortunately, there is no significant relationship between media interest and self-esteem at p=0.2316.

### 5.5 Summary

There were 195 adolescent girls with a mean age of 14.9 years who participated in the study, 170 had a normal weight; 10 were underweight; and 4 were obese. All the girls were exposed to, and had an interest in, media to varying degrees.

The results of the study established that there is an association between media exposure and interest involving three aspects of body image (*behaviour*, *feelings* and *thoughts*). However, the study did not find statistical evidence for association with other aspects of body image and self-esteem. Nevertheless, tendencies were established that show that relationships and tendencies vary among rural and semi-urban respondents.

#### 5.6 Recommendations

After analysing the results the researcher is of the opinion that the key to resolving the issue of body image dissatisfaction could be media forums. Media forums would be responsible for educating women about their body and how to take care of them. Many feminists have argued that in a patriarchal culture women are subjected to various means of subordination, including objectification and the degradation of their bodies (Bordo, 1993; Kilborne, 1999). Ward (1995) found that the most common theme among television shows popular with North American adolescents is that women attract men through their physical appearance. They should be informed that media outlets, such as magazines or television programmes, are there to sell products and make profits and so they should not compare themselves with the idealised images they see in the media. Through discussion, adolescents may become more aware of the diverse alternatives of beauty. Awareness is crucial in protecting our youth from a bleak future of body hatred.

According to the relevant literature, most authors are of the opinion that body image dissatisfaction is a risk factor in the eating pathology. This research advocates that in future it would be useful to explore other variables that influence body image dissatisfaction in adolescent girls. Future studies might suggest prevention programmes to counteract the negative influences and pressures of society to achieve the media thin ideal. Since there is statistical evidence that adolescent girls' exposure to, and interest in, media clothing advertisements is related to their body image and self-esteem, it is recommended that the study be replicated with a lager sample. Further research should take into consideration cultural issues.

## 5.7 Limitations of the Study

The participants from the different areas were not equal in number; there were more from the semiurban area than from the rural area. The questionnaire did not include questions about culture. The self-administered questionnaire placed an emphasis on anonymity but it is not known how honestly the participants responded. A further limitation of this exploratory study is that it cannot be generalised and while relationships between factors can be examined, no conclusions about cause and effect can be made because it was not a correlation study.

#### 5.8 Conclusion

After an intensive literature search this study was found to be the first of its kind to explore the relationship between clothing advertisements, body image and self-esteem in adolescent girls in Botswana. The size of the sample for the study cannot be generalised to all girls in Botswana, as it was a convenient sampling and not a random sampling. Perhaps the study could be generalised to girls who are in the rural areas and in the Boteti sub-district of Botswana; girls in the cities were not included in the study - this could be done in future.

The analysis of the research suggests that there is a relationship between the respondents' rating of their body image and their degree of media exposure and interest. However, the study did not find statistical evidence for relationships between most of aspects of body image and self-esteem. Instead, there was only evidence for a relationship between media and 3 aspects of body image as well as a relationship tendency between media with a body image aspect and self-esteem. These relationships and tendencies, however, appear to vary in rural and semi-urban respondents. The results show that not all adolescents develop body image dissatisfaction and low self-esteem by internalising a comparison of idealised media image and advertised clothing.

However, the current study suggests that peers, especially school friends, play a major and influential role in body image dissatisfaction and low self-esteem. In the variable, "My friends tell me I am thin" x media interest for rural respondents the results indicate that the p-value is 0.0268 at a 5% level of significance which means that there is a tendency for association because as the media interest increases the percentage of friend's telling respondents that they are thin also increases. This could result in some psychological effects in respondents as it could either initiate some eating disorder or low self-esteem. Brown, Mory and Kinney (1994) are of the opinion that peers are a vital part of the lives of adolescents and that they play an increasingly prominent role in defining social expectations; establishing identity; and evaluating self-as indicated in the literature review. According to Anderson and Olnhausen (1999), peer acceptance is critical and interaction with peer groups can have a significant positive or negative effect on self-esteem. Feeling accepted and supported by friends and classmates is, indeed, one of the central concerns of adolescents (Bukowski, Hoza & Boivin, 1993).

Finally, the study confirms and accepts the  $H_I$  factor that the exposure and interest of adolescent girls of the three schools in the Boteti sub-district of Botswana to clothing advertisements is related to their body image and self-esteem.

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#### **APPENDICES**

**Appendix A: Informed Assent Form** 



Participation information sheet and informed consent form

Title: The Relationship between Clothing Advertisements, Body Image and self-Esteem of Adolescent Girls

#### Introduction

My name is Kenyafetse M. Mokotedi. I am a student at the University of Pretoria. I am inviting you to volunteer to take part in a research project. This information sheet will help you to decide if you would like to participate in this study or not. Before you take part in this study you should fully understand what is involved. If you have any questions, which are not explained in this leaflet, please do not hesitate to ask me. You should not agree to take part unless you are completely happy about all the procedures involved.

## **Purpose of the study**

The research investigates the relationship between clothing advertisements, body image and selfesteem of adolescent girls in Boteti sub-district of Botswana.

#### **Procedures**

During the study you will be asked to complete a questionnaire, which includes demographic information, media and body image self-assessment and self-esteem. Your body mass index (BMI) will be measured as well. The BMI is weight in kilograms divided by height in metres squared. There are no right or wrong answers. Please answer all the questions as honestly as possible.

#### Risk and benefits

Special care has been taken to make sure that you will not be harmed in anyway. You are not expected to experience any physical or psychological discomfort before, during or after participating in the study. Your name will not appear on any of the forms. Participating in this study will not directly benefit you but information you provided will be shared with the Ministry of education especially curriculum development when designing guidance and counselling programs.

## Your rights as a participant in this study

Your decision to take part in this study is entirely voluntary but if you feel you don't want to take part in this study you can refuse or withdraw your permission at any time without stating the reason.

#### Confidentiality and anonymity

All information provided in the questionnaire during the study is strictly confidential and only the relevant research team will have access to this information. Reports will not include any information, which identifies you as a participant in this study. All questionnaires will be locked safely in the department of psychology at the University of Pretoria. This study will take into consideration that your body mass index (BMI) will be taken privately. The strategies for protecting your confidentiality will include coding research data, storing it in cabinets, protecting or even destroying anything that identifies you and limiting personnel who have access to the study.

#### **Contact Person**

If you have questions or comments, please contact Ms KM Mokotedi (Researcher) at +26771758024 or email <a href="mishmok2000@yahoo.com">mishmok2000@yahoo.com</a> or contact Ms A Moleko (Research supervisor) on (012) 420 2930 or email <a href="main.moleko@up.ac.za">anne.moleko@up.ac.za</a>. If you are happy to take part in this study, please read and sign the attached consent form below.

## Informed consent form to participate in the study

I hereby confirm that I have been informed by the researcher, Kenyafetse M Mokotedi, about the nature, conduct, benefits and risks of the study. I have also received, read and understood the above written information regarding the study. I understand that this research project will not benefit me personally. I am participating freely and without being forced in any way to do so. I understand that I can stop being involved at any time if I want to without giving reasons and this will not affect me in a bad way. I have received contact details of persons to contact should I want to talk about any issues concerning this study. I have received a signed copy of this consent agreement.

Participant's full name	Signature	Date
	edi, here with confirm that the above study.	pove participant has been informed
Researcher's full name	Signature	Date

## **Appendix B: Informed Consent Form**



## Dear Parent/Guardian

My name is Kenyafetse M. Mokotedi. I am a student at the University of Pretoria. I am inviting your daughter to volunteer to take part in a research project I am doing. The research investigates the relationship between clothing advertisements, body image and self-esteem of adolescent girls. The participants will be required to complete a questionnaire, which includes demographic information, media and body image assessment and self-esteem and body mass index (BMI). The BMI is weight in kilograms divided by height in metres squared. The questionnaire will take approximately 20-30 minutes to complete.

#### **Risks and Benefits**

The girls are not expected to experience any physical or psychological discomfort before, during or after participating in this study.

#### Confidentiality and Security of Data

The name of the child will not appear on any of the forms. This study will also take into consideration that the BMI of the girls will be taken privately. The strategies for protecting the confidentiality of the girls will be include coding research data, storing it in locked cabinets, protecting or even destroying anything that identifies her and limiting personnel who have access to study.

#### **Contact Person**

If you have questions or comments, please contact Ms KM Mokotedi at +26771758024 or email <a href="mishmok2000@yahoo.com">mishmok2000@yahoo.com</a> or contact Ms A Moleko at 420 2930 or email <a href="main.moleko@up.ac.za">anne.moleko@up.ac.za</a>.

**Consent:** I understand that although my child is volunteering to participate in this study she has the right to leave at any time and refuse to answer any questions that make her uncomfortable. I have read and understood the above information and my signature below represents my informed consent.

Parent full name:	Signature:	Date:
Researcher's full name:	Signature:	Date:

**Appendix C: Letter to the Principal** 

Dear Principal

University of Pretoria

My name is Kenyafetse M. Mokotedi. I am currently studying for a Master's Degree in psychology

at the University of Pretoria. I will be conducting a study with purpose of investigating the

relationship between clothing advertisements, body image and self-esteem of adolescent girls in

Botswana. The participants will be required to complete a questionnaire, which includes

demographic information, media and body image assessment and self-esteem and body mass index

(BMI). I would appreciate if you would allow me to conduct a questionnaire survey in your school

with form 1, 2 and 3 adolescent girls of 13-17 years. The questionnaire will take approximately 20-

30 minutes to complete.

**Risks and Benefits** 

The girls are not expected to experience any physical or psychological discomfort before, during or

after participating in this study. Upon completion of the study the results could be made available to

the school for use in the guidance/counselling department or be published in the journal or be

presented to the Ministry of Education and Skills Development to be included in guidance and

counselling programs.

Confidentiality and Security of Data

The names of the learners will not appear on any of the forms. This study will also take into

consideration that the BMI of the girls will be taken privately. The strategies for protecting the

confidentiality of the girls will be include coding research data, storing it in locked cabinets,

protecting or even destroying anything that identifies her and limiting personnel who have access to

study.

**Contact Person** 

If you have questions or comments, please contact Ms KM Mokotedi at +26771758024 or email

mishmok2000@yahoo.com or contact Ms A Moleko at 420 2930 or email anne.moleko@up.ac.za.

Your cooperation will be highly appreciated.

Yours faithfully

Kenyafetse. M. Mokotedi

© University of Pretoria

### Appendix D: Letter to the Ministry of Education

Ministry of Education and Development and Skills Department of Secondary Education P.O.Box 00206, Gaborone



Dear Minister

My name is Kenyafetse M. Mokotedi. I am currently studying for a Master's Degree in Psychology at the University of Pretoria. I will be conducting a study with purpose of investigating the relationship between clothing advertisements, body image and self-esteem of adolescent girls in Botswana. The participants will be required to complete a questionnaire, which includes demographic information, media and body image assessment and self-esteem and body mass index (BMI). I would appreciate if you would allow me to conduct a questionnaire survey with form 1, 2 and 3 adolescent girls of 13-17 years in the three (3) Schools in the Butte sub-district of Botswana. The questionnaire will take approximately 20-30 minutes to complete.

#### **Risks and Benefits**

The girls are not expected to experience any physical or psychological discomfort before, during or after participating in this study. Upon completion of the study the results could be made available to the school for use in the guidance/counselling department or be published in the journal or be presented to the Ministry of Education and Skills Development to be included in guidance and counselling programs.

#### Confidentiality and Security of Data

The names of the learners will not appear on any of the forms. This study will also take into consideration that the BMI of the girls will be taken privately. The strategies for protecting the confidentiality of the girls will be include coding research data, storing it in locked cabinets, protecting or even destroying anything that identifies her and limiting personnel who have access to study.

#### **Contact Person**

If you have questions or comments, please contact K.M Mokotedi at +26771758024 or email <a href="mishmok2000@yahoo.com">mishmok2000@yahoo.com</a> or contact Ms A Moleko at 420 2930 or email <a href="mishmok2000@up.ac.za">anne.moleko@up.ac.za</a>.

Yours faithfully

Kenyafetse. M. Mokotedi

## **Appendix E: Demographic Information**

## Questionnaire Measuring Body Image and Self-Esteem in Adolescent Girls Aged 13-17 Years

The questionnaire forms part of the study. Please do not write your names on the questionnaire. We are requesting the following information about you that will help us in our analysis of the data we are collecting. No participant will be identified with any information provided. Please tick the appropriate box for your response.

#### **Instructions**

Your answers are confidential and anonymous and therefore cannot be traced back to you. Please answer all the questions as honestly as you can. There are no right or wrong answers. Please ignore to the boxes on the far right it is for official use only.

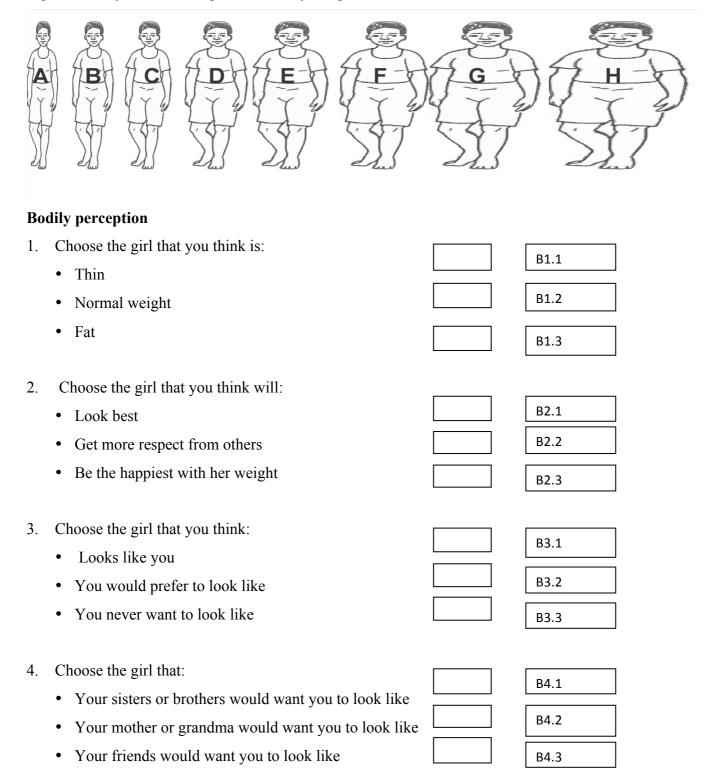
1.	Age (in years)	13	14	15	16	17		D1
2.	Weight (kg)							D2
2	H: 14/						<u> </u>	
3.	Height (cm)						$\neg$	D3
4.	Residential area where	you live.						
		Rural	Semi	urban	Urb	an		D4
5.	Which form are you?							
		1		2	3			

App	endix F: Exposure to Media and Clothing Advertisements	A0
D.		
	se tick the appropriate box and ignore the boxes on far right	A1
1.	I watch fashion shows on television or live fashion shows?	
	Always   Often   Sometimes   Rarely   Never	
2.	I read any fashion clothing magazine or magazines, which contain fashion clothing?	
	Always   Often   Sometimes   Rarely   Never	A2
3.	I read fashion clothing magazines and/or magazines that contain fashion clothing.	A3
	Always   Often   Sometimes   Rarely   Never	
4.	I buy fashion clothing that I see on television, Internet and/or print media.	A4
	Always   Often   Sometimes   Rarely   Never	
5.	I want to look like models that advertise fashion clothing on television, Internet and/o	or print
	media.	A5
	Always   Often   Sometimes   Rarely   Never	
6.	I watch fashion on television and/or live shows.	A6
	Always   Often   Sometimes   Rarely   Never	
7.	I read print media that contain fashion clothing.	
	Always   Often   Sometimes   Rarely   Never	A7
8.	Exposure to fashion clothing advertisements affects the way I look at myself (My body)	A8
	Always   Often   Sometimes   Rarely   Never	

## **Appendix G: Bodily Perception Scale**

I would like you to point out how you perceive your body and bodily figure; what you think and how you feel about yourself. For each question please write the answer that applies best to you. There are no right or wrong answers. Please answer all questions in this section.

Figure 1: Body structure for perceived body image



## **Thoughts**

_	•	. 1		-		. 1
4		th	ากไ	7	am	thin
J.	1	uu	ши	<b>1</b>	am	thin.

Always   Often   Sometimes   Rarel	/ Never
------------------------------------	---------

В5

6. My friends tell that I am thin.

Always	Often	Sometimes	Rarely	Never

В6

7. I think I am fat.

Alwa	ays Of	ten Som	netimes Ra	arely Never

В7

8. My friends tell me that I am fat.

Always Often	Sometimes	Rarely	Never
--------------	-----------	--------	-------

В8

## **Feelings**

9. I am happy with my present weight.

Strongly Disagree Disagree	Don't know	Agree	Strongly Agree
----------------------------	------------	-------	----------------

В9

10. I don't want to be thin?

Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree

B10

11. I don't want to be fat.

Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree

B11

12. I think I am underweight.

C4	D:	D 24 IV	A	C41 A
Strongly Disagree	Disagree	Don t Know	Agree	Strongly Agree
0 3			$\mathcal{L}$	

B12

13. I think I am normal weight.

Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
-------------------	----------	------------	-------	----------------

B13

14. I think I am overweight.

Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree

B14

## Behaviour

15. In the past I have tried to lose weight.

Strongly Disagree Disagre	Don't know Agree	Strongly Agree	B15
---------------------------	------------------	----------------	-----

16. I am trying to lose weight currently.

Strongly Disagree Di	isagree Don't know	Agree	Strongly Agree		B16	
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17. In the past I tried to put on / gain weight.

Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree		B17	
-------------------	----------	------------	-------	----------------	--	-----	--

18. I am currently trying to gain weight.

G 1 5:	-·	- 1.1		l a	1	
Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree		B18
	_		_			_

## **Appendix H: Self-Esteem**

Strongly Disagree

Disagree

Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree	7 [	
Strongly Disagree	Disagree	Don't know	7 15100	Strongly rigice	] [	C1
I have a positive att	itude towards	myself				
Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree	7	C2
					_	
I am not satisfied w	ith myself.					
Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree		C3
					_	
I wish I could have	more respect	for myself.				
Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree		C
	·				-	
I am not proud of th	e way I look.					
I am not proud of the Strongly Disagree	e way I look.  Disagree	Don't know	Agree	Strongly Agree		C5
-			Agree	Strongly Agree		C5
-	Disagree	Don't know	Agree	Strongly Agree	]	C5
Strongly Disagree	Disagree	Don't know	Agree	Strongly Agree  Strongly Agree	]	C5
Strongly Disagree  I feel satisfied with	Disagree my current w	Don't know			]	
Strongly Disagree  I feel satisfied with	Disagree  my current w  Disagree	Don't know eight. Don't know			]	
Strongly Disagree  I feel satisfied with  Strongly Disagree	Disagree  my current w  Disagree	Don't know eight. Don't know			]	C5
Strongly Disagree  I feel satisfied with  Strongly Disagree  I feel satisfied with	Disagree  my current w  Disagree  the shape of i	Don't know eight. Don't know my body.	Agree	Strongly Agree	]	C6
Strongly Disagree  I feel satisfied with Strongly Disagree  I feel satisfied with Strongly Disagree	Disagree  my current w Disagree  the shape of the shape o	Don't know eight. Don't know my body. Don't know	Agree	Strongly Agree	]	C6
Strongly Disagree  I feel satisfied with  Strongly Disagree  I feel satisfied with	Disagree  my current w Disagree  the shape of the shape o	Don't know eight. Don't know my body. Don't know	Agree	Strongly Agree	]	C6
Strongly Disagree  I feel satisfied with Strongly Disagree  I feel satisfied with Strongly Disagree	Disagree  my current w Disagree  the shape of the shape o	Don't know eight. Don't know my body. Don't know	Agree	Strongly Agree	]	C6
Strongly Disagree  I feel satisfied with Strongly Disagree  I feel satisfied with Strongly Disagree  All in all I am inclin	Disagree  my current w Disagree  the shape of the Disagree  ning to feel the shape of the shape of the disagree	Don't know eight. Don't know my body. Don't know	Agree Agree	Strongly Agree  Strongly Agree	]	C6
Strongly Disagree  I feel satisfied with Strongly Disagree  I feel satisfied with Strongly Disagree  All in all I am inclin	Disagree  my current w Disagree  the shape of the Disagree  ning to feel the Disagree	Don't know eight. Don't know ny body. Don't know at I am a failure Don't know	Agree Agree	Strongly Agree  Strongly Agree	]	C6
Strongly Disagree  I feel satisfied with Strongly Disagree  I feel satisfied with Strongly Disagree  All in all I am inclin Strongly Disagree	Disagree  my current w Disagree  the shape of the Disagree  ning to feel the Disagree	Don't know eight. Don't know ny body. Don't know at I am a failure Don't know	Agree Agree	Strongly Agree  Strongly Agree		C6

Agree

Strongly Agree

C10

Don't know

# **Appendix I: Statistics**

	D4=]	Rural		D4=Ser	mi Urban	
Relationship with Exposure						
Body image - Think		p-value			p-value	
I think I am thin x Exposure	Chi-Square	0.5782		Chi-Square	0.5473	
Friends tell me I am thin <b>x</b> Exposure	Fisher's Exact Test	0.345		Chi-Square	0.1101	*
Body image - Feel						
I think I am underweight <b>x</b> Exposure	Chi-Square	0.5678		Chi-Square	0.2906	
I think my weight is normal x Exposure	Chi-Square	0.6856		Chi-Square	0.9457	
I think I am overweight x Exposure	Fisher's Exact Test	0.5018		Chi-Square	0.4669	
Body image - Behaviour						
I am trying to lose weight <b>x</b> Exposure	Chi-Square	0.6395		Chi-Square	0.0703	10%
I am trying to gain weight <b>x</b> Exposure	Chi-Square	0.8328		Chi-Square	0.0654	10%
Relationship with Interest						
Body image - Think		p-value			p-value	
I think I am thin x Interest	Chi-Square	0.9443		Chi-Square	0.8751	
Friends tell me I am thin x Interest	Chi-Square	0.0268	5%	Chi-Square	0.1944	*
Body image - Feel						
I think I am underweight x Interest	Chi-Square	0.2858		Chi-Square	0.7845	
I think my weight is normal x Interest	Chi-Square	0.7421		Chi-Square	0.8241	
I think I am overweight x Interest	Fisher's Exact Test	0.5284		Chi-Square	0.4669	
Body image - Behaviour						
I am trying to lose weight x Interest	Chi-Square	0.5603		Chi-Square	0.6015	
I am trying to gain weight x Interest	Chi-Square	0.874		Chi-Square	0.6551	
Self-esteem						
Self-esteem <b>x</b> Exposure	Chi-Square	0.3766		Chi-Square	0.1701	*
Self-esteem						
Self-esteem x Interest	Chi-Square	0.6226		Chi-Square	0.2316	