

MASTERS IN RESEARCH PSYCHOLOGY (BY COURSEWORK)

SURNAME: van Schalkwyk

NAME: Lameez

STUDENT NUMBER: 0213573W

COURSE: RESEARCH

SUPERVISOR: Mrs. Heste Endrody-Younga

PERCEPTIONS OF SELF-IMAGE: A Comparative Study of White and African Urban Females in University Gyms

**PERCEPTIONS OF SELF-IMAGE:
A COMPARATIVE STUDY OF WHITE AND AFRICAN URBAN FEMALES IN
UNIVERSITY GYMS**

LAMEEZ VAN SCHALKWYK
0213573W

A research project submitted in partial fulfillment of the requirements for the degree of MA by coursework and Research Report in the Field of Psychology in the Faculty of Humanities, University of the Witwatersrand, Johannesburg, January 29, 2008

Abstract: The primary aim of the research attempted to investigate whether ethnic differences in self-image existed amongst White and African females. It further investigated whether specific factors such as family, peer relations and psychosocial factors (specifically perceptions regarding the media) have had a positive or negative influence on weight. Additionally it explored whether black females may still perceive a fuller figure as being more acceptable or whether changes have occurred within past and/or present ideologies. The study used both qualitative and quantitative analysis. In order to establish whether ethnicity was significantly different from BMI, BSQ, SATAQ-3, t-tests (non-parametric one-way ANOVA comparisons) were performed. Ethnicity was not significantly different in relation to the dependent variables BSQ; overall SATAQ-3 scores and its dimensions; and affirmation, belonging and commitment of the MEIM. However significant differences were found between BMI, the overall MEIM and its subscale ethnic identity. Low and high scores of the MEIM revealed no differences across all measurement instruments used within the study, demonstrating no effect upon BSQ or the SATAQ-3 and its subscales. However there was a significant difference found between ethnic groups with regard to BMI. Fisher's $-z$ was used to conduct comparisons between the correlations established using Pearson's Rank Coefficient Correlations. The results indicated that significant relationships did exist between the BSQ, specific subscales of the SATAQ-3, and BMI. Results obtained from Fisher's $-z$ revealed significant differences on the BSQ and SATAQ-3 (including its subscales) correlations. Multiple Regression was conducted to establish whether BMI, MEIM and SATAQ-3 have had an impact upon the outcome of BSQ. The comparisons revealed that BMI and sociocultural factors may have an impact upon the perceptions of body shape and size. Major themes identified within the qualitative analysis were culture, inherited concepts, media, family, friends and parental (mother) influences amongst others. The results revealed that White females may experience greater body dissatisfaction. African females had stated that their body concept *is* influenced by ethnicity, while White females communicated media and stereotyped images of white females as being the source of pressure to loose weight.

Keywords: *Ethnicity, BMI, Body concept, Sociocultural influences, Thin ideals*

I declare that this work is my own, unaided work. It has not been submitted for any other degree or examination at this or any other university

Name:

Signature:

Date:

Acknowledgements

My sincere thanks and appreciation to Mrs. Heste Endrody-Younga for your support and patience throughout this process. Although the journey had been plagued by quite a few obstacles I am grateful for your input and interest in the study.

I am grateful for the assistance which Nicky Israel had provided and her remarkable input and insight towards the investigation. Sincere thanks to Prof. Gill Finchilescu for her guidance and support during the course of the year.

To my family and fiancé who had provided unconditional support through a tough year and have provided words of wisdom which will carry me through a life time of experiences.

Thank you.

Dedicated to the best in my life.....

A World of Support

*Mum and Dad, Sisters: Gillian and Charmaine;
Brother: Harold
and to the Million dollar man
Mr. Mathebula*

Abstract.....	i
Declaration.....	ii
Acknowledgement.....	iii
Table of contents.....	I
List of Tables	IV
List of Graphs	V
 1. Introduction and Aim	 1
Chapter I: Literature Review:	
1. Perceptions and Appearance of Weight.....	3
1.1. Definition and BMI.....	3
1.2. Eating Disorders.....	4
1.2.1. Anorexia Nervosa.....	4
1.2.2. Bulimia Nervosa.....	5
1.2.3. Binge Eating Disorders.....	5
1.3. Factors Maintaining Weight Loss and Gain.....	6
1.3.1. Its Historical Existence and Culture.....	6
1.3.2. Lifestyle: Physical Inactivity and Dietary Intake.....	9
1.3.3. Socioeconomic Status (SES) and Biology.....	10
1.3.4. Psychological Factors.....	10
2. Self-Image: Associations with Eating Disorders, Body Image, Self-Esteem and Control.....	12
3. Theoretical Considerations.....	15
3.1. Mandala of Health (Health Model)	15
3.2. Social Identity Theory.....	16
3.3. Psychoanalytic Social Theory.....	17
4. Research in Context: Final Word.....	20
Chapter II: Rationale, Hypothesis and Methods	
Rationale	22
1. Research Methodology.....	23
1.1. Qualitative Enquiry.....	24
1.2. Quantitative Enquiry.....	25
2. Research Questions and Hypothesis.....	26
3. Sample and Sampling	28
4. Methods of Enquiry.....	29

4.1. Questionnaires : Qualitative and Quantitative Enquiry	29
4.2. Variables	31
4.3. Instruments	33
4.3.1. Anthropometric Measurements: BMI.....	33
4.3.2. Body Shape Questionnaire (BSQ)	33
4.3.3. Sociocultural Attitudes towards Appearance Scale – 3 (SATAQ-3)	35
4.3.4. Multigroup Ethnic Identity Measure (MEIM)	37
5. Data Collection	38
6. Ethical Considerations	40
7. Data Analysis.....	41
7.1. Qualitative / Thematic Content Analysis	41
7.2. Statistical Analysis	43
 CHAPTER III. RESULTS	
1. Reliability of the Psychometric Instruments.....	45
2. Normality	48
3. Comparisons: Differences in Scores in Relation to Ethnic Identity and Ethnicity	48
3.1. Ethnicity.....	48
3.2. Ethnic Identity	50
4. Relationships: Between Sociocultural Influences, BMI, Body Dissatisfaction and Ethnic Identity in Relation to Ethnicity.....	52
4.1. African and White Female Correlations	52
5. Comparisons between Correlations	55
6. Multiple Regression	57
7. Qualitative Outcomes	59
 CHAPTER IV: DISCUSSION	
Overview	65
1. Ethnic Association or Ethnic Identity	67
1.1. Social Categorization	67
1.2. Social Identity	68
1.3. Social Comparisons	68
2. The Idealized Body: A Psychoanalytic Interpretation	69
3. Limitations, Gaps and Recommendations	72
 CHAPTER V: CONCLUSION AND COMPARISONS - INFLUENCES UPON PERCEPTIONS OF WEIGHT	
	74

REFERENCE LIST.....	76
Appendix A (BMI)	90
Appendix B (Informed Consent)	91
Appendix C (MEIM – Additional Questions).....	92
Appendix D (Normality Checks)	94
Appendix E (Qualitative)	98

LIST OF TABLES

	DESCRIPTION	PAGE
Table 1:	Descriptive Statistics and Internal Consistency of Measuring Instruments	47
Table 2:	T-test o Ethnicity	49
Table 3:	2-Way Anova for Race and Ethnic Identity	50 - 51
Table 4:	Pearson's Correlations Coefficient of African Females	54
Table 5:	Pearson's Correlations Coefficient of White Females	54
Table 6:	Fisher's z Comparisons between the Correlation	56
Table 7:	Multiple Regression	57
Tables 8:	Question 16	60
Table 9:	Question 17	62

LIST OF FIGURES AND GRAPHS

	DESCRIPTION	PAGE
Figure 1:	The Mandala of Health	16
Figure 2:	Ethnicity	28
Figure 3a:	Marital Status	28
Figure 3b:	Marital Status by Ethnicity	29
Figure 4-12:	Test for Normality – Histograms	30

**PERCEPTIONS OF SELF-IMAGE:
A COMPARATIVE STUDY OF WHITE AND AFRICAN URBAN FEMALES IN
UNIVERSITY GYMS**

1. INTRODUCTION

Globally, HIV/AIDS and other communicable diseases have created growing apprehension concerning the mortality of human beings. However, non-communicable diseases are also becoming an increasing concern for many health professionals, as they are daily affecting the well-being and mortality rate within many countries (Aacharya, Prasad, & Gupta, 2006; Eckersley, 2006; Goedecke, Jennings, & Lambert, 1995; Kruger, Venter, & Vorster, 2001). Non-communicable diseases are amongst one of the few ailments that may be partially preventable, as they are more likely to be the artifacts of poor health-and-lifestyle habits (Allsen, Harrison, & Vance, 1997; Peltzer, 2001; Perdue, Mensah, Goodman, Moulton, 2005). Strong associations with non-communicable diseases and unhealthy lifestyles paired with unnecessary weight gain, have been demonstrated across numerous research areas evaluating factors which may have impacted upon health (Eckersley, 2001 as cited in Eckersley, 2006; Mciza et al., 2005; Steyn, 2005; Walker, Adam, & Walker, 2001).

An unhealthy weight range has become one of the greatest health risks, in addition to producing physiological health dilemma's such as diabetes, cardiovascular diseases and cancer (Goedecke et al., 1995; Kruger, Puoane, Senekal, & van der Merwe, 2005; Kruger et al., 2001; Puoane et al., 2005; Soh, Touyz, & Surgenor, 2006; Steyn, 2005). In addition being overweight has contributed to a number of mental syndromes including depression, which could consequently lead to a number of eating disorders namely bulimia nervosa, anorexia nervosa or chronic overeating (Berkman, Lohr, & Bulik, 2007; Brehm, 1999; Johnson, & Broadnax, 2003; Tannock, 2005). However being overweight may not be the single causal factor in these physiological and mental problems, but may be one of the contributing factors implicated in these issues. Another eating disorder which needs to be warranted and considered within the literature is binge eating disorder, very often associated with increased weight gain (Berkman et al., 2007; Dingemans, Bruna, & Furth,

2002). The pre-dominant variable frequently implicated in the development of an eating disorder within female populations are issues concerning poor self-image. (Brehm, 1999; Park, 2003; Riley et al., 1998). This is particularly relevant within the study, as it places in context the development of negative perceptions of self and the possibility of other cultures and stereotypes generated within and amongst ethnic groups. As a consequence it might have a direct affect the mind-sets, self-concept and expression of thin ideals amongst females. Existing research within the focus of weight and self-image appears limited to the effects and consequences of negative perceptions of self (Le Grange, Louw, Breen, Katzman, 2004; Steyn, 2005).

AIMS

The primary aim of the research attempted to investigate whether ethnic differences in self-image existed amongst White and African females. It further investigated whether specific factors such as family, peer relations and psychosocial factors (specifically perceptions regarding the media) may have had a positive or negative influence on the concept of weight. Additionally it explored whether black females may still perceive a fuller figure as being more acceptable or whether changes have occurred within past and/or present ideologies.

CHAPTER I: LITERATURE REVIEW

1. PERCEPTION AND APPEARANCE OF WEIGHT

1.1. DEFINITION AND BMI

In most descriptions or explanations of weight, a classification system called the Body Mass Index (BMI) had been introduced to define the concepts of underweight, normal/healthy weight, overweight and obesity (see Appendix A). However, insufficiency exists within the definition, as basic explanations of what characterizes the terms are inadequate. One of the main occurrences for an increase in weight gain is the deposit of excess adipose tissue or fat cells within the body. Food consumption acts as a means for the body to obtain and replenish its energy sources. However if energy stores (fats and carbohydrates) are exceeded or not effectively used, accumulation occurs producing an increase in adipose tissue. Over time the physical appearance of the individual results in an overweight or obese state (Hubbard, 2000; Lynch, n.d.; Montague, 2003; Wolf, & Tanner, 2002). Therefore these constructs or definitions of overweight/obese could further be complimented by the BMI classification system.

The BMI is one of the standardized systems frequently utilized during health and fitness evaluations of body composition to provide normative data of an individual's weight category (Aarcharya et al., 2001; Prentice, & Jebb, 2001). However it has often been debated what abnormal and normal weight could be. BMI measures (see Appendix A) within a range of 25-29, classifies the individual as overweight, whilst anything 30 and above would be indicative of an obesity type (Barlow, & Durand, 2005; Gallahue, & Ozmun, 2002; Kruger et al., 2001; Marieb, 2001; Powers, & Howley, 2004; Puoane et al., 2002). Three classifications exist for obesity, namely obesity class I, class II and class III/morbid obesity (Powers, & Howley, 2004; Prentice, & Jebb, 2001; Sadock, & Sadock, 2003). Obesity is one of the extremes of being overweight and can be life threatening. Overweight and obese individuals are at risk of experiencing an increase in blood pressure, cholesterol, respiratory dysfunctions, diabetes and in severe cases lack of mobility which further contributes to the dangers of being overweight (Aarcharya et al., 2006; Goedecke et al., 1995; Lean, 1996, Montague, 2003; Wadden, & Phelan, 2002).

Nonetheless, although described as an accurate means of assessing estimates of body composition with regard to height, the BMI neglects individual differences (Marshall, n.d.;

Prentice, & Jebb, 2001). Muscle mass, training, age and race are some of the factors that the BMI underestimates or overlooks (Marshall, n.d.; Prentice, & Jebb, 2001). Where the individual could be considered or characterized within a normal or healthy weight range, the person may be classified as overweight due to neglected individual differences. Nevertheless, the BMI offers a means to provide a target for those attempting to establish an appropriate weight range. Thus factors contributing to weight gain, loss and maintenance need to be further explored to understand the factors acting upon the individual, in order to comprehend subjective developments of positive and negative self-images.

1.2. *EATING DISORDERS*

An individuals' self-image is strongly related to how one scrutinizes themselves on the basis of perceptions of self and those of others. If these views are strongly linked with negative associations alongside body-image and weight, eating disorders may begin to emerge (Berkman et al., 2007; Clark-Stone, 2000; Dally, & Gomez, 1980; Haworth-Hoeppner, 2000, Keski-Rahkonen, 2005). Prior to providing a brief overview of the factors which influence weight gain (or loss), it is imperative to momentarily deliberate and reflect upon the outcomes of negative self-image pertaining to development of eating disorders. Well-known forms of eating disorders are anorexia and bulimia nervosa. However a third disorder which will briefly be reviewed is binge eating disorder.

1.2.1. *ANOREXIA NERVOSA*

The term is often associated with an individual who has an immense fear of gaining weight (Berkman et al., 2007; Brannon, & Feist, 2000; Clark-Stone, 2000; Sadock, & Sadock, 2003). Individuals with anorexia contemplate about food, but often pride themselves over the amount of control which they are able to maintain. Such control leads to self-starvation and additionally, could be manipulated to maintain emotional control. Anorexic individuals often have low body weight in relation to their height, display forceful resistance against a normal, healthy and ideal weight range, have an obsessive fear of weight gain albeit thin stature and have distorted cognitive perceptions of an overweight appearance (Barlow, & Durand, 2005; Berkman et al., 2007; Brannon, & Feist, 2000; Clark-Stone, 2000; Sadock, & Sadock, 2003).

Physiologically, females may begin to experience symptoms such as amenorrhoea (the absence of their menstrual cycle). Numerous factors are associated with the onset of anorexia nervosa, namely culture and the processors of acculturation, families (particularly the attitudes of parents), stressful events or particular personality traits (Barlow, & Durand, 2005; Berkman et al., 2007, Clark-Stone, 2000). Anorexic individuals would often exercise compulsively and if they had eaten or were forced to eat would attempt to purge (Barlow, & Durand, 2005; Berkman et al., 2007, Clark-Stone, 2000).

1.2.2. BULIMIA NERVOSA

Bulimic individuals however do not often appear to loose excessive weight, rather weight is maintained. Purging, a common factor amongst bulimic individuals, is a process in which the individual will attempt to relieve themselves of the food which they have consumed (Berkman et al., 2007; Brannon, & Feist, 2000; Clark-Stone, 2000; Sadock, & Sadock, 2003). This is usually achieved by means of laxative ingestion and/or through self-induced vomiting (Barlow, & Durand, 2005; Brannon, & Feist, 2000). Purging is also a formal attempt to lessen feelings of guilt and dissatisfaction with one's self for having no control. Subsequently to purging, a sense of relieve is experienced (Barlow, & Durand, 2005; Berkman et al., 2007, Clark-Stone, 2000). Similar factors to that of anorexia nervosa have been found to lead to the onset of bulimia.

1.2.3. BINGE EATING DISORDER

Binge Eating Disorder (BED) has only recently been given considerable attention and a set of criteria with which to distinguish it apart from bulimia nervosa (Dingemans et al., 2002; Marcus, Moulton, & Greeno, 1995; Sadock, & Sadock, 2003). Individuals with BED have frequent episodes in which food is consumed in abnormally large quantities; experience a lack of control over how much they consume, eating rapidly, and often do not experience hunger pangs as an outcome of their binges (Berkman et al., 2007; Dingemans et al., 2002; Sadock, & Sadock, 2003). In contrast with bulimia, both disorders constitute an episode of binge eating behavior but BED individuals do not purge thereafter (Berkman et al., 2007; Dingemans et al., 2002; Sadock, & Sadock, 2003). It is more likely that individuals with

BED are obese, are women and continue on a spree of yo-yo dieting (Dingemans et al., 2002; Marcus et al., 1995; Sadock, & Sadock, 2003).

BED individuals have a history of depression and low self-esteem. It is unclear whether depression is the cause or effect of BED, but there appears to be reports suggesting that negative emotional states such as sadness, anger, anxiety and even boredom are triggers towards binge eating episodes (Dingemans et al., 2002; Marcus et al., 1995; de Zwaan, & Mitchell, 1992). An important factor of BED is low self-esteem, however these individuals “are not fixated on body shape and weight” (Sadock, & Sadock, 2003, p. 751). In addition BED individuals experience lower levels of guilt for bingeing than bulimic individuals, however, will experience shame and disgust concerning the amount of food they had consumed. Therefore they often eat in isolation attempting to conceal bingeing episodes (Dingemans et al., 2002; Marcus et al., 1995; Marcus, Smith, Santelli, & Kaye, 1992). It is not to say these individuals do not seek to gain control over weight, but are not pre-occupied with the idea (Dingemans et al., 2002; Sadock, & Sadock, 2003).

Eating disorders are a demonstration of one’s pre-occupation either with weight, self-image or an attempt to gain control over emotional experiences or stressors (Berkman et al., 2007; Marcus et al., 1992). Dieting, exercising, visiting gyms, support groups or weight-loss clinics/centers are the main sources to establish some form of control over additional weight gain.

1.3. FACTORS MAINTAINING WEIGHT LOSS AND GAIN

1.3.1. ITS HISTORICAL EXISTENCE AND CULTURE

Despite the known facts that excessive overeating contributes towards being overweight, factors such as lifestyle, acculturation, physical inactivity, dietary intake, socioeconomic status, genetics, education, psychological factors and culture have been found to be influential variables in the weight gain (or loss). Historically, being overweight played a significant role in the representation of female sexuality, wealth and health (Barlow, & Durand, 2005). Full figured women across a variety of cultures including western societies were the symbols of strength, health, fertility, often assumed to be of a wealthy family or husband and were considered alluring (Barlow, & Durand, 2005; Cassell, 1995; Johnson,

& Broadnax, 2003; Khalique, 2006; Nasser, 1988; Pesic, n.d.; Soh et al., 2006; Steyn, 2005; Thompson, n.d.).

Culture has been defined as the passing of values from one generation to the next which is inclusive of its symbols, beliefs and knowledge (Dalton, Elias, & Wandersman, 2001; Eckersley, 2006; Johnson, & Broadnax, 2003) while ethnicity has been defined as the individuals social identification with their cultural group (Dalton et al., 2001; Frable, 1997; Sadock, & Sadock, 2003). Dalton et al (2001) further states that “ethnicity is defined by language, customs, values...but not by physical appearance” (p. 157). However this may beg to differ, considering that one would develop and identify with the values which each cultural group provides. It is this passing on of values which ascertains excess adipose tissue (fat) as acceptable and tolerable, specifically within non-western societies (Puoane et al., 2005; Soh et al., 2006; Steyn, 2005; Thompson, n.d.; Walker et al., 2006; Webb et al., 2004) thus may be the reason for females of African ethnicity to be more tolerant of overweight individuals...or not?

Although there is evidence to suggest that specific ethnic groups display tolerance towards body weight and shape, moreover there appears to be evidence to suggest that concept of body image and shape, may exist as a cultural concept amongst these/particular ethnic groups (Brooks, 2006; Nasser, 1997; Nasser, 1998; Swartz, 1985). Cultural values have often been dictated by individuals within a community, implying that particular members within a group influence and/or may control perceptions that women carry about themselves. Thus these perceptions have been set for females within the cultural institutions in which she exists (Nasser, 1997; Notman, 2003). Nasser (1997) further suggests that the circles in which women are attached to, forces her to concentrate and generate a sense of what may fashion “successful femininity” (p. 63). In doing so, it is implied that females give way to independence by focusing on the concept of body (image and shape) rather than the internal self (Nasser, 1997; 1998; Swartz, 1985). However hypothesis of self is further internalized by the generated concepts of femininity within society which are exploited to further increase profit margins within the advertising industry (Alexander, 2003; Baker, 2005; Notman, 2003; Powell, & Longino, 2002; Shilling, 2003).

These sociocultural factors, fashion an institution of socially acceptable norms which addresses the female body. Ethnic groups perceive themselves quite differently from each other, however are influenced by their own and other cultures specifically those addressing the female body in its *glory* of sexuality and femininity (Baker, 2003; Nasser, 1997; 1998). It is an argument of this paper that African females are very tolerant of larger physiques, compared to White females. Having a larger physique has been a symbol of femininity within various cultural contexts throughout history and has or may have declined from generation-to-generation (Cassell, 1995; Johnson, & Broadnax, 2003; Nasser, 1997). The believe that the symbol of sexuality and femininity is held by the larger physical features such as breast, buttocks and thighs (Puoane et al., 2006; Steyn, 2005, Nasser, 1997; 1998) is a cultural feature more often found within African communities.

The argument is not that these physical characteristics are not found within non-African communities or societies but that it is not readily considered as physically attractive outside African communities. Therefore thinness as described across a number of research areas is a concept more appealing within White South African communities (Abrahams, & Stormer, 2002; Iverson, 2005; Nasser, 1997; 1998; Lainad, 2007). Within the South African context in which there appears to be an overwhelming tolerance which females are exposed to, it is likely that there may be an acceptance of appearance and shape, but that there may be a trend towards using exercise and/dieting and its numerous modalities, to institute a likeness to the publicized and idealized thin body image across ethnicities (Peltzer, 2003; Caradas et al., 2001; Mciza et al., 2005; Wassenaar, le Grange, Winship, & Lachenicht, 2000). Further eating disorders are not only being recognized within the boundaries of Western societies, but across a number of non-Western communities (Caradas, Lambert, & Charlton, 2001; Mciza et al., 2005; Puoane et al, 2005; Steyn, 2005; Wassenaar et al, 2000)

As a consequence - culturally, being overweight within a number of societies including South Africa placed significant value upon larger women especially amongst specific ethnic groups (Goedecke et al., 1995; Nasser, 1988; Webb, Looby, & Fults-McMurtery, 2004). Thus it has been found within numerous studies that White women experience greater body dissatisfaction than African females (Williamson, Womble, Zucker, Reas, White, Blouin, & Greenway, 2000). It further suggests that African females are far more

comfortable with larger physiques as they develop in a cultural environment which is more tolerant of overweight individuals (Caradas et al, 2001).

As a consequence of a technological society with its advances in transportation, internet and media services - cultural globalization has occurred, which contributes to the process of acculturation (Culture and Health, n.d.; Eckersley, 2006; Littlewood, 2004). Acculturation – the integration of other cultures into one’s own (Brehm, 1999; Dalton et al., 2001; Keski-Rahkonen, 2005; Steyn, 2005) may have had an effect on cultures which have idealized or valued overweight women (Anderson-Fye, 2004; Huynen, Martens, & Hilderink, 2005; Keski-Rahkonen, 2005; Webb et al., 2004). In other words, it has been suggested that the values of other cultures has an effect upon the views of other communities and individuals which may be linked to the aforementioned factors of increased weight (Culture and Health, n.d.; Eckersley, 2006; Goedecke et al., 1995; Lean, 1996; Littlewood, 2004; Speiser et al., 2005).

1.3.2. LIFESTYLE: PHYSICAL INACTIVITY AND DIETARY INTAKE

Lifestyle, physical activity and dietary intake has been dictated by an easy consumer lifestyle (Culture and Health, n.d.; Eckersley, 2006; Lean, 1996; Goedecke et al., 1995; Littlewood, 2004; Speiser et al., 2005). Increase in weight has been influenced by a sedentary lifestyle, which includes a lack of physical activity, which eventually leads to weight gain. Physical activity in a number of non-western societies primarily included agricultural activities (working in the fields to ensure the required nutrition for the family). As a result, families were active individuals in their quest to obtain nutrition. However the consumer movement, fast lifestyle and easy access to nutrition within the fast food industry, has significantly contributed towards lethargic behavior and increased fat consumption (Allsen et al., 1997; Bourne et al., 2002; Goedecke et al., 1995; Kruger et al., 2005; Peltzer, 2003; Steyn, 2005). Furthermore dietary behaviors and physical activity have been predictive of the type of lifestyle or socioeconomic status (SES) being led.

2.3.3. SOCIOECONOMIC STATUS (SES) AND BIOLOGY

Globally, research has indicated that a higher socio-economic status (SES) results in decreased weight amongst women, a consequence of various factors such as media exposure, status and appearance and an interest taken in health education, weight and wealth (Dwyer, Feldman, & Mayer, 1970; Jacoby, Goldstein, López, Nñez, & López, 2003; Kilicarslan, Isildak, Guven, Tanriover, Duman, Saracbası, & Sozen, 2006; Klumbiene, Petkeviciene, Helasoja, Prättälä, & Kasmel, 2004; Kruger et al., 2005; Montague, 2003; Walker et al., 2001; Wanneburg, 2006). Closely linked with SES and decrease in weight, is the inverse relationship found between levels of education and increased weight gain. Weight-gain has been implicated with lower levels of education, thus assuming that a higher educational level and SES influences or encourages weight loss and maintenance (Goedecke et al., 1995; Jacoby et al., 2003; Kilicarslan, 2006; Klumbiene et al., 2004; Kruger et al., 2005; Wanneburg, 2006).

Lifestyle, education, or SES influences may not be true for every individual. An additional factor controversial in the weight debate is the genetic predisposition for specific or all individuals within a family to gain weight. Furthermore, it has been debated and researched whether a specific gene may influence weight gain (Montague, 2003; Goedecke et al., 1995; Walker et al., 2001). Nonetheless being overweight has been shown to have dramatic emotional and psychological effects upon individuals.

2.3.4. PSYCHOLOGICAL FACTORS

Psychological effects that could raise the chances of individuals gaining and losing weight include psychosocial stressors pertaining to the family environment, which are habitual cultural stressors as well as demands made by parental figures (Fishmann-Havstad, & Marston, 1984; Haworth-Hoeppner, 2000). Family influences found to indirectly generate the onset of weight gain and/or the development of eating disorders, are parents being over critical, resentful, invasive, demanding, applying excessive corporal punishment or incidents of child abuse (Ebigo, & Okunna, 1986/87; Haworth-Hoeppner, 2000). However, since culture is a dominant aspect within the family, the need or requirements of the family may influence the appearance of individuals across crucial developmental stages. Thus pressures to alter weight may cause conflict due to additional

social pressures experienced and could lead to dire consequences (Fishmann-Havstad, & Marston, 1984; Haworth-Hoeppner, 2000; Keski-Rahkonen, 2005).

Further stressors which are significant in the occurrence of weight-gain have been identified as stress, depression and negative emotional states (Goedecke et al., 1995; Lynch, n.d.; Montague, 2003; Wardle, Waller, & Rapoport, 2001) and one's own SES (Speiser et al., 2005). Psychological strains and pressures exerted by the media, may generate stereotyped behavior towards individuals further contributing to the development of eating pathologies such as anorexia nervosa, bulimia nervosa and/or BED (Berkman et al., 2007; Brehm, 1999; Dingemans et al., 2002; Keski-Rahkonen, 2005; Littlewood, 2004; Sigall, & Pabst, 2005; Wanneburg, 2006; Wardle et al., 2001).

2. SELF-IMAGE: ASSOCIATIONS WITH EATING DISORDERS, BODY IMAGE SELF-ESTEEM AND CONTROL

Self-image or self-concept has been defined as the mood states or perceptions that has been internalized or which is held by the individual (McLeod, 2003). Eating pathologies/disorders have been found to occur with dissatisfaction with ones self (Abell, & Richards, 1996; Brehm, 1999; Johnson, & Broadnax, 2003; Le Grange et al., 2004; Thompson, n.d.). Dissatisfaction may arise due to expectations of one's culture, particularly arising from the family environment (Brehm, 1999; Fishmann-Havstad, & Marston, 1984; Haworth-Hoeppner, 2000), peer relationships and possibly due to one's own body-dissatisfaction, lack of control or expectations thereof (Brehm, 1999; Park, 2003; Thompson et al., 2007; Wardle et al., 2001).

Exploring health as an aspect of weight and self-image, pertains to two important variables affecting self-concept, mainly that of self-esteem and mastery/control. Self-esteem refers to how one values, or how one feels about their self or self worth (Levy, & Ebbeck, 2005; Park, 2003), while mastery is the control which one might have over certain aspects of their self (Brehm, 1999; Park, 2003; Weinberg, & Gould, 2003). Thus low self-esteem in relation to the individuals' weight may result in the need to gain control to loose and maintain weight. However, loss of or lack of control, may result in decreased self-esteem affecting the individuals overall self-image (Brehm, 1999). This decrease in self-image influences chances of body dissatisfaction leading to a number of decisions – seeking help to loose weight, depression or the development of an eating disorder (anorexia, bulimia, or BED).

Although eating disorders have been more prominent in white females (Le Grange et al., 2004; Littlewood, 2004; Nasser, 1988; Soh et al., 2006), a growing body of literature states that eating disorders and body dissatisfaction are becoming prevalent in females of black communities (Goedecke et al., 1995; Le Grange et al., 2004; Nasser, 1988; Nwaefuna, 1981; Peltzer, 1995; Riley et al., 1998). However with the HIV/AIDS dilemma, concerns are arising as body dissatisfaction may becoming a reflection of poor or ill health, as weight loss or being underweight has a negative association with being HIV positive or having acquired AIDS (Khalique, 2006; Puoane et al., 2005).

Research has stated that although overweight women are preferred within particular cultures, it is the changing concept of an acceptable body ideal in relation to *body image perception* that may become problematic for women of various cultures (Steyn, 2005). Ideally, this may be related to factors of acculturation, negative stereotypes, false assumptions and overall cultural beliefs. Body image is the cognitive representation which an individual holds about themselves (Kakeshita, & de Sousa Almeida, 2006; Latha, Supriya, Bhat, Sharma, & Pooja, 2006). Dissatisfaction with this mental image produces a number of underlying dilemma's including the development of eating disorders such as anorexia and bulimia commonly associated with decreased self-esteem. Research has found that individuals, who present with greater dissatisfaction with their overall appearance including weight and shape of their body, may be one of the factors associated with a decline in self-esteem (Abell, & Richards, 1996; Latha et al., 2006). Dissatisfaction or disturbances in body image perception which may either be cognitive, perceptual or a behavioral instability, may well lead to concerns about body size. Furthermore, these disturbances may encourage and compel the individual to strive for and/or achieve a realistic or unrealistic body ideal (Reas, Masheb, Grilo, 2004).

The individual's personal strive to achieve the *ideal body*, would affect them at various levels regardless of cultural influences. These levels have an influence upon the self, either in isolation or within social groupings (Riley et al., 1998; Soh et al., 2006). Influences upon self, regarding body size, contributes to the decision to take control of one's own body weight (Dwyer et al., 1970), levels of self-esteem experienced (Brehm, 1999; Levy, & Ebbeck, 2005), self-consciousness (Nasser, 1998) and overall self-concept or perception of self (Sigall, & Pabst 2005). Although interrelated, these aspects of self will be referred to perceptions of self-image within the study. Levels or factors which further influences perceptions of self-image are ideologies of weight as a major health concern and media display of graphic images portraying slim, *sexy*, figures of women (Barlow, & Durand, 2005; Steyn, 2005).

Whether these bombardments are influential within both black and white females, as contributing to negative states of self-image, are questionable within the study but a very realistic occurrence. Perhaps influential concepts to investigate and place the research questions and answers into perspective might be the Hancock and Perkins (1985) model of health, discussed in the next section (VanLeeuwen, Waltner, Abernathy, & Smit, 1999), as

well as Tajfel and Turners' theory of Social Identity (1979) and Karen Horney's Psychoanalytic Social Theory.

3. THEORETICAL CONSIDERATIONS

3.1. MANDALA OF HEALTH (MODEL OF HEALTH),

Hancock and Perkins' (1985) model of health (Mandala of health) conceptualizes factors and systems which the individual interacts with and upon (see figure 1). The model would be useful to frame the individuals' reasons for weight gain, in their attempts to loose weight, and factors within and beyond the model which have fostered the development of negative or positive self-images. The model encompasses a number of factors, which may influence health, holistically viewing the individual within their various spheres of existence. Family, body and mind are the core or heart of the individuals' well-being thus conceptualizing the individuals' ideologies from their own perspective. These systems or networks may have fostered and provide meaning to relationships the individual has with their body, weight and self-image.

Factors of lifestyle, work and the medical system (gyms) interacting with the individual's personal behavior, psycho-socio economic environment, the physical environment and human biology may establish the fostering of self-image in relation to being overweight, while the community and the human-made environment may provide insight towards factors of acculturation and stereotypes. The outer-circle of the model consisting of the biosphere and culture may provide insight to the concepts of the individuals' development of self-image or self-concept in relation to weight and further influences of their traditional or ethnic believe systems (VanLeeuwen et al., 1999).

Although extensively used, there is no evidence of the model been used to research issues of weight and self-concept. It is the attempt of this research to frame this comparative study in order to identify factors within the perspective of a group and the individual, thus briefly integrating concepts of identity and over identification with body images and the need to change one's physical appearance.

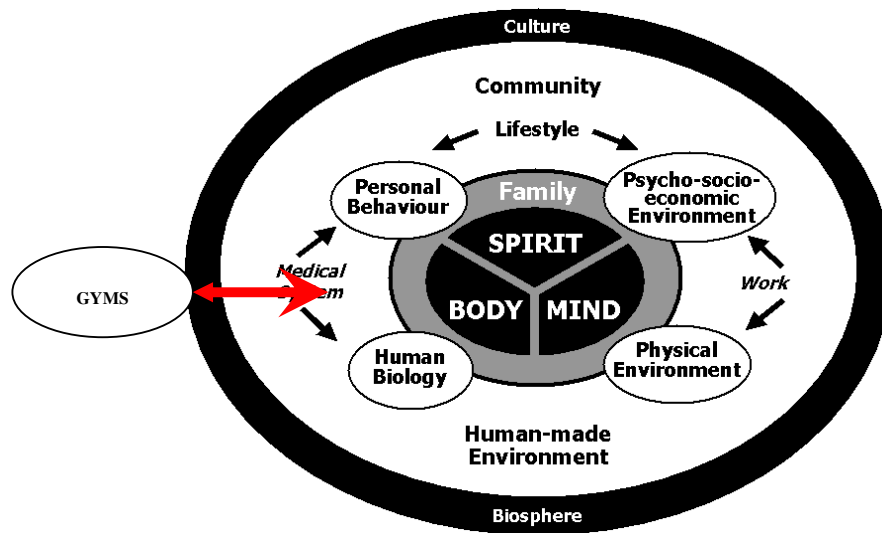


Figure 1: The Mandala of Health developed by Trevor Hancock and Fran Perkins (Retrieved from VanLeeuwen et al., 1999)

3.2. SOCIAL IDENTITY THEORY

Furthermore, the social identification of the individual would be important to understand their place in society and overall health perceptions within the model. Therefore, it appears imperative to question whether identification with western cultures and the need to be thin, are the only factors affecting perceptions of self-image within black and white women in urban areas in South Africa.

Factors affecting the person's desire for a positive self-image are "prejudice, intergroup conflict, culture and acculturation" (Cooper, & Denner, 1998, p. 8). Identifying with the need or choosing to be thin, may be a process with which to avoid prejudice and discrimination but also to feel and be accepted (Klaczynsk, Goold, & Mudry, 2004; Puhl, & Brownell, 2003). Important in this process of being accepted as part of the in-group or being rejected as part of an out-group is the concept of self (Simon, Pantaleo, & Mummendey, 1995; Stets, 1995; Wetherell, 1996).

The Self as stated by social identity theory necessitates the meaning of self-image which consists of both "a personal identity and a social identity" (Waller, 2000, p. 56). The social category created within the media and possibly amongst peer groups, is the ideal thin image which is assumed to be part of the in-group (Klaczynsk, et al., 2004; Waller, 2000). In doing so, social pressures are exerted and conformity to feel and look *good*, and be

accepted are incorrectly internalized which may ultimately be dramatized/expressed through or with the body (Klaczynsk, et al., 2004; Puhl, & Brownell, 2003; Waller, 2000). Therefore self-image is an example of how one may attempt to identify with a group on more than one level of the social identity – which may include body, ethnicity and cultural factors. It is the personal identity that strives to *fit-in* to a social group which conforms to the norm generated by society and cultures that professes to cope, change or maintain a standard set for the body in context (Klaczynsk, et al., 2004; Puhl, & Brownell, 2003; Puoane et al., 2005; Schooler, Ward, Merriwether, & Caruthers, 2004)

Tajfel and Turners' (1979) social identity theory identifies three stages in which the individual attempts to identify with a group (Wetherell, 1996). The first stage (*social categorization*) is the process in which the individual produces a “cognitive scheme with which to view the world” (Wetherell, 1996, p. 212). The theorists (Tajfel and Turner) stated this process occurs within everyday life and within every category of social groups. Social categorization is where delusions or perceptions of self are stimulated by others perceptions or judgments of the individual (Klaczynsk et al., 2004; Puhl, & Brownell, 2003; Wetherell, 1996). The second stage termed *social identification*, is created by the individuals organization and cognitive impressions developed within the first stage. This identification may affect perceptions of self-image (Wetherell, 1996), specifically whether white women have a lower self-image of themselves, compared to black women based on cultural social identification (identification with the need to be idealized as a thin individual) (Klaczynsky et al., 2004; Puhl, & Brownell, 2003). Following the completion of this identification, *social comparisons* are then made (Wetherell, 1996). Within this third stage, issues of self-esteem appear to be “tied to the position of the one’s social group” (Wetherell, 1996, p. 213). It appears that one’s self-esteem is based upon the individuals’ cognitions and the discrimination processes concerning the group in question (Wetherell, 1996). Thus evaluation of self and the strive to have or obtain positive self-image is established as an important factor in the process.

3.3. PSYCHOANALYTIC SOCIAL THEORY

The process, according to Karen Horney, is behavior as a compulsion rather than a choice towards a positive self-image. According to her theory, anxieties about *self* are created during childhood as hostility towards primary caregivers develops as a result of minimal

affection or love which had been experienced (Horney, 1942; Westcott, 1989). In warding off these anxieties, Horney suggested that the individual would either 1) *move towards people*, where they would seek love and approval, thus appearing good and virtuous, 2) *move against people* in order to achieve ambition and superiority over others, therefore attempting to be strong and heroic, or 3) *move away from people* to gain perfection over one's self and feelings of self-sufficiency (Horney, 1942; Horney, 1951). These are developments of a neurotic personality further compelled by or establishes the idealized self-image or development of self-hatred.

It is not the assumption that the female individuals may be experiencing self-hatred, but it is a key possibility in the requirement to loose, maintain and master control over one's weight in association with poor self-image. Thus many individuals constantly attempt to achieve an idealized self-image or are compelled to do so. Negative self-image/concept according to Horney is expressed in a number of ways, specifically: placing persistent demands upon self, ruthless self-accusations, self-contempt, self-frustration, self-torment and/or destructive behaviors/impulses resulting in negative consequences to oneself (overeating or not eating) (Horney, 1942; Horney, 1951). The self-hatred process and expressions thereof, are a consequence of unrealistic perceptions of who individuals wish to be. Individuals with high body dissatisfaction often carry unrealistic expectations of immediate weight and are often conflicted by surrounding views of modern culture and the idealized body concept of health and beauty (Klaczynsky et al., 2004; Puhl, & Brown et al., 2003).

Thus Horney's theory conceptualizes around the individuals strive to achieve an idealized self-image, the frameworks of culture as a major determinant of human behavior and the competitiveness which centers on modern culture. Furthermore she emphasizes early childhood development and the influence of love and security from primary caregivers in the development of self-image (Horney, 1942; Horney, 1951). Social Identification Theory and the Mandala of Health will be effectively linked to conceptualize the individuals' decision and need to loose weight, further establishing which racial/social group have greater perceptions of self-image associated with weight ideals and body image. In addition, Horney's Psychoanalytic Social Theory sketches the individual within the aforementioned constructs to holistically understand the overweight individual within their immediate context. The above theories will be used to explain findings which might

emerge from the proposed study in an attempt to understand the individual within a holistic setting complete with their weight category, ethnic identity, social-cultural attitudes, social identity and self-image. Hence determinants of behavior and idealized self-image are then likely to be sufficiently explored with regard to the South African context.

4. RESEARCH IN CONTEXT: FINAL WORD

As previously highlighted, body image has been culturally linked to tolerance, inclusion and acceptance of *full figured* women specifically within non-western societies including South Africa, (Dally, & Gomez, 1980; Dwyer et al., 1970; Goedecke et al., 2005; Johnson, & Broadnax, 2003; Kruger et al., 2005; Nasser, 1988; Puoane et al., 2005; Riley et al., 1998; Soh et al., 2006; Steyn, 2005; Walker et al., 2001). However research performed in the 1980's made the discovery that some African women were beginning to experience eating disorders for a number of reasons which included exposure to a western lifestyle (Buchan, & Gregory, 1984; DiNicola, 1988; Ebigo, & Okunna, 1986/87; Nwaefuna, 1981; Peltzer, 1995; Thomas, & Szmukler, 1985). Peltzer (1992) stated that chronic diseases were on the increase within the South African population - especially amongst black ethnic groups. Steyn, Fourie and Bradshaw (1992) further reported 24,5% of deaths in South Africans were due to the type of lifestyle which ultimately led to chronic diseases (as cited in Peltzer, 2001).

Peltzer (2001) concluded in his study that lifestyle and health practices of white and black South Africans such as limiting salt, fat and red meat intake were practiced by a minority of his sample. Thus assuming that they are either ill informed, or are well-informed but ensue to make negative health and lifestyle choices. Factors contributing towards positive health choices include levels of education and SES. Kruger et al. (2001) established that obesity within South African women were increasing, placing them at considerable risk for non-communicable diseases. Further findings in a number of studies suggested that body image and body weight dissatisfaction were higher in black women compared to white women (Mciza et al., 2005). Nonetheless "there [was] still [a] greater tolerance for increased body size in the South African black African community" (Mciza et al., 2005, p. 515), even though additional research claims women are striving to achieve smaller physiques (Anderson-Fye, 2004; Buchan, & Gregory, 1984; Dwyer et al., 1970; Ebigo, & Okunna, 1986/87; Goedecke et al., 1995; Le Grange et al., 2004; Mciza et al., 2005; Nwaefuna, 1981; Peltzer, 2003).

In conclusion, self-image has and will present with numerous factors which need to be explored from the individuals subjective understanding. Furthermore, comprehension of

their identification with and need to belong within a social group who will accept and be tolerant of the persons' individuality, has implications regarding the choices made to loose or maintain weight. Weight needs to be understood from its onset and the need to achieve a slimmer physique (whether it is assumed necessary or not). Factors contributing to these needs are either within the individuals' immediate scope or realm of reality or within the fallacy of cultural acceptance, acculturation, media exposure and/or social acceptance.

CHAPTER II: RATIONALE, HYPOTHESIS AND METHODS

RATIONALE:

Limited research explores the possibility of changes occurring cross-culturally and between racial groups. These changes exist within the cultural realms of values held by ethnic groups as acceptable, however transformations are imminent due to the influences of a western lifestyle. Consequently females may be experiencing pressures to conform to an idealized body image, both at a physical and psychological level. Furthermore these realms of change exist not only in the broader concept of culture, but within the general aspects of the immediate and extended family where cultural practices are maintained and altered.

Further the growth domains of South Africa as a developing country are strongly dominated by the governance of first world countries which fashions and *confirms* body ideals for females. As a result it further generates a need for a self-image which appears acceptable or within the norms of society according to the dominant trends. Identification with the ethnic group as well as subtle influences from family and friends *may* result in the development of a negative self-image for the individual, affecting the ideologies the individual had held about themselves. There is a growing body of literature which explores as well as illuminates the factors and influences of being overweight within a holistic framework of health (Bourne, Lambert, & Steyn, 2002; Lean, 1996; Le Grange et al., 2004), but very few focuses on the perceptions of South African females with regard to ethnic identification, sociocultural pressures, body image and comparisons with present weight – specifically BMI measurements. It would be important to understand the decisions made to loose weight and what shifts are occurring in a non-western society influenced greatly by the trends, fashions and *thin ideals* of the western world. Findings within this research may have implications for the way in which health and fitness professionals approach the issues of weight loss and maintenance in South African women, by further considering their mental health and stability overtime.

The literature in relation to the proposed research, attempts to explore ethnicity, self-image and influences upon self-concept and the existing or changing cultural factors among ethnic groups (African and White) within the South African context. An overview of

existing literature does not sufficiently reflect changes of self-image across ethnic groups due to cultural changes in South Africa mainly due to acculturation and exposure to media influences which dictate the norms concerning attractiveness, beauty and fashion. As a result, an examination of these factors will be explored. Factors which may arise could exist within childhood for the individual(s), which may further contribute towards a negative self-concept. International research reviewed, focuses on the perceptions occurring within ethnic groups, factors facilitating the onset of weight concerns and factors affecting the decisions to maintain or loose weight. Therefore the present research review will explore current issues/factors involved in the development of a self-image with regard to culture, ethnicity and influential factors contributing towards weight gain and loss.

1. RESEARCH METHODOLOGY

The following research is qualitative and quantitative in nature. Thus to understand the subjective meaning behind the experiences of participant's, a qualitative enquiry has been applied. The qualitative enquiry made use of a short questionnaire added as additional items (16, 17, and 18) to the Multigroup Ethnic Identity Measure (MEIM) (see Appendix C). The items on the questionnaire consist of open-ended questions, thus themes were drawn from the data to assess issues of weight, factors influencing weight gain and loss, ethnicity and social factors involved in self-concept. However to quantitatively explore the dimensions of body image in relation to estimated body mass, the Body Shape Questionnaire (BSQ) was utilized and estimates derived from Body Mass Index (BMI) were used to assess each participant. Further comparisons were made against the BSQ scores and ethnic origins of the females obtained from information obtained from the MEIM. An additional questionnaire was used to assess the influence of socio-cultural factors which affected self-image – specifically those emanating from the media (Sociocultural Attitudes towards Appearance Scale-3 (SATAQ-3)). Further the SATAQ-3 was correlated with BMI, BSQ and MEIM scores.

1.1. QUALITATIVE ENQUIRY

In the attempt to examine the experiences between White and African females, a qualitative analysis was employed. Qualitative studies allow an exploration into the truth of the individual or group experiences based on their subjective reality. This research method captures the understanding individuals' place upon occurring events and whether the experiences thereof are positive or negative (Flick, 2002; Hancock, 2002; Patton, 2002).

This method or technique of enquiry can illustrate and provide an elaborate comprehension of the participants within their contextual settings (Flick, 2002; Hancock, 2002; Patton, 2002). Qualitative research by no means is an isolated proficiency but can be utilized within a number of frameworks and with the aid of other methods of enquiry. It may compliment quantitative methods in order to provide an in-depth exploration of the investigation – thus adding to the value of the research (Flick, 2002; Hancock, 2002; Patton, 2002).

Additionally, qualitative enquiry produces a greater awareness of the participants and their subjective interpretation of events; has the capacity to observe emerging and dynamic developments; creates an awareness of changes occurring within and over a space of time; and encourages sensitivity to the influences of the immediate context. Moreover, it provides the space in which the investigator may enter the field having no preconceptions or notions of what should occur allowing the researcher to be vigilant towards unanticipated proceedings (Flick, 2002; Hancock, 2002; Patton, 2002).

However, qualitative enquiry may produce a number of known and unknown effects which may disadvantage the outcome of the scientific enquiry. Firstly, the biasness of the researcher may hamper the overall result of the study. Thus if pre-conceptions are made or were established beforehand and an unwillingness exist to comprehend the reality of the participants, the researcher has neglected the true nature of the investigation (Flick, 2002; Hancock, 2002; Patton, 2002). Secondly there may be a lack of credibility from the type of sources used, hence participants may have been deceptive or have attempted or have successfully concealed information. Although information obtained is valuable and is

subjective, the information received may not always be representative of the larger population (Flick, 2002; Hancock, 2002; Patton, 2002).

Nonetheless, depending upon the method of enquiry used qualitative enquiries are cost effective but extremely time consuming. Analysis of the data is monotonous and needs to be evaluated with a heart for the truth, for subjective realities and respect for the personal viewpoints of others (Flick, 2002; Hancock, 2002; Patton, 2002).

1.2. QUANTITATIVE ENQUIRY

To make a comparative analysis between White and African females with regard to their body image, a quantitative approach had been employed making use of scores obtained from the BMI, the Body Shape Questionnaire (BSQ), the SATAQ-3, and the MEIM. In doing so, BMI, BSQ, SATAQ-3 and MEIM scores were compared between the two ethnic groups. In the attempt to further understand the cultural implications of these quantitative results, they were further evaluated and rationalized within the context of the qualitative grounds which were provided by the participants. Further the MEIM was used to assess ethnic orientation of the group and further correlated with the BSQ, SATAQ-3 and BMI scores. Thus the MEIM, BSQ and BMI scores were used to compare the differences across the White and African sample in an attempt to establish whether likely differences or similarities existed within self-image, weight (BMI) and attitudes towards their appearance.

Quantitative research uses numerical dimensions to understand how much and how often particular events under investigation might occur (Jones, 1997; Nau, 1995; O'Neill, 2006). It provides an exploration into the distinctive basic properties and pragmatic boundaries of occurring events which have been observed (Jones, 1997; Nau, 1995). It is a more acceptable and common scientific enquiry engaging in and formulating experimental and quasi-experimental methods (O'Neill, 2006). However when considering the type of data, the sample size needs to be of an appropriate number to allow generalizability of the data across the general population from which the sample had been drawn. Through employing the appropriate sample size (of at least 60 – 200 or more individuals), accuracy of the data may be ensured, further informing the statistical procedures which need to be employed after normality checks had been run upon the data (Howell, 2004; O'Neill,

2006). Quantitative data has been described as an extremely objective procedure, enhancing the interpretations through numerical data which decreases researcher biasness, ambiguous and is independent of individual judgments (Jones, 1997; Nau, 1995; O'Neill, 2006). Data is acquired through surveys, demographic questionnaires, and/or measurement instruments such as Sociocultural Attitudes towards Appearance Scale - 3 (SATAQ-3) or the Body Shape Questionnaire (BSQ) which is then quantified (transformed into numerical data); captured within formulas or software programs to interpret or provide meaning to the raw and standardized data which is then interpreted (Howell, 2004; Jones, 1997; Nau, 1995; O'Neill, 2006; Rosenthal, & Rosnow, 1991). Typically interpretations begin with the data being based on a theory or hypothesis, followed by the application of descriptive or inferential statistical methods.

2. RESEARCH QUESTIONS AND HYPOTHESIS

This study attempted to examine the experiences between White and African females with regard to weight, body image, ethnicity and socio-cultural influences. It had attempted to explore their self-image in relation to their ethnicity and weight. Thus the proposed research aspires to comprehend whether White females experience lower levels of self-image than African females in South Africa. Of further importance is whether culture, family, peer relations and psychosocial factors, positively or negatively influences weight gain or loss and whether black females still perceive a fuller figure as acceptable.

It has been established that African females within a number of studies appear more satisfied with their bodies even though they do carry more weight (Baker, 2003; Mciza, et al., 2005; Peltzer, 2001; Peltzer, 2003; Reas, et al., 2000). Thus it may be assumed that White females will display greater levels of body dissatisfaction and internalize sociocultural factors more frequently than African females who however, may demonstrate greater BMI and ethnicity scores (hypothesis 1a). Furthermore, it could be suggested that low and high ethnic identity may reflect differences in BMI, body dissatisfaction and levels of internalization of sociocultural influences (hypothesis 1b).

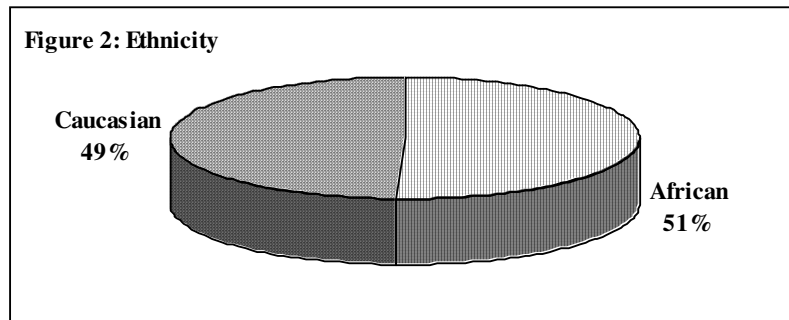
The literature review has specified that particular trends were found to exist within particular ethnic groups (Puhl, & Brownell, 2003; Puoane et al., 2002; Puoane et al., 2005). It could be hypothesized that relationships found will be greater amongst White

females with regard to sociocultural factors, and body dissatisfaction. Further relationships found between BMI and other variables will be greater amongst the African sample within the study (hypothesis 2a). Moreover there may be similarities found between variables which correlate significantly with regard to ethnicity (hypothesis 2b).

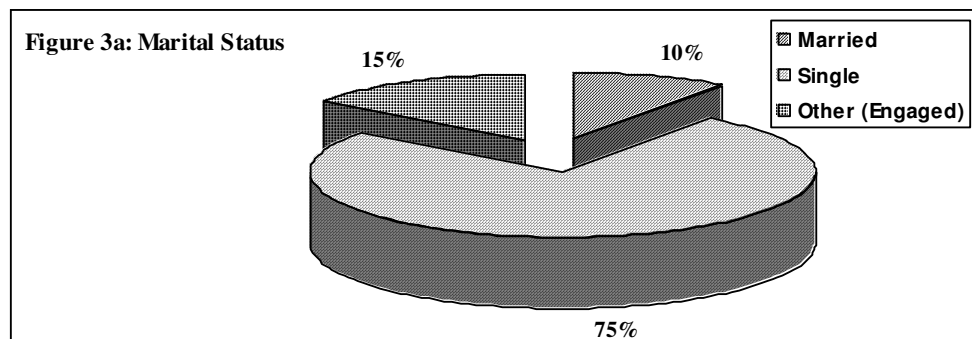
The research further attempts to explore which factors/variables have an impact upon each other. It has become apparent that there are influences that affect the outcome of weight and the decisions made to loose weight (Dwyer et al., 1970; Jacoby et al., 2003; Kilicarslan, 2006; Kruger et al., 2005). Hence this research postulates that BMI, sociocultural influences and ethnicity may have an impact or effect upon body dissatisfaction (hypothesis 3). The research additionally endeavors to discover the meanings provided by the participants about the factors or issues which they presume determine or influencing their weight (Appendix C provides the outline of the questions which were added as part of the MEIM).

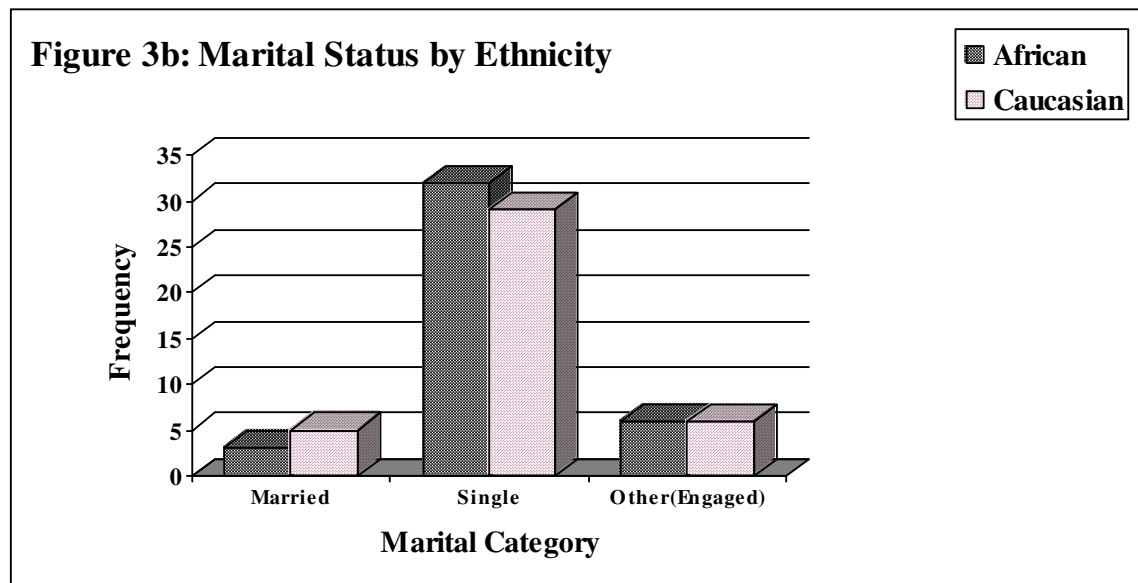
3. SAMPLE AND SAMPLING

The researcher approached 120 female volunteers at the gyms at the University of the Witwatersrand. As the sample was University students who had registered to use the gym(s) for the duration of the year, and as a result were approached during their time of use, the sampling method applied for this study was convenience or haphazard sampling (Coolican, 2004).



Of the 120 individuals 81 responses were obtained (please refer to figure 2). The volunteers' ages for the study ranged between 18 and 33 years (mean= 23.3; standard deviation= 3.4), with the majority being 20 years of age. For marital status please refer to figures 3a and 3b).





Weight (not BMI) ranged between 43kg and 114kg with a mean of 64.6 (standard deviation= 12.5). The overall sample consisted of 33 (40.7%) individuals who were overweight, with 25 (30.9%) attempting to loose weight while the additional 8 (9.8%) were not involved in any weight loss program or attempting to loose weight. Furthermore the majority of individuals who were overweight is African females and displayed the greatest weight distribution (34.6% compared to 6.2% of White females). Nonetheless there were female participants from both ethnic groups who were on a weight loss program even though their BMI results classified them as being within a healthy weight range or underweight (18.5% of White females and 8.6% of African females).

4. METHODS OF ENQUIRY

4.1. QUESTIONNAIRES: QUALITATIVE AND QUANTITATIVE ENQUIRY

As the study is partially qualitative in nature, additional questions upon the MEIM (see Appendix C) had been included in the attempt to gather further information regarding the participants experience of their ethnic identity and appearance and influences which might sway their present or desired weight range. Thus the questions were constructed to allow the participant to state whether they agree or disagree with the question and provide a brief but comprehensible explanation for their particular response.

Questionnaires are a quick, effective and time efficient method of gathering information – especially if the data is being obtained from a large number of respondents, allowing for valid and reliable statistical analysis. Demographic information might enable the researcher to correlate the information with relevant data from additional questionnaires (Foddy, 1993; Peterson, 1944).

Because questionnaires are a flexible measuring tool, it may be used to quantitatively and/or qualitatively (Peterson, 1944) which may result in reflection of subjective and objective experiences. Questionnaires may be used anywhere and for any purpose, as long as they reflect or are valid and reliable in what they are attempting to assess (Foddy, 1993; Peterson, 1944). Thus they could be used where resources and finance are limited, ensuring confidentiality and anonymity, and corroborate other findings in conjunction with additional questionnaires (Foddy, 1993; Peterson, 1944; Zhao, Stephens, Sim, & Meredith, 1997).

Questionnaires however need to be clearly defined in terms of what they are attempting to investigate. Hence, the goal, purpose and validity of the questionnaire are extremely important (Foddy, 1993; Peterson, 1944). Questionnaires which are not skillfully constructed may be compromised by its lack of structure, poor identification of the problem or analytic properties (Foddy, 1993; Peterson, 1944) thereby hampering analysis of the data.

Further difficulties may be encountered if the questions which have been asked are inappropriate, unnecessary and sensitive (Foddy, 1993; Peterson, 1944). The researcher or investigator needs to consider the types of questions he/she is including within the questionnaire. In order for questionnaires to be valid and reliable instruments they have to be skillfully and methodically constructed and piloted to investigate the particular phenomena. Further it needs to be established by the researcher whether or not the questionnaire/instrument (not only for their investigation) will be suitable for replicability and for specific samples obtained from the population (Foddy, 1993; Peterson, 1944).

The qualitative questions within the questionnaire for the present investigation were open-ended questions, urging the respondent to provide their subjective interpretation (Foddy, 1993; Peterson, 1944). Therefore a variety of responses might be obtained which could

reflect the opinions of the participant(s) and their subjective reality (Foddy, 1993; Peterson, 1944). However open-ended questions do not readily allow for statistical analysis, thus time is a clear restraint in analyzing the content of the respondents answers (Foddy, 1993; Peterson, 1944). Further bias interpretation by the investigator may hamper the true meaning of the answer provided, compared to interviews where the information could be further clarified by asking additional questions related to the response of the participant (Foddy, 1993; Peterson, 1944). Further limitations may be experienced by the thought and time needed by the participant(s) and how honest they are within their initial responses (on both qualitative and quantitative investigations) (Foddy, 1993; Peterson, 1944).

Regardless of whether the questionnaire is quantitative or qualitative in nature, it needs to offer clarity within its content, elimination of embarrassing and/or hypothetical questions. Questionnaires, if used constructively and effectively, are resourceful research instruments in which data of both a qualitative and quantitative nature may be explored (Foddy, 1993; Peterson, 1944). These data collection instruments can be time efficient (quantitatively) for the researcher but time consuming for the respondent. It may offer a space for reflection (qualitatively) but could be hampered by bias interpretations (Foddy, 1993; Peterson, 1944). The use of questionnaires need to be carefully reviewed and established whether it will be appropriate for the investigation and allow for appropriate statistical and/or content analysis of the data. As a result it might offer the researcher the use of a powerful and versatile assessment tool.

4.2. VARIABLES

To analyse the tools/instruments, the scales of measurement and variables need to be identified within the study. Further it is important within the qualitative analysis to be able to identify the appropriate themes which may emerge.

The scales of measurement within the study are primarily interval and nominal. Nominal scales are often used for classification purposes. They are the variables within the study which categorize or assign labels to individuals or groups of people (Howell, 2004). Thus ethnicity, age, employment and marital status could be identified as nominal variables

within the study as they provide descriptive and demographical information about the sample.

Additionally the questionnaires aim to obtain information about the participants on the basis of their responses, hence establishing similarities and/or differences about the sample based on the acquired scores (Howell, 2004; Rosenthal, & Rosnow, 1991). As the questionnaires and BMI assessments are measurements producing scores on particular subscales and/or an overall score is estimated, the scales are at least interval (Howell, 2004; Rosenthal, & Rosnow, 1991). Thus weight, height (BMI), ethnic orientation, age, marital status, employment status, body image, and cultural factors are all particular forms of variables within the study.

Weight is a continuous variable because it can take on any possible number greater than 45kg for an average adult female individual. Thereby making it ordinal or at least interval. Further it is attempting to establish whether it is a result of body image, sociocultural factors and/or ethnic identity. Ethnic orientation within this study can only take on a few possible values (African or White). It is a biographical, nominal and interval variable, dependent upon what is being measured. However it is an independent variable predicting the outcome of physical appearance and weight.

Age, marital and employment status could presumably be variables which might have an impact upon some or all of the other variables within the study. These biographical variables have been shown to have an impact upon weight, however have not been exclusively linked to ethnic identity (Alexander, 2003). Additionally age is a continuous variable and interactions may occur between body dissatisfaction, socio-cultural influences and/or weight. Marital and employment status are further biographical and discrete variables which may or may not have an impact upon body dissatisfaction, weight and the extent to which socio-cultural factors have an impact upon the aforementioned variables. In addition age could impact upon how the individual interprets/understands the present socio-cultural factors investigated.

Body dissatisfaction and sociocultural factors are continuous, dependent variables which may predict individual BMI statuses. All these variables may be identified as possible themes which may emerge within the study. However extraneous variables which have not

been considered may emerge during qualitative analysis of the subjective experiences attributed to weight of the participant(s) concerning cultural, family, or peer influences, ethnic orientation and factors related to self.

4.3. INSTRUMENTS

4.3.1. ANTHROPOMETRIC MEASUREMENTS: BMI

Field methods may not be the most reliable way of estimating body mass/weight outside a laboratory setting, however they are the most practical, cost and time effective methods (Deurenberg, & Yap, 1999). The BMI is a measurement of the individuals height in meters and weight in kilograms using the formula $\frac{weight(kg)}{height(meters)^2}$ to calculate and establish

weight according to standardized tables, similar to that in Appendix A, to estimate the individuals weight category (Aarcharya et al., 2001; Allsen et al., 1997; Bray, 1999; Deurenberg, & Yap, 1999; Prentice, & Jebb, 2001; Reimers, 2000). Height, in meters (m), was recorded using a tape measure secured to a flat wall (Puone et al., 2005). Participants were asked to remove their shoes, stand up straight against the wall, with their back to and against the tape measure. The measurement was taken to the nearest 0.1m (Allsen, 1997; Puone et al. 2005). Weight, in kilograms (kg), was taken using a bathroom scale. For each participant the scale was calibrated to zero before and after each participant steps onto the scale to be measured. Further each participant was asked to remove their shoes, and any heavy clothing (jackets), stand tall and straight, without looking at the scale, facing front. Weight was taken to the closest 0.05kg (Allsen et al., 1997; Puone et al., 2005).

4.3.2. BODY SHAPE QUESTIONNAIRE (BSQ)

To assess perceptions of body image, the body shape questionnaire (BSQ) was used. It was developed by Cooper, Taylor, Cooper and Fairburn (1987) out of the need to understand the association between body image and its centrality with eating disorders (Cooper, Taylor, Cooper, & Fairburn, 1987; Rosen, Jones, Ramirez, & Waxman, 1996). The questionnaire assesses women's, rather than male perceptions of weight (Cooper et al., 1987; Rosen et al., 1997). Rosen et al (1997) examined the reliability and validity of the instrument, finding it to have test-retest reliability (0.88), criterion and concurrent validity. Further Dowson and Henderson (2001) have further investigated the validity of

the instrument, but on the short form of the BSQ. The short form is a 14-item version of the original 34-item BSQ. It has found to have a high association with “patients with psychogenic low weight and a history of full or partial AN [Anorexic Nervosa]” (Dowson, & Henderson, 2001, p. 269).

Internal consistency (Cronbach’s Alpha) was found to be extremely high, which states that the items on the test have been successful in measuring the same thing (Murphy, & Davidshofer, 2001). The BSQ has been found to have a positive correlation with weight (Evans, & Dolan, 1993; Rosen et al., 1997) implying that individuals who are overweight, score higher on the BSQ in relation to their immediate self-image and body image. The BSQ which was used within this study, is the 34-item version which is 6 point Likert scale with responses ranging from 1, *never*, to 6, *always*, which has been used in South Africa before to evaluate psychological perceptions of appearance and weight (Cilliers, Senekal, & Kunneke, 2006; Senekal, Steyn, Mashego, & Nel, 2001).

Scores on the test range from 34 – 204 with a mid-point/average of 102. Cooper et al (1987) have estimated a mean of 109.0 (SD= 21.2) for the concerned group and a mean of 55.9 (SD= 14.4) from the unconcerned group for probable cases of bulimia nervosa. In a study conducted by Rosen et al (1996) a mean of 129.9 ± 29.0 had been established for body image therapy patients while a mean of 123.1 ± 27.9 had been obtained for obese dieters. Based upon these results Cilliers et al. (2006), estimated cut off points to identify *at risk individuals* (high scorers), of ≥ 129 . A lower cut off point of < 112 was calculated by Cilliers et al. (2006), as signified by the low scorers of probable bulimia nervosa cases in Senekal et al. (2001) study of black female students in South Africa. Therefore a cut off point for identifying participants within this study who are at risk is ≥ 129 and for participants who are not at risk < 112 . Any participant(s) between 112 and 129 would be considered to be borderline cases. The questionnaire takes approximately 10 minutes to complete (Cooper et al., 1987).

4.3.3. SOCIOCULTURAL ATTITUDES TOWARDS APPEARANCE SCALE – 3 (SATAQ-3)

The SATAQ-3 is a 30 item scale which essentially measures four areas of the individuals perceptions and need to strive for an ideal thin image which is influenced by the media (Cafri, Yamamiya, Brannick, & Thompson, 2005; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004). The four dimensions which make up the SATAQ-3 include **Pressure** (amount of influence perceived by the individual from the media, to conform to particular standards set by society or societal norms) (Thompson et al., 2004), **Information** (the acquired or acknowledgement of knowledge obtained from the media regarding presumed attractiveness and fashion statements) (Calogero, Davis, & Thompson, 2004; Cash, 2005), **Internalization – General** and **Internalization – Athlete**.

The internalization dimension takes priority within this instrument as it assesses the risk if internalizing the popularized thin ideal (Thompson et al., 2004). Two definitions provided for internalization include:

1. “Internalization is the incorporation of specific values to the point that they become guiding principles” (Thompson et al., 2004, p. 294), and/or
2. Internalization is “*the extent to which an individual cognitively buys into*’ societal norms of size and appearance, to the point of modifying one’s behavior in an attempt to appropriate these standards” (Thompson, & Stice, 2001 as cited in Thompson et al, 2004, p. 294).

These definitions of internalization demonstrates that individuals conform to concepts of body ideals which are advertised, televised and exploited confirming to the individual that these sexy, slim figures are appropriate, attractive and *healthy*. Two measures of internalization exist within the SATAQ-3: the **general internalization** items which assesses the individuals *need or want* to achieve a body ideal based on media images (Thompson et al., 2004; Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005) and the **athlete internalization** subscale which assess the extent to which the individual wishes to achieve an athletic physique based on formulated images presented within the media (Cafri et al., 2005; Thompson et al., 2004). This particular subscale had replaced the Awareness subscale of the original SATAQ and the SATAQ-R, as athleticism had become the latest trend over the past decade in media culture impacting on perceptions of fitness,

health and more specifically the thin, slim, sexy and toned body ideal (Thompson et al., 2004). As noted by Lindeman (1999), “exercise is promoted as an optimal means to achieve the ideal physique” (p. 1135).

The internalization-general subscale consists of 9 items, internalization-athlete consists of 5 items, the pressure subscale has 7 items while information subscale has 9 items. In total there are 30 items within the 5 point-Likert assessment instrument, with items 3, 6, 9, 12, 13, 19, 27 and 28 needing to be reverse scored. The present study scored the items ranging from 0 (definitely disagree) to 4 (definitely agree) with the maximum score being 120 and the min 0 (zero). Internal consistency reliability for the scales were found to be 0.96 information, 0.92 for pressure, 0.95 for internalization-athlete and 0.96 internalization-general (Thompson et al., 2004, p. 298). Good convergent validity had been established (Thompson et al., 2004) however there is no evidence of the instrument being utilized within the South African context.

4.3.4. MULTIGROUP ETHNIC IDENTITY MEASURE (MEIM):

As comparisons between racial and ethnic identities were assessed, thus attempting to demonstrate and understand the importance the nature of ones identification according to these racial and ethnic classifications. Racial and ethnic identities are fluid and multidimensional aspects of the individuals' identity, being synonymous with and the identification with a particular social group (Frable, 1997). Race is scientifically defined by the physical characteristics of the individual, while ethnicity is defined by the values associated with particular aspects related to cultural markers (Dalton et al, 2001; Frable, 1997).

Phinney (1989) developed a model which was used to assess ethnic identity development of all ethnic groups. Based on these stages of development Phinney developed a questionnaire, the Multigroup Ethnic Identity Measure (MEIM). The MEIM assesses three components or subscales of ethnic identity specifically Ethnic Behaviors, Affirmation and Belonging, and Ethnic Identity Achievement (Frable, 1997; Phinney, 1992; Roberts et al., 1999; Schooler et al., 2004).

The MEIM has shown alphas above 0.80 amongst various ethnic groups and across ages (Phinney, 1992; Roberts et al., 1999). However the current MEIM has only two scales: ethnic identity and affirmation, belonging and commitment (Roberts et al., 1999). The instrument has 15 items however items 13, 14, and 15 are used for identification and categorization of ethnicity (Roberts et al., 1999). Items 1, 2, 4, 8 and 10 assesses ethnic identity and items 3, 5, 6, 7, 9, 11 and 12 assesses affirmation, belonging and commitment (Roberts et al., 1999). None of the items require reversed scoring. The range of scores is from 1 (strongly disagree) to 4 (strongly agree). There is no evidence of the scale being used within South Africa but has been used within Africa (Worrell, Conyers, Mpofu, & Vandiver, 2006), hence further alterations have been made to the scale to adapt it to the South African context. For example Asian American, Chinese, Japanese, Hispanic, Latino and other ethnic and racial categories which are not applicable to South Africa or for this study have been replaced. An additional three items (16, 17 and 18) have been added to the MEIM for qualitative purposes to assess appearance, weight and influences related to their ethnic identification but mainly for further clarification related to the present study.

5. DATA COLLECTION

The appropriate staff member(s) working for Sports Administration: working with and within the sporting club of Strength and Fitness were approached in order to obtain permission to approach female students to obtain the necessary data. The administrative officer overseeing the running of the gyms (strength and fitness club) were informed upon the nature of the study and to obtain the use of the scales within the gym(s) to acquire weight measurements towards BMI assessments.

Potential participants were approached within the gym environment of the University of the Witwatersrand (before and/or after training) to complete the questionnaires and to obtain their BMI. Participants were provided with the questionnaire after obtaining BMI measurements (height and weight assessment). As a few students were unwilling to complete the questionnaires immediately, they were informed that they may, upon return to the gym, leave their completed questionnaire and sealed envelope in a sealed and marked box at the allocated gyms at the University. They were informed that further information could be obtained upon the information letter attached to the questionnaires. To maintain confidentiality, the researcher removed the contents from the envelopes only after an appropriate sample size had been obtained and upon recognizing that students may not bring in additional responses due to the temporal considerations at the time (examinations). After the desired sample size had been obtained, only then were the envelopes be opened in order for data analysis to be performed. Uniform size and colour envelopes were used and no identifying information about the participant or gym was placed on the envelopes. Height and weight was taken with shoes off, with as minimal clothing (removal of any heavy clothing) as possible and recorded, (weight to the nearest 0.05kg and height to the nearest 0.1m). The researcher is a fitness professional, who understands and is familiar with the procedures of the BMI. BMI took approximately 2-5 minutes to complete while those who were willing to complete the questionnaire took approximately 10-15 minutes.

The qualitative data collected on the MEIM was analyzed by means of thematic content analysis performed by means of coding and identifying themes which had emerged. BMI for each participant was calculated and correlated/compared to establish whether any statistical significance could be found with the questionnaires with regard to ethnic

identity, socio-cultural factors and body image. This was further compared with the qualitative data which provides explanations about their self-concept and further elaborated on, using the theoretical considerations previously mentioned to make further comparisons. In the attempt to further understand the cultural implications of these quantitative results, they were explored and examined around the qualitative reasoning's provided. To make a comparative analysis between White and African females with regard to their body image, a quantitative approach was employed using BMI scores, the Body Shape Questionnaire (BSQ), SATAQ-3, and MEIM. In doing so, BMI, BSQ, SATAQ-3 and MEIM scores were compared between the two ethnic groups.

6. ETHICAL CONSIDERATIONS

The participants for the study were female students obtained from the gyms of the University of the Witwatersrand. The appropriate staff member(s) working for Sports Administration: working with and within the sporting club of Strength and Fitness were approached in order to obtain permission to approach female students to obtain the necessary data. The administrative officer overseeing the running of the gyms was informed on the nature of the study and granted the use of the scales within the gym(s) to acquire weight measurements towards BMI assessments.

Informed consent was obtained from the students through a provisional cover letter (please refer to Appendix B). Participants were made aware that the information obtained will be deemed as confidential. In order to ensure partial anonymity, each participants questionnaire was placed within an envelope of the same size and colour and sealed. Students were asked to complete the questionnaires (BSQ, SATAQ-3 and MEIM) to the best of their ability. However as students were unable to complete the questionnaire immediately, weight and height was taken to obtain BMI and students were informed that they would be able to place their completed questionnaires, sealed in the provided envelope in boxes at the gyms or they may contact the researcher who would collect the envelope. After an appropriate sample size had been obtained, the envelopes were opened and data analysis performed. Results of the study will be provided to interested parties for scientific purposes with the permission from all participants involved however it is not possible to provide individual feedback to participants. They were informed of this. Participants were made aware that they have the right to stop or withdraw from the study and to refuse to take part in the study at all.

If students do become concerned or feel distressed about the questions, referral mechanisms were provided. They were supplied with a suitable referral agency and telephone number in the information letter.

7. DATA ANALYSIS:

7. 1. QUALITATIVE/THEMATIC CONTENT ANALYSIS

Thematic content analysis employs a variety of techniques to interpret collected data (Patton, 2002). It involves categorizing gathered words and/or sentences, with words which describe the position or feelings which had been expressed during data collection (Patton, 2002). Thereafter, the likelihood of a specific concept is coded to determine the strength of the theme being identified, however the counting process is not a requirement (Patton, 2002). Furthermore emerging patterns such as culture needs to be recognized and clarified according to its importance (Patton, 2002). Question 4 is qualitative in nature, therefore was analyzed using the procedure below.

The basic elements or procedures of content analysis involves ((Patton, 2002, Zang, 2006)
:

1. Deciding the unit of analysis:

- a.*** Responses need to be divided into units before data is to be coded.
Thus it is important to define the coding units for content analysis;
 - i.*** The data had been read and assessed and concepts which emerged were placed within a specific category or identified as a possible emerging theme.

2. Developing categories and coding scheme

- a.*** This will be obtained or derived from three sources, mainly the data themselves, previous related studies, and theories;
 - i.*** Categories were developed based upon the data which was obtained but was guided by the literature review of body concept of South African females (Puoane et al., 2005; Steyn, 2005).
- b.*** Coding schemes will be used using an deductive method (from the general to the specific);
 - i.*** General concepts were used and are further investigated within the discussion section to explore the specific

discourses centering around and within the themes which had emerged.

3. *Coding consistency*

- a. Consistency needs to be verified. If consistency is low revising the coding scheme is plausible;
 - i. The themes were rechecked thoroughly and interpreted to ensure that they are consistent with what was found within the other research areas.

4. *Code all text*

- a. After sufficient consistency has been established, it can now be applied to all transcribed data/text;
 - i. Codes were developed upon a number and alphabet system and categorized according to the questions outlined within the extended version of the MEIM. The initial categories were 1) identification and affluence that ethnicity has had upon the image or concept of the female body as outlined by question 16; 2) influential factors or people within the individuals life as experienced by the sample (question 17), and 3) whether the females were on a diet, what factors contributed to their weight gain and what method(s) they were using to control their weight which was obtainable through question 18 of the modified MEIM..
 - ii. Once all the data had been coded, it was tallied and a frequency had been obtained to assess how often the specific theme had emerged. The major occurring themes were analyzed and further elaborated upon within the results and discussion section(s).

5. *Assess coding consistency*

- a. Recheck consistency
 - i. The consistency of the themes or categories were rechecked and/or rephrased.

6. *Drawing conclusions from the coded data*

- a. Make sense of the data. This involves “exploring properties and dimensions of categories, identifying relationships between

categories, uncovering patterns, and testing categories against the full range of data” (Zhang, 2006, p.4);

7. Reporting

- a. Involves comprehensible yet realistic description and interpretation of the data obtained which needs to contain rich and thick description.

The data was concluded by employing and applying relevant theories to the outcomes, themes and/or behaviors which had emerged through coding and identifying occurring patterns and themes.

7.2. STATISTICAL ANALYSIS

Various univariate analysis techniques were used in the study. Descriptive statistics providing means and standard deviations; correlations (Pearson’s and Spearman’s); comparisons (Mann Whitney U); and Multiple Regression were performed to answer the research questions.

Internal consistency reliability was analyzed for the BSQ, the overall MEIM (including subscales), and the SATAQ-3 and its subscales by calculating Cronbach’s Coefficient Alpha. This particular method investigates or provides an estimate of whether the test items within the particular psychometric instrument provides an accurate or reliable measure of what the test is assumed to measure (Murphy, & Davidshofer, 2001; Thomas, & Nelson, 2001). Prior to carrying out analyses to answer the research questions normality-check tests and histograms were performed. Normality checks are able to provide the researcher with an idea about the appropriateness of the statistical techniques which may be used in order to obtain reliable and accurate results (Howell, 2004; Murphy, & Davidshofer, 2001; Thomas, & Nelson, 2001). In turn these results may be accurately clarified, to provide meaningful predictions, conclusions or interpretations of the data. As normality was not established for data obtained for each psychometric instrument, the assumption to perform parametric statistical techniques, were not met (Thomas, & Nelson, 2001). However due to the need to conduct statistical techniques requiring parametric data, and the sample size being large enough to use parametric strategies, parametric analysis were used to analyze the data.

The first hypothesis within the present study, hoped to investigate whether significant differences could be established between the overall scores of socio-cultural factors determined by the SATAQ-3 (and its dimensions: internalization general; internalization athlete, pressure and information), body dissatisfaction as outlined by the BSQ, body mass scores (BMI) on the basis of ethnicity. In order to do this T-test were performed. Hypothesis 1b further explored the differences which may exist based on high and low scores on ethnic identity of the MEIM. Therefore scores were signified as low (25-34) and high (35-47) on which to classify significance between ethnic identity and provide an interpretation of significant differences employing 2-Way ANOVA for Race and Ethnic Identity.

To establish further significances (hypothesis 2b) between the two groups, correlations (hypothesis 2a) were calculated, providing the opportunity to investigate whether differences might exist between correlations by computing Fisher's z test without the use of SAS (by hand). Fisher's z is the transformation test for Pearson's r 's which attempts to detect equal differences or the average between two correlations (Rosenthal, & Rosnow, 1991; Thomas, & Nelson, 2001).

However, after Fishers' z allowed for been further comparisons (question 2.3) to be made through careful examination of the obtained results from hypothesis 1a, 1b and 2b, to determine whether any differences, which may have been found were based upon ethnic association (biological known characteristics) or ethnic identity (pride, affirmation, identification, commitment, and/or belonging).

Question 3 attempted to explore whether the variables (BMI, sociocultural factors and ethnic identity) may predict body dissatisfaction (BSQ). To explore this phenomenon stepwise multiple regression was performed. The test usually requires an dependent variable or criterion variable (BSQ) and two or more independent variables or predictor variables (BMI, SATAQ-3, and MEIM) which increases the likelihood of the prediction. However even though there is an attempt to establish how much influence or likelihood the independent variables have as influential factors for body dissatisfaction, it does not imply causality (Howell, 2001; Thomas, & Nelson, 2001).

CHAPTER III. RESULTS

All data of the study were analyzed using the SAS system. The results of the study will be reported and discussed in individual sections. Each section will focus on the initial question to guide interpretation of the results. All statistical analysis was evaluated at 0.05 (5%) level of significance.

1. Reliability of the Psychometric Instruments

Internal consistency estimates for the BSQ, the overall estimates for the SATAQ-3 and MEIM, as well as all subscales for these, were calculated (please refer to Table 2). Internal consistency measures demonstrate or provide reliability estimates of the instruments used within the study. These estimates are able to illustrate whether the items within the scale are measuring the same construct. If all items measure the same concept and are large enough to do so, then it could be interpreted that the test was reliable (Murphy, & Davidshofer, 2001). Cronbach's Alpha was used to establish the reliability of the items within the measuring instruments and is a versatile estimate in establishing internal consistency reliability. In addition it is more reliable to use with instruments utilizing Likert scales (Thomas, & Nelson, 2001). The greater the reliability of the test, the less effect measurement errors has on the test (Murphy, & Davidshofer, 2001).

The results yielded Cronbach Alpha Coefficients ranging from 0.64 to 0.98. All Cronbach Alphas, except the subscale of Ethnic Identity from the MEIM were extremely high, yielding fairly consistent results in performance across test items upon each individual instrument and the subscales of the SATAQ-3 and MEIM (Murphy, & Davidshofer, 2001). The SATAQ-3 was fairly consistent with studies conducted by Thompson et al (2004), and the MEIM was consistent with Alphas found within a variety of studies performed across ethnic and age groups (Phinney, 1992; Roberts et al., 1999). The BSQ yielded an Alpha of 0.98, which was slightly higher compared to previous studies in which Alphas of approximately 0.93 had been obtained (cf. Dowson & Henderson, 2001).

Thus measurement errors appear to have little effect upon the overall test scores which were obtained.

TABLE 1: DESCRIPTIVE STATISTICS AND INTERNAL CONSISTENCY OF MEASURING INSTRUMENTS							
	No of Items	Item Response Range	Max Possible Scores	Subject Response Scores	Mean	Standard Deviation	Alpha
BSQ	34	1-6	204	34-202	94.4	44.5	0.98
Overall SATAQ-3 scores	30	0-4	120	0-120	35.0	3.4	0.97
• Internalization General	9	0-4	36	0-36	20.6	8.7	0.94
• Internalization Athlete	5	0-4	20	0-20	13.1	4.1	0.90
• Pressure	7	0-4	28	0-28	16.0	7.2	0.95
• Information	9	0-4	36	0-36	22.0	8.6	0.95
Overall MEIM scores	12	1-4	48	25	35.0	3.4	0.83
• Ethnic Identity	5	1-4	20	8-19	13.8	1.8	0.64
• Affirmation, Belonging and Commitment	7	1-4	28	15-28	21.1	2.1	0.84

2. Normality

Tests for normality – specifically Kolmogorov-Smirnov – were performed to assess the normal distribution of the data and in addition, the skewness of the graphs were examined. Tests for normality revealed that most scales were not normal (at $\alpha=0.05$ level of significance) considering the distribution of test scores (please refer to Appendix D: Figures 4 – 12). The histograms of the obtained data, as well as the tests for normality suggested that non-parametric techniques be used to further explore the outcomes of these results. However due to the nature of the study and the probability of conducting further statistical techniques (requiring parametric assumptions), the use of non-parametric methods were discarded. Therefore parametric procedures were used within the study.

3. Comparisons: Differences in Scores in Relation to Ethnic Identity and Ethnicity.

3.1. *Ethnicity*

In order to establish whether White and African samples differed significantly on the dependent variables (BMI, BSQ, SATAQ-3 including subscales, MEIM and its subscales) t-tests were performed. The results of these are detailed in Table 3, and clearly show that scores in relation to the dependent variables BSQ, overall SATAQ-3 and its dimensions; and affirmation, belonging and commitment subscale of the of the MEIM, as well as the MEIM overall score were not significantly different on the basis of ethnicity. However significant differences were found for the MEIM– ethnic identity subscale as well as the BMI. The pattern of means for these differences suggested that for BMI, African females had a greater BMI than White females in the sample, while for MEIM-ethnic-identity suggested that White females had a weaker sense of identity than Black females.

Means between both groups with regard to BSQ and the SATAQ-3 and all its subscales suggested that there was no difference between the groups for these variables. This may suggest that the groups internalize the content structure quite similarly in which they socialize. Affirmation, belonging and commitment were not significant either, thus establishing that groups hold similar ideals towards their

ethnicity. Nonetheless, there were significant differences on the Ethnic Identity subscale of the MEIM between the groups, possibly suggesting that both groups carry different ideologies concerning their ethnic identity which affects the overall view of who they are in terms of ethnicity.

Table 2: T-test on Ethnicity

	Sample		Pooled			Satterthwaite		
	African N=41	White N=40	t-value	df	p	t separ. var.est.	df	p 2- sided
BSQTot	93.95122	94.95000	-0.10039	79	0.920290	-0.10035	78.73545	0.920323
SATAQTot	71.24390	72.05000	-0.14211	79	0.887353	-0.14187	77.01805	0.887552
MEIMTot	35.68293	34.20000	1.98658	79	0.050436	2.00019	61.94918	0.049869
SATIGEN	20.56098	20.70000	-0.07177	79	0.942970	-0.07163	76.48358	0.943087
SATIATH	12.34146	13.77500	-1.44136	79	0.153436	-1.44154	78.98281	0.153385
SATPRES	16.19512	15.80000	0.24510	79	0.807015	0.24457	76.03070	0.807448
SATINFOR	22.14634	21.77500	0.19335	79	0.847184	0.19310	77.71546	0.847387
MEIMETH	14.29268	13.35000	2.42561	79	0.017563	2.43170	76.62464	0.017363
MEIMABCT	21.39024	20.85000	1.17375	79	0.244022	1.18270	58.73480	0.241693
BMI	26.08049	22.08750	4.679428	79	0.000012	4.696117	73.97049	0.000012

Further to assess the strength or the degree of the differences which had been found, effect size had been calculated. Effect size provides an idea of how strong an effect there is on the significant differences found within the results (Cohen, 1988; Grimm, 1993; Howell, 2004; Rosenthal, & Rosnow, 1991). The following guidelines had been provided by Cohen (1988) to assist in the interpretation of the outcome:

1. 0.01 = small effect
2. 0.06 = moderate effect
3. 0.14 = large effect.

The formula used to calculate effect is provided below including the results with regard to effect size on MEIMeth (ethnic identity) and BMI.

$$Eta^2 = \frac{t^2}{t^2 + N - 1}$$

The effect size obtained was 0.07 and 0.21 respectively for MEIMeth and BMI. This implies, according to the guidelines provided by Cohen (1988) that MEIMeth, although a significant difference was found between the White and African sample, that the effect is minimal (Cohen, 1988). However BMI has a greater effect size of

0.21 again supporting that BMI is significantly different between White and African females within this sample.

3.2. *Ethnic Identity*

To establish whether there were any differences in scores for BMI, the BSQ, and the SATAQ-3 (including subscales) on the basis of race and ethnic identity, a series of 2-Way ANOVAs were carried out. To create categories for the variable of ethnic identity, overall scores of the MEIM were divided into low (25-34) and high (35-47). The ‘high’ category, based on higher scores and indicating a greater ethnic identity, implies acceptance and pride in belonging to a specific ethnic group (Phinney, Chivira, & Tate, 1996; Phinney, 1990; Phinney, 1992). The ‘low’ category, based on lower scores and indicating less ethnic identity, possibly implies confusion, uncertainty or a lack of pride in identifying with the ethnic group of association (Phinney, et al., 1996, Phinney, 1990, Phinney, 1992).

Therefore to investigate whether any of the dependent variables in the study differed on the basis of race or ethnic identity, as well as the interactions between these two independent variables, 2-Way ANOVAs were carried out. The results are presented in Table 4. The only significant result which had been obtained was on BMI. This result had been supported by the t-test which had previously been conducted, thus implying that BMI plays a significant role in weight alone between White and African females within the study. Thus low or high scores reveal no differences across all the other measurement instruments used within the study, demonstrating no effect upon BSQ or the SATAQ-3 and its subscales.

Table 3: 2-Way ANOVA’s for Race and Ethnic Identity

	Degr. of Freedom	BMI SS	BMI MS	BMI F	BMI p
Intercept	1	42521.37	42521.37	2838.214	0.000000
Ethnicity	1	314.72	314.72	21.007	0.000017
M_Spl	1	0.76	0.76	0.051	0.822074
Ethnicity*M_Spl	1	9.81	9.81	0.655	0.420891
Error	77	1153.59	14.98		
Total	80	1487.47			

Table 3 continued : 2-Way ANOVA's for Race and Ethnic Identity

	Df	BSQTot SS	BSQTot MS	BSQTot F	BSQTot p	SATAQTot SS	SATAQTot MS	SATAQTot F	SATAQTot p
Intercept	1	689241.8	689241.8	347.6785	0.000000	382166.0	382166.0	576.5028	0.000000
Ethnicity	1	179.1	179.1	0.0903	0.764568	8.5	8.5	0.0129	0.909945
M_Spl	1	5343.4	5343.4	2.6954	0.104716	106.0	106.0	0.1598	0.690422
Ethnicity*M_Spl	1	571.7	571.7	0.2884	0.592816	340.6	340.6	0.5138	0.475666
Error	77	152645.7	1982.4			51043.6	662.9		
Total	80	158346.0				51476.6			
	Df	SATIGEN SS	SATIGEN MS	SATIGEN F	SATIGEN p	SATIATH SS	SATIATH MS	SATIATH F	SATIATH p
Intercept	1	32377.74	32377.74	424.4063	0.000000	12592.31	12592.31	614.0886	0.000000
Ethnicity	1	6.84	6.84	0.0897	0.765399	32.05	32.05	1.5630	0.215013
M_Spl	1	94.57	94.57	1.2397	0.268998	2.81	2.81	0.1372	0.712088
Ethnicity*M_Spl	1	42.63	42.63	0.5588	0.457027	0.63	0.63	0.0306	0.861608
Error	77	5874.29	76.29			1578.94	20.51		
Total	80	6002.89				1623.80			
	Df	SATPRES SS	SATPRES MS	SATPRES F	SATPRES p	SATINFOR SS	SATINFOR MS	SATINFOR F	SATINFOR p
Intercept	1	19519.56	19519.56	370.2983	0.000000	34718.76	34718.76	458.6925	0.000000
Ethnicity	1	22.61	22.61	0.4290	0.514423	1.47	1.47	0.0194	0.889569
M_Spl	1	42.04	42.04	0.7975	0.374626	57.65	57.65	0.7617	0.385525
Ethnicity*M_Spl	1	63.23	63.23	1.1996	0.276815	10.13	10.13	0.1338	0.715542
Error	77	4058.91	52.71			5828.19	75.69		
Total	80	4160.00				5902.89			

4. Relationships: Between Sociocultural Influences, BMI, Body Dissatisfaction, and Ethnic Identity

Pearson's Rank Coefficient Correlations were carried out to establish whether there was a relationship between various aspects of the BSQ, SATAQ-3, and MEIM in the sample. Data obtained from Pearson's was further used to provide an analysis to question 2.2 requiring a comparison of the correlations, using Fisher's $-z$ transformation. Pearson's results are given in tables 5 and 6 providing r and P-values. The results indicated that significant relationships did exist between certain subscales of the SATAQ-3, MEIM and BSQ (please refer to Table 5 and 6).

4.1. African and White Female Correlations

The BSQ scale showed a weak, positive and significant correlation with BMI within both groups. The results obtained revealed that White females demonstrated a greater significant relationship between BSQ and BMI. This may suggest that African females may be more satisfied with their bodies compared to White females regardless of the shape or size which they perceive themselves to be. Thus White females may experience greater body dissatisfaction even though their BMI is lower than the African sample within this study. This is consistent within a number of additional studies (Altabe, 1996; Demarest, & Allen, 2000; Fitzgibbon, Blackman, & Avellone, 2000; Iverson, 2005; Keski-Rahkonen, 2005).

Correlations between the BSQ and the SATAQ-3 and all its subscales revealed significant relationships for the White sample. However significant relationships had only been established for the overall score of the SATAQ-3 and its subscale – Pressure – for the African sample. The White sample revealed a strong positive significant correlation on the overall scale of the SATAQ-3 but a weak positive correlation had been obtained for the African sample within the study. This may suggest that White females demonstrate a greater relationship with perceptions of their body and the overall sociocultural influences which they are exposed to (Baker, 2005). This is not to suggest that African females do not experience the impact of other cultures, especially the media and Western factors, but possibly these are not as great an influence upon their perceptions with regard to the shape and size of their bodies. Correlations between the SATAQ-3 subscales – Internalization General and

Pressure and the BSQ, yielded weak positive correlations for the African sample. The BSQ (of the White sample), Internalization General and Pressure yielded strong positive correlations, while Internalization Athlete and the Information dimensions of the SATAQ-3 yielded weak - moderate correlations.

Strong positive correlations between the overall SATAQ-3 and its subscales were obtained for the White sample. Correlations (r) suggest that Pressure was greater within the White sample in relation to BSQ. Based on these results, although both groups have cultural factors which influence them and are external to them, it appears that most facets related to Internalization are interrelated to body shape and BMI, but more so amongst White females. This may further suggest that information regarding fashion and shape and size of the body is internalized, although not strongly correlated with BSQ or BMI amongst the African sample, surprisingly so, considering that they display greater BMI levels.

Table 4: Pearson's Correlations Coefficient of African Females

	BMI		BSQ		Overall SATAQ-3		Internalization General		Internalization Athlete		Pressure		Information		Overall MEIM		Ethnic Identity		Affirmation, Belonging, Commitment	
	r	P	r	P	r	P	r	P	r	P	r	P	r	P	r	P	r	P	r	P
BMI	-	-	0.36	0.02	0.11	0.50	-0.02	0.91	0.06	0.69	0.15	0.15	0.17	0.28	0.26	0.09	0.29	0.07	0.20	0.20
BSQ	0.36	0.02	-	-	0.32	0.04	0.29	0.07	0.25	0.10	0.47	0.02	0.11	0.48	0.12	0.46	0.11	0.51	0.11	0.49
Overall SATAQ-3	0.11	0.50	0.32	0.04	-	-	0.91	<0.0001	0.86	<0.0001	0.85	<0.0001	0.85	<0.0001	-0.07	0.68	0.08	0.61	-0.16	0.30
P<0.05																				

Table 5: Pearson's Correlations Coefficient of White Females

	BMI		BSQ		Overall SATAQ-3		Internalization General		Internalization Athlete		Pressure		Information		Overall MEIM		Ethnic Identity		Affirmation, Belonging, Commitment	
	r	P	r	P	r	P	r	P	r	P	r	P	r	P	r	P	r	P	r	P
BMI	-	-	0.46	0.003	0.29	0.08	0.31	0.054	0.16	0.31	0.29	0.07	0.19	0.21	0.12	0.44	0.12	0.42	0.06	0.72
BSQ	0.46	0.003	-	-	0.73	<0.0001	0.77	<0.0001	0.25	0.0001	0.78	<0.0001	0.45	0.004	0.14	0.38	-0.04	0.80	-0.20	0.22
Overall SATAQ-3	0.29	0.08	0.73	<0.0001	-	-	0.95	<0.0001	0.77	<0.0001	0.95	<0.0001	0.82	<0.0001	-0.03	0.86	0.15	0.35	-0.23	0.15
P<0.05																				

5. Comparisons between Correlations

In order to assess whether significant differences existed between the correlations of African and White females, Fisher's z test was used. Table 7 provides the results of the comparisons while the below equation is the formula which had been used to generate comparisons between the correlations.

Zra= African; Zrc= White; r₁= African; r₂; Na=African: 40; Nc= White: 41

$$Zra = \frac{1}{2}[\log_e (1 + r_1) - \log_e (1 - r_1)]$$

$$Zrc = \frac{1}{2}[\log_e (1 + r_2) - \log_e (1 - r_2)]$$

$$Z = \frac{Zra - Zrc}{\sqrt{\frac{1}{Na - 3} + \frac{1}{Nc - 3}}}$$

Table 6: Fisher's z Comparisons between the Correlation

	BMI		BSQ		Overall SATAQ-3		Internalization General		Internalization Athlete		Pressure		Information		Overall MEIM		Ethnic Identity		Affirmation, Belonging, Commitment	
	z	Re	z	Re	z	Re	z	Re	z	Re	z	Re	z	Re	z	Re	z	Re	z	Re
BMI	-	-	-0.52	N/S	-0.77	N/S	-1.47	N/S	-0.44	N/S	-0.63	N/S	-0.11	N/S	0.65	N/S	0.78	N/S	0.61	N/S
BSQ	-0.52	N/S	-	-	-2.56	**	-3.07	**	1.95	**	-2.34	**	-1.60	**	1.13	N/S	0.65	N/S	1.34	N/S
Overall SATAQ-3	-0.77	N/S	-2.56	**	-	-	0.996	N/S	1.21	N/S	-2.51	**	0.26	N/S	-0.03	N/S	-0.48	N/S	0.30	N/S
** P<0.05; N/S= not significant; Re= Result																				

The results obtained from Fisher's z reveal significant differences between the White and African sample on the BSQ and SATAQ-3 (including its subscales Internalization-General and Pressure) correlations which were previously established. It could be suggested that BSQ and SATAQ-3 including the subscales Internalization-General and Pressure have a greater influence upon perceptions of this sample as was initially demonstrated by the correlations.

6. Multiple Regression

Multiple regression, was conducted to establish whether sociocultural factors, levels of BMI and overall ethnic identity predicted levels of BSQ (please refer to table 8). This method attempts to analyze whether two or more independent variables has an effect upon a dependent variable (Howell, 2004; Pedhazur, 1997). Thus the implication was to establish whether perceptions of body shape could be explained by weight, sociocultural factors and the influences of ethnic identity. The analysis of variance for the model revealed a significant outcome ($p = 0.00000$), implying that the model supports the assumption that one or more variables has had a significant degree of influence upon BSQ. The correlation coefficient squared (R^2) was 0.363 with an F value of 14.632. Further explanation of R^2 establishes that 36% of the variance in the DV (BSQ) is explained by the BMI and sociocultural factors. However 64% of this relationship is not explained. Thus other variables which might not have been accounted for could be explained to some degree by the qualitative constructs provided by the participants.

Table 7: Standard Multiple Regression

Regression Summary for Dependent variables: BSQTot						
<i>R = 0.603; R² = 0.363; Adjusted R² = 0.338;</i>						
<i>F (3,77) = 14.632; p < 0.00000; Std. Error of Estimate: 36.191</i>						
	Beta	Std. Err. of Beta	B	Std. Err. of B.	t(77)	p-level
Intercept			-21.94	44.57	-0.5	0.624
BMI	0.28	0.097	2.90	0.99	2.91	0.005
SATAQTot	0.49	0.093	0.87	0.16	5.34	0.000
MEIMTot	-0.03	0.096	-0.45	1.24	-0.36	0.720

The two significant results which had been obtained were on the BMI and SATAQTot (overall sociocultural factors). It appears that weight distribution and sociocultural influences has an effect upon perceptions of body shape. Greater significance was found on SATAQTot, presumably implying that sociocultural influences has a greater correlation with the concept of body shape. It may be assumed that sociocultural influences exert an awareness of an ideal body shape generated by society which negatively impacts the view one carries about their own body. Furthermore the relationship between weight and body shape was found to be significant implying BMI has a further predictive outcome on the perceptions of body shape. Thus initial weight/BMI may create an unrealistic mental image about the shape of ones body. Nonetheless, immediate exposure to the lifestyle created by sociocultural factors generated by the media and initial BMI of the sample are supposed predictive factors of body dissatisfaction.

7. Qualitative Outcome

Qualitative analysis (Thematic content analysis) was performed upon the questions provided on the MEIM (see Appendix C). Major themes within this study were identified by the researcher by means of identifying categories which had emerged. All categories were identified through careful interpretation and analysis of the data with specific reference to previous studies (Puoane et al., 2005; Steyn, 2005). Coding procedures used a numerical and alphabet system which was categorized according to the questions outlined within the extended version of the MEIM. These procedures were conducted according to the outline provided by Patton (2002) and Zhang (2006) (please refer to page 42).

However analysis and interpretation of this qualitative data is limited as the reliability and validity are not apparent. Possible procedures which might have aided the credibility and transferability of the analysis might have been triangulation (Golafshani, 2003; Mays, & Pope, 2000; Seale, 1999; Whittemore, Chase, & Mandle, 2001). Performing methodological triangulation using two or more researchers could have been used to establish whether the emergent categories/themes were consistent between all researchers involved. Thus to establish the reliability of the analysis between the researchers, inter-rater reliability estimates (Kappa) could have been obtained (Golafshani, 2003; Seale, 1999).

Each question revealed relevant information and provided further insight towards the quantitative results which had been obtained. The major themes which had been identified within the study are summarized in the tables below and further elaborated upon in the discussion section.

Table 8: Question 16

Themes: Concepts which frequently occurred	Frequency	Percentage
Culture	29	35.8%
Biological or Inherited Phenomena	23	28.4%
Media	20	24.7%
Physical Attractiveness	9	11.1%
Weight expectancy	8	9.8%
Stereotype	8	9.8%
Self-Control	7	8.6%
Social phenomena	5	6.2%
Womanhood	5	6.2%
Illness related (concept of thinness)	4	4.9%
Historical event (size and shape)	4	4.9%
Altered viewpoints	3	3.7%
Health (concept of voluptuousness)	3	3.7%
Status	3	3.7%
Dissatisfaction	2	2.5%

With regard to question 16: *Would you say that ethnic identity has an impact on how you perceive your weight and body image?* – 80% of the respondents stated that they believed ethnic identity has had an impact upon their weight and body image. However it is noted that a number of categories or themes which were identified are externally related but are within the control of the individual. Conversely factors related to an inherited phenomenon are internally related but can be controlled by careful regulation of diet and physical activity. In relation to question 16, most of these themes describe how ethnic orientation affirms weight, size and shape. Thus most of these themes as portrayed by the sample, are related to behavioral goals which targets and determines desired weight outcomes as ascribed by events which are external but closely associated to the individual. Some factors are directly related to the perceptions of the physical body: *“If they see a person being too thin, they think that she/he is sick. So it’s better to keep your body size”* was how one African student comprehended weight attributes in relation to her ethnicity but was a significant interpretation regarding how people may view excessive weight loss in an article by

Khalique (2006) and demonstrated within a research article by Puoane et al (2005). Another individual stated that *“in the olden days an African woman was expected to be big. However due to illness the situation has changed. I don’t want to be bigger than I am. I think a lot of black African women do not take care of their bodies; I exercise because I don’t want to not care”*.

Additionally most African females made reference to their shape in terms of being culturally or traditionally related (*“the culture states that the mother should teach daughters how to look as they get older. It’s a symbol of men’s wealth”*). As a consequence it may relate back to how they perceive that there may be a cultural aspect to them being a particular shape, weight and size: *“Yes African people tend to pick up a lot of weight especially in butt, breast and hips”* while another ascertained that although it was a hard concept to explain but *“ethnicity has been a great influence in [her] weight especially lower body (butt and thighs)”*.

White females described the impact upon their weight and body image to factors associated with stereotypes of the ideal *white female: blonde, sexy, toned and slim/thin*. They described these stereotypes as being strongly associated with white females in terms of western influences generated by the media and how it challenges their perceptions in relation to the pressures imposed upon them in a changing society. African females are described as being more social by the White sample and becoming more aware of their bodies within a changing society affected by the thin-ideal. Nonetheless there appears to be unison agreement that African females are being pressured by media factors to conform to the thin ideal outside of their culture and ethnic identity (Altabe, 1996; Baker, 2005; Puoane et al., 2002; 2005)

Question 17: *Has your body concept been influenced by one of the two or both: family or friends?* This question had further elaborated upon the outcomes of question 16 by querying where the greatest influence upon weight was centered. Although a major element had been culture which was clearly demonstrated in question 16, an additional factor was the culture which exists within the family environment (family culture). This could probably be defined as the rules, values and judgments which families maintain and hold as important within their household (Dalton et al., 2001),

which is constructed around and influenced by “what we can and cannot do” (Watson, 1996, p.243).

The major influence in both African and White females was their mothers and how she would state that their weight was or was not appropriate: “*mother thinks I should lose weight*”, “*being big is part of being a woman*”; “*keep control of the weight*”; “*Yes, [my] mother wants me to live an African life saying that my body is fine for me. A good symbol of womanhood*”.

Some influence was not always verbal disagreement but was also viewed in terms of the scrutiny which some respondents held about the perceptions of their mothers weight (either being too thin, overweight or in a career which involved *physical perfection*). Nonetheless there appeared to be some form of pressure and judgment from family and friends to either maintain, loose or gain weight.

Table 9: Question 17

Themes: Concepts which frequently occurred	Frequency	Percentage
Family	35	43.2%
Friends	33	40.7%
Both	27	33.3%
Lose weight	24	29.6%
Pressure	24	29.6%
Weight maintenance	19	23.5%
Judgment	18	22.2%
Mother	17	20.9%
Weight gain	8	9.8%
Positive influence	5	6.2%
Body concept and Image	4	4.9%
Teasing/Mocking	3	3.7%
Spouse/Boyfriend	3	3.7%

Question 18 revealed that 95% of the sample ascribed overeating and consuming incorrect foods as a source of their weight gain, while 8.6% (especially White females) related the cause of overeating being directly related to stress or anxiety.

Those who were attempting to loose or control weight were using a combination of dieting and exercising (96%). However most White females were more specific in terms of their goals in relation to how they would achieve the desired outcomes.

CHAPTER IV. DISCUSSION: A THEORETICAL FRAMEWORK

The first hypothesis (1a) of the study had not been confirmed with regard to comparisons concerning White females. It appears that there are no differences in White and African females with regard to internalization processes of sociocultural factors, which influences the proposition of the ideal body image. However it had been confirmed that African females do indeed have greater ethnic identity scores and BMI levels. Low or high scores (hypothesis 1b), reveal no differences between body dissatisfaction, and levels of internalization of sociocultural influences. However BMI played a significant role between the two ethnic groups.

Relationships had been established between the BSQ and BMI as well as between the BSQ and SATAQ-3 (including its subscales). However the relationships stated within the hypothesis (2a), was not verified. Although BMI was found to be greater amongst African females within the study, the relationship between BMI, BSQ and SATAQ-3 was greater, suggesting that White females display greater dissatisfaction with weight and size even if they are lighter in mass. The relationship between BSQ and SATAQ-3 and its subscales suggests that White females internalize sociocultural factors more frequently. What had not been expected was the relationship between BSQ and Pressure for the African sample which may suggest that Black South African females are experiencing social pressures outside of their culture to conform to an ideal standard regarding body shape and size.

Hypothesis 2b had not had been confirmed entirely but differences which had been found were between the BSQ and Internalization General and Pressure. Implications of this result may suggest that the relationships found between BSQ and SATAQ-3 (Internalization –General and Pressure) is significantly different between the two groups further implying that White females are greatly influenced by sociocultural determinants. Additionally it has been found that at least two variables have had an effect upon body dissatisfaction within this study (hypothesis 3). It appears that sociocultural influences and levels of BMI may be determining factors that predict perceived body shape (or levels of body dissatisfaction).

OVERVIEW

Several components had been supported towards the idea that incorrect eating habits is a functional part of lifestyle in the emerging concepts of being overweight particularly within this sample. In addition it had been supported that a genetic, biological component is an unmistakable construct which should not be overlooked, as contributing towards the onset of weight gain. Furthermore this research cannot deny the values which the sample signifies or places upon culture as a major component contributing towards existing ideologies of physical appearance. It has been supported within the literature review that being overweight is a historical concept which has and still plays a significant role in the representation of female sexuality (*womanhood*), wealth and health (Barlow, & Durand, 2005). As previously acknowledged full figured women across a variety of cultures, including western societies were and may still be the symbols of strength, health, fertility, often assumed to be of a wealthy family or husband and were and are still considered alluring (Barlow, & Durand, 2005; Cassell, 1995; Johnson, & Broadnax, 2003; Khalique, 2006; Nasser, 1988; Pesic, n.d.; Soh et al., 2006; Steyn, 2005; Thompson, n.d.).

Dalton et al (2001) stated that “ethnicity is defined by language, customs, values...but not by physical appearance” (p. 157). However it was the argument of the researcher that ethnicity may have an influence to some degree upon the physical appearance of an individual or a group of people within or from a particular ethnic group. The research has indicated that ethnicity plays a major role in defining how one may look, is expected to appear in shape and size, and is a fundamental pressure construct within the lives of most females. Altabe (1998) states that cultural values are the important environmental structures which may define dissatisfaction with ones body as a cultural value. White females within the study established greater dissatisfaction with their bodies compared to the African females with regard to the correlations and Fisher’s *z* although not implied by the comparisons (t-test and 2-way ANOVA). Within this study, 15 (18.5%) White females were not overweight but were on an exercise and diet plan to loose additional weight. Thus it further demonstrates and supports additional research (Heinberg, Thompson, & Stormer, 1995) that cultural factors and values are a pivotal force in the role of eating disorders and poor body image (Brooks, 2006; Nasser, 1997; Nasser, 1998; Swartz, 1985). Within African cultures or communities within South Africa, the sample had stated that it is this

passing on of values which ascertains excess adipose tissue (fat) as acceptable and tolerable, specifically within non-western societies (Puoane et al., 2005; Soh et al., 2006; Steyn, 2005; Thompson, n.d.; Walker et al., 2006; Webb et al., 2004), and may be the reason for females of African ethnicity to be more tolerant of overweight or more voluptuous individuals.

Cultural values are often dictated by individuals within a community, implying that particular members within a group influence and/or may control perceptions that women carry about themselves within this study. These perceptions have been implicated by the broader society which consists of friends, family and the cultural institutions in which the sample exists (Banaji, & Prentice, 1994; Kladzinski, et al., 2004; Markus, & Kitayama, 1991; Nasser, 1997; Notman, 2003). The results of the study revealed that African females have a greater BMI compared to White females, and have a greater sense of their ethnic identity. Moreover ethnic identity has no impact upon any of the variables within the study at a comparative level. Thus implying that ethnicity (the biological and inherited influence) plays a greater role upon how cultural factors influence and dominates the internalized ideals held by the sample. Thus Nasser's (1997; 1998) suggestion, that women are indeed attached to forces which fashions her ideologies of the ideal femininity construct, may be correct. Thus White females appear to internalize more general concepts of femininity within society which are deeply rooted within the consumer and movie industry (Alexander, 2003; Baker, 2005; Notman, 2003; Powell, & Longino, 2002; Shilling, 2003).

In relation to body concept and satisfaction thereof, sociocultural factors such as information and pressure are dominant forces within both groups but are greater within the White sample. Thus sociocultural factors are a greater source of information for the White sample; whereas African females appear to obtain their information from cultural values which are more internally and externally *related and constructed* by cultural values determined by their ethnic association. Consequently it appears that although ethnic identity is stronger amongst the African sample, it does not play a role in body satisfaction to the degree of sociocultural influences. Nevertheless BMI appears to be linked to ethnicity, ethnic identity and more over, body concept, but is not linked or affected by sociocultural factors as implicated by the results. This statement contradicts the previous assumption that body image is

related to culture. However the cultural implications cannot be ignored within this study nor can it be excluded as a factor which does not contribute towards concepts held about the female body within South Africa. It cannot be excluded, as it is a dominant criterion, as established by the qualitative analysis as a major force in the perceptions which the sample held about themselves and the pressures and judgments which were generated by their weight. Therefore the believe that the symbol of sexuality and femininity is held by the larger physical features such as breast, buttocks and thighs (Puoane et al., 2006; Steyn, 2005, Nasser, 1997; 1998) is a cultural feature still in existence amongst and within African communities.

It has been demonstrated within this research that thinness, as described across a number of research areas (Abrahams, & Stormer, 2002; Iverson, 2005; Nasser, 1997; 1998; Lainad, 2007), is a concept more appealing and a more dominant expectancy within White communities - *but how could it be described by social identity?*

1. Ethnic Association or Ethnic Identity.

1.1. Social Categorization

Individuals within the sample hold a cognitive schema of how they perceive their bodies; in turn that specific cognitive perception had been generated by their social and cultural upbringing. This schema is the product of how one interacts within society and finds attachments with which they identify with, creating and maintaining historical foundations of body image (Wetherell, 1996). The historical foundations within this study are represented by the notions of how African and White females have embodied themselves in relation to their social context. The African body as such is a social category in which specific features are notable and have become featured characteristics of the African female. As a consequence it is the perceptual illusion constructed by groups (Turner, Oakes, Haslam, & McCarthy, 1994; Wetherell, 1996) based on their judgment of attractiveness which creates self-categorization (Turner et al., 1994).

This self-categorization “reflects an interaction both between comparative and normative fit and between fit and accessibility” (Turner et al., 1994). Thus factors such as cognitive understanding, affect of the category and motivational aspects or

factors and influence ethnic orientation and judgments of themselves based upon their body (Sirgy, 1982; Turner et al., 1994; Wetherell, 1996). Banaji, and Prentice (1994) conceptualized that “very few findings suggest that ethnicity influences collective identification strategies and their relation to psychological well-being” (p. 318). This particular study supports the notion that body concept can be influenced by social categorization and is central to self-concept in relation to body shape, size and weight (Banaji, & Prentice, 1994). Perceptions of shape, size and weight constructs the notion of the idealized body concept and image. This affects psychological well-being through the interpretation of needing to gain or loose weight. The decision is thus made according to the influences which are generated by identification with a group which may hold particular values concerning weight (Klaczynsky et al., 2004; Puhl, & Brownwell, 2003). This self-concept generated by categorizations, further leads towards an identity created within society (Klaczynsky et al., 2004; Puhl, & Brownell, 2003; Wetherell, 1996).

1.2. Social Identity

Social identification, is created by the individuals organization and cognitive impressions developed within social categorizations (Banaji, & Prentice, 1994; Wetherell, 1996). The identity which both ethnic groups associates themselves with, creates a distinctiveness amongst many additional factors, which includes body image. Strong identification with one’s body and ethnic group appears to have a significant impact on the assumption of affirmation, belonging and BMI (Phinney, 1990; Wetherell, 1996). Hence the establishment of the categorization and its affected state, including one’s identification with the ethnic group and its physical characteristics (shape, size and weight), creates an identity within the individuals’ cognitive schema and amongst members of the same or different ethnic group: if illustrated through general stereotypes (Banaji, & Prentice, 1994; Wetherell, 1996).

1.3. Social Comparison

Judgments had been one of the themes which had emerged from the data, upon which individuals had stated that they would compare themselves to family members and especially friends in order to develop an idea of what the social group requires at a

cultural and social level (Banaji, & Prentice, 1994; Wetherell, 1996). Thus following the completion of identification with the ethnic group in which one belongs and internalizes the physical characteristics thereof, *social comparisons* are then made (Wetherell, 1996). Some respondents within the study remarked upon how friends and family had influenced them:

1. White Respondent: *“My friends are very fashionable and are aware of their body image which has also influenced my body concept”.*

2. White Respondent: *“My mother is overweight which makes me very aware of what I could become”.*

3. African Respondent: *“Peers always make more comments of peoples bodies which make me very self conscious of my own body”.*

4. African Respondent: *“Maybe my friends as most are bigger than I am and are trying to loose weight. So I try to be their size”.*

5. African Respondent: *“Family - thinks I have an African body and its something I should be proud of”.*

Thus evaluation of self and judgments held by others generated positive or negative concepts of body image which is established as an important factor in the process of social comparisons (Wetherell, 1996).

2. The Idealized Body: A Psychoanalytic Interpretation.

The process which the individual undertakes to develop social comparisons is a process of behavior as a compulsion rather than a choice towards a positive self-image (Horney, 1942; 1951; 1968). Furthermore these comparisons are made as an internal factor by external sources in which the individual is responsible for how they feel and act (Horney, 1951; 1968). The behavior of the sample in relation to the external forces - *sociocultural influences and ethnic cultural ideologies* – had enabled them to identify sources which provided the opportunity to “bridge the gap between

[their] real self and [their] idealized image” (Horney, 1968, p. 115). Although Horney’s theory is mainly used to discuss neurotic personality behavior and based on cultural factors rather than biology or sexuality (Viljoen, 2003), it may provide insight into the concept of the real self – as defined by the body through cultural implications which have emerged within the qualitative and quantitative results within this research. Many of the respondents reflect or provide meaning to their bodies in relation to themselves, their culture or a culture which had brought a new realization of the female body (Klaczynsk et al., 2004). The female in this case is not only engulfed in cultural believe practices as signified by the majority of the African female sample, but is exposed to the sociocultural influences generated by the media.

Robbins (1958, p. 165) provides/identified 6 elements which Horney has used to conceptualize the real self. These were:

1. *“It is an original force*
2. *It is a source*
3. *It is a possible self or goal*
4. *It is a mental image*
5. *It is an entity of willing or desiring,*
6. *It is a felt abstraction.”*

The embodied female is an original force and its identification with ones culture and ethnic orientation is a unique aspect of the female as a woman (Notman, 2003). Culture is the context in which the body exists and prescribes the physical characteristics which had enabled the sample to label themselves within. However not everyone is happy with the original force (the body) and may attempt to find an additional source for the creation of an ideal image. This source is the ethnic believe system, mediated factors and cultural believes which exist within the group (Wetherell, 1996) or stereotypes which enforces pressures and enables judgments. The sample had demonstrated that they have particular weight loss goals which may enable them to obtain *a self* which they could identify with as being attractive, and generates confidence.

6. African Respondent: *“Peers seem to like the idea of a person being healthy (even when they’re not) so that influences me”.*

This particular individual has related a conscious factor of attempting to be better than her peers. In this regard it is a social comparison which she had made about herself relative to her peers but is also a source and a goal towards her attempts of an idealized image.

7. White Respondent: *“Yes, most white women in today’s society aim to keep a desirable weight, although black women are beginning to become more aware of their body as they are more involved in society and public actions than years before”*

8. White Respondent: *“They definitely would encourage you to be thinner even if you weighed 47kg. They’d tell you, you were wobbly and pinch your fatty bits even if you weren’t fat. I think that stays with you for life. My friends are very weight conscious. They often look at bigger people and comment negatively about them*

There is a desire or willingness to be perceived as attractive and within the normal weight range set out by society. There is an overwhelming desire from most of the respondents to hold a mental picture of their bodies and how it relates to their culture and how they wish it could be. However forces which influence these decisions are key sources particularly from family and friends which generate pressures to conform to socialized norms, which may generate hidden anxieties about ones overall body concept (Powell, & Longino, 2002; Puhl, & Brownell, 2003).

Horney had suggested that in order to ward off these anxieties individuals would *move towards people*, where they would seek love and approval, thus appearing good and virtuous (Horney, 1942; 1968). There are cases within the sample where respondents claim to abide by the wishes of their friends or family in order not to feel excluded or be deviant against cultural values. The second option to ward off anxieties is to *move against people* in order to achieve ambition and superiority over others, therefore attempting to be strong and heroic. This was clearly demonstrated by respondent 6 (see above) who wanted to obtain or be superior in her attempts to be *healthy* or fit. The third option as specified by Horney (1942; 1968) was to *move away from people* to gain perfection over one’s self and feelings of self-sufficiency

(Horney, 1942; Horney, 1951; 1968). An excellent example of such behavior in relation to body concept is:

9. African Respondent: *“No I’m happy with my body although it is round and concerned about parts of it. Now and then it disturbs me but I don’t feel like losing my heritage”*

10. White Respondent: *“No cause you have control. Regardless of genetics”.*

These respondents illustrate a position of taking control over how they want to look and feel regardless of other people dictating the normal standards. However respondent 9 demonstrates *moving away from people*, but not away from the implied cultural or ethnic standards.

In relation to the concept of ethnic identity and body concept, weight and image, there is the concept of developing the ideal body image within the boundaries of the individuals’ heritage. Within the analysis there are concepts of developing a positive self-image but there are individuals who have developed self-hatred towards their body concept. The self-hatred process and expressions thereof, is a consequence of unrealistic perceptions of how the individuals wish to be (Horney, 1942; 1951; 1968) as established by a few of the participants. Individuals with high body dissatisfaction often carry unrealistic expectations of immediate weight loss (even if they are not overweight) and are often conflicted by surrounding views of modern culture and the idealized body concept of health and beauty (Klaczynsky et al., 2004; Puhl, & Brown et al., 2003).

3. Limitations, Gaps and Recommendations.

Various factors were not accounted for within this study. Variables such as age, marital and employment status may have had an impact upon BMI, body dissatisfaction and sociocultural factors but had not been assessed. Age could have been a significant variable as the sample had an appropriate and varied age range between 18 – 33 to provide interesting results. Furthermore it would be interesting to evaluate how females across a greater age range (possibly 18 – 45) state how family

and peer influences, and ethnic and cultural factors impact upon their view of their body concept. The data obtained suggested that White females might be experiencing a higher degree of body dissatisfaction but it would be interesting to conduct the study in rural areas to assess the impact of urban influence upon girls entering an urban environment.

Furthermore it might be intriguing to expand the present research to understand the impact of body dissatisfaction, sociocultural influences and ethnic orientation upon male participants. As a consequence it could provide additional comparisons across gender domains. Marital status might have had an impact upon body image, BMI and sociocultural factors: thus could be explored within additional studies, as a number of participants illustrated that their partners had had an influence upon their body concept. To investigate this area, questions within the questionnaires could be specifically targeted to extract this information. Additionally employment should be investigated to understand the work environment as a source of stress and pressure towards body dissatisfaction but with a sample of working women and men.

CHAPTER V: CONCLUSION AND COMPARISONS - INFLUENCES UPON PERCEPTIONS OF WEIGHT.

An overview of the factors which have been influential and which envelop the views concerning weight are traditional cultural values, sociocultural influences within this sample which could fit within Hancock and Perkins' (1985) model of health (Mandala of health) (see figure 1). There is a clear indication that family and friends, but particularly the mother, have a great influence upon the mindset of their daughters in relation to their bodies with regard to weight. Mothers have had a significant input by fostering the development of negative or positive self-images. The model encompasses a number of factors, which may influence health, holistically viewing the individual within their various spheres of existence. Therefore the family (and friends), body and mind are the core or heart of the individuals' well-being regarding their weight thus conceptualizing the individuals' ideologies from their own perspective. These systems or networks had provided meaningful relationships to the individual about their body, weight and self-image.

Factors of lifestyle (university), and the gym environment had interacted with the individual's personal behavior, psycho-social and economic environment, the physical environment and human biology; which had all enabled the notion that a different body ideal may be achieved. Even though the biological factor of the individual plays a significant role in relating their image back to traditional cultural values or stereotypes it still remains a factor of the human-made environment (consumer and movie industry), (VanLeeuwen et al., 1999).

This study had demonstrated that there is an overwhelming tolerance towards larger females but pressures do exist to loose weight, to conform to an ideal standard of femininity and to adhere to cultural standards of womanhood. In order to do so and conform to or to achieve the generated standards there is a trend to use commonalities such as exercise and/or dieting to institute a likeness to the publicized and idealized thin body image across ethnicities (Peltzer, 2003; Caradas et al., 2001; Mciza et al., 2005; Wassenaar, le Grange, et al., 2000).

As a consequence - culturally, being overweight within a number of societies including South Africa do indeed have a significant impact upon larger women especially amongst specific ethnic groups (Goedecke et al., 1995; Nasser, 1988; Webb, Looby, & Fults-McMurtery, 2004). Thus it has been found within numerous studies including the present investigation, that White females experience greater body dissatisfaction than African females (Williamson, Womble, Zucker, Reas, White, Blouin, & Greenway, 2000). It further suggests that African females are far more comfortable with larger physiques as they develop in a cultural environment which is more tolerant of overweight individuals (Caradas et al, 2001).

REFERENCE LIST

- Aacharya, R. P., Prasad, P. N., & Gupta, M. P. (2006). Body Mass Index and its Relation with Hypertension, Diabetes Mellitus, and Ischemic Heart Disease in a General Health Clinic in Nepal. *Journal of Institute for Medicine*, 28 (1), 45 – 48.
- Abell, S. C., & Richards, M. H. (1996). The Relationship between Body Shape Satisfaction and Self-Esteem: An Investigation of Gender and Class Differences. *Journal of Youth and Adolescence*, 25 (5), 691 – 703
- Abrahams, L. S., & Stormer, C. C. (2002). Sociocultural Variations in the Body Image Perceptions of Urban Adolescent Females. *Journal of Youth and Adolescence*, 31 (6), 443 – 450.
- Adams, M. (2004). *Weight Loss Centers Are Popular, But Do They Really Work?* Retrieved May 18, 2007 from the World Wide Web: www.newstarget.com/001686.html
- Alexander, S. M. (2003). Stylish Hard Bodies: Branded Masculinity in ‘Men’s Health’ Magazine. *Sociological Perspectives*, 46 (4), 535 – 554.
- Allsen, P. E., Harrison, J. M., & Vance, B. (1997). *Fitness for Life: An Individual Approach*. (6th ed.). McGraw-Hill: Boston, Massachusetts.
- Altabe, M. (1998). Ethnicity and Body Image: Quantitative and Qualitative Analysis. *International Journal of Eating Disorders*, 23, 153 – 159.
- Anderson-Fye, E. P. (2004). A “Coca-Cola” Shape: Cultural Change, Body Image, and Eating Disorders in San Andrés, Belize. *Culture, Medicine and Psychiatry*, 28, 561 – 595.
- Baker, C. N (2005). Images of Women’s Sexuality in Advertisements: A Content Analysis of Black- and White-Orientated Women’s and Men’s Magazines. *Sex Roles*, 52 (1/2), 13 – 27.
- Banaji, M., & Prentice, D. A. (1994). The Self in Social Contexts. *Annual Review of Psychology*, 45, 297 – 332.
- Barlow, D. H., & Durand, M. V. (2005). *Abnormal Psychology: An Integrative Approach*. (4th ed). United States of America, Belmont, CA: Thomson Wadsworth.
- Berkman, N. D., Lohr, K. N., & Bulik, C. M. (2007). Outcomes of Eating Disorders: A Systematic Review of the Literature. *International Journal of Eating Disorders*, 40 (4), 293 – 309.

- Bourne, L. T., Lambert, E. V., & Steyn, K. (2002). Where does the Black Population of South Africa stand on the Nutrition Transition? *Public Health Nutrition*, 5 (1A), 157 – 162.
- Brannon, L., & Feist, J. (2000). *Health Psychology: An Introduction to Behavior and Health*. Belmont, CA: Wadsworth/Thompson Learning.
- Bray, G. A. (1999). Clinical Evaluation of the Obese Patient. *Bailliere's Best Practice & Research: Clinical Endocrinology and Metabolism*, 13 (1), 79 – 92.
- Brehm, B. A. (1999). Body Dissatisfaction: Causes and Consequences. *Fitness Management Magazine, Los Angeles, California*, 15 (4), 28 – 30. Retrieved August 8, 2005 from the World Wide Web: www.fitnessmanagement.com/FM/tmpl/genPage.asp?p=/information/articles/library/labnotes/labnotes0399.html.
- Brooks, B. (2006). *Obesity as a Culture-Bound Syndrome: The Impacts of Socioeconomics and Body Image*. Retrieved August 13, 2007 from the World Wide Web: www.as.ua.edu/ant/binon/ant476/papers/Brooks.pdf
- Buchan, T., & Gregory, L. D. (1984). Anorexia Nervosa in a Black Zimbabwean.
- Cafri, G., Yamamiya, Y., Brannick, M., & Thompson, J. K. (2005). The Influence of Sociocultural Factors on Body Image: A Meta-Analysis. *Clinical Psychology: Science and Practice*, 12, 421 – 433.
- Calogero, R. M., Davis, W. M., & Thompson, J. K. (2004). The Sociocultural Appearance Questionnaire (SATAQ-3): Reliability and Normative Comparisons of Eating Disordered Patients. *Body Image: An International Journal of Research*, 1, 193 – 198.
- Caradas, A. A., Lambert, E. V., & Charlton, K. E. (2001). An Ethnic Comparison of Eating Attitudes and Associated Body Image Concerns in Adolescent South African Schoolgirls. *Journal of Human Nutrition and Dietetics*, 14, 111 – 120.
- Cash, T. F. (2005). The Influence of Sociocultural Factors on Body Image: Searching for Constructs. *Clinical Psychology: Science and Practice*, 12, 438 – 442.
- Cassell, J. (1995). Social Anthropology and Nutrition: A Different Look at Obesity in America. *Journal of the American Dietetic Association*, 95 (4), 424 – 427.
- Cilliers, J., Senekal, M., & Kunneke, E. (2006). The Association between the Body Mass Index of First Year Female University Students and their Weight-Related Perceptions and Practices, Psychological Health, Physical

Activity and Other Physical Health Indicators. *Public Health Nutrition*, 9 (2), 234 – 243.

Clark-Stone, S. (2000). *Working with the Person with Disordered Eating Patterns: An Introductory text for Mental Health Clinicians*. Retrieved May 18, 2007 from the World Wide Web:
www.edglos.org.uk/cliniciansmanagement.pdf

Coolican, H. (2004). *Research Methods and Statistics in Psychology*. (4th ed). Hodder & Stoughton Educational: London.

Cooper, C. R., & Denner, J. (1998). Theories Linking Culture and Psychology: Universal and Community-Specific Processes. *Annual Review of Psychology*, 49, 559 – 584.

Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The Development and Validation of the Body Shape Questionnaire. *International Journal of Eating Disorders*, 6 (4), 485 – 494.

Culture and Health. (n.d.). Retrieved March 20, 2007 from the World Wide Web:
http://medi.wiley.com/product_data/excerpt/60/04708473/0470847360.pdf

Dally, P., & Gomez, J. (1980). *Obesity and Anorexia Nervosa: A Question of Shape*. Faber and Faber: London.

Dalton, J. H., Elias, M. J., Wandersman, A. (2001). *Community Psychology: Linking Individuals and Communities*. Wadsworth/Thompson Learning: Belmont, CA.

Demarest, J., & Allen, R. (2000). Body Image: Gender, Ethnic and Age Differences. *The Journal of Social Psychology*, 14 (4), 465 – 472.

Deurenberg, P., & Yap, M. (1999). The Assessment of Obesity: Methods for Measuring Body Fat and Global Prevalence of Obesity. *Bailliere's Best Practice & Research: Clinical Endocrinology and Metabolism*, 13 (1), 1 – 11.

de Zwaan, M. D., & Mitchell, J. E. (1992). Binge Eating Disorder in the Obese. *Annals of Medicine*, 24, 303 – 308.

Dingemans, A. E., Bruna, M. J., & van Furth, E. F. (2002). Binge Eating Disorder: A Review. *International Journal of Obesity*, 26, 299 – 307.

DiNicola, V. F. (1988). Anorexia Nervosa from a Transcultural Perspective: The Requirements for a Comprehensive Model. *The BASH Magazine*, 7, 210 – 215.

- Dowson, J., & Henderson, L. (2001). The Validity of a Short Version of the Body Shape Questionnaire. *Psychiatric Research*, 102, 263 – 271.
- Dwyer, J. T., Feldman, J. J., & Mayer, J. (1970). The Social Psychology of Dieting. *Journal of Health and Social Behavior*, 11 (4), 269 – 287.
- Ebigo, P. O., & Okunna, E. N. (1986/87). Anorexia Nervosa Resulting from Family rejection. *Psychopathology Africaine*, 21, 177 – 183.
- Eckersley, R. (2006). Is Modern Culture a Health Hazard? *International Journal of Epidemiology*, 35, 252 – 258.
- Evans, C., & Dolan, B. (1993). Body Shape Questionnaire: Derivation of Shortened “Alternative Forms.” *International Journal of Eating Disorders*, 13, 63 – 74.
- Fishmann-Havstad, L., & Marston, A. R. (1984). Weight-Loss Maintenance as an Aspect of Family Emotion and Process. *Journal of Clinical Psychology*, 23, 265 – 271.
- Fitzgibbon, M. L., Blackman, L. R., & Avellone, M. E. (2000). The Relationship between Body Image Discrepancy and Body Mass Index across Ethnic Groups. *Obesity Research*, 8 (8), 582 – 589.
- Flick, U. (2002). *An Introduction to Qualitative Research*. (2nd ed.). London: Sage Publication.
- Foddy, W. (1993). *Constructing Questions for Interviews and Questionnaires: Theory and Practice in Social Research*. New York: Cambridge University Press.
- Frable, D. E. S. (1997). Gender, Racial, Ethnic, Sexual, and Class Identities. *Annual Review of Psychology*, 48, 139 - 162.
- Gallahue, D. L., Ozman, J. C. (2002). *Understanding Motor Development: Infants, Children, Adolescents, Adults*. (5th ed.). New York: McGraw-Hill.
- Goedecke, J. H., Jennings, C. L., & Lambert, E. V. (1995). Obesity in South Africa. In J. Fourie, & K. Steyn. (Ed). *Chronic Diseases of Lifestyle in South Africa: Review and Identification of Essential Health Research Priorities* Tygerberg: Medical Research Council.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *The Qualitative Report*, 8 (4), 597 – 607.

- Hancock, B. (2002). *Trent Focus for Research and Development in Primary Health Care: An Introduction to Qualitative Research*. Retrieved September 20, 2007 from the World Wide Web: http://faculty.uccb.ns.ca/pmacintyre/course_pages/MBA603/MBA603_files/IntroQualitativeResearch.pdf
- Haworth-Hoeppner, S. (2000). The Critical Shapes of Body-Image: The Role of Culture and Family in the Production of Eating Disorders. *Journal of Marriage and the Family*, 62 (1), 265 – 271.
- Heinberg, L. J., Thompson, J. K., & Stormer, S. (1995). Development and Validation of the Sociocultural Attitudes towards Appearance Questionnaire. *International Journal of Eating Disorders*, 17, 81 – 89.
- Horney, K. (1942). *Self-Analysis*. New York: W. W. Norton and Co.
- Horney, K. (1951). *Neurosis and Human Growth : The Struggle toward Self-Realization*. London : Routledge and Kegan Paul.
- Horney, K. (1968). *Our Inner Conflicts: A Constructive Theory of Neurosis*. London: Routledge & Kegan Paul Ltd.
- Howell, D. C. (2004). *Fundamental Statistics for the Behavioral Sciences*. (5th ed.). Belmont, CA : Thomson-Brooks/Cole
- Hubbard, V. S. (2000). Defining Overweight and Obesity: What are the Issues? *American Journal of Clinical Nutrition*, 72, 1067 – 1068.
- Huynen, M. M. T. E, Martens, P., & Hilderink, H. B. M. (2005). *The Health Impacts of Globalisation: A Conceptual Framework*. Retrieved April 17, 2007 from the World Wide Web: www.rivm.nl/bibliotheek/rapporten/550012007.pdf
- Iverson, A. (2005). *Mind Over Matter: Race, Body and Eating Disorders*. October 18, 2007 from the World Wide Web: www.womensstudies.ku.edu/senior_seminar/anne_iverson_paper.doc
- Jacoby, E., Goldstein, J., López, A., Núñez, E., & López, T. (2003). Social Class, Family, and Life-Style Factors Associated with Overweight and Obesity among Adults in Peruvian Cities. *Preventive Medicine*, 37, 396 – 405.
- Johnson, R. W., & Broadnax, P. A. (2003). A Perspective on Obesity. *The ABNF Journal*, 14 (3), 69 – 70.

- Jones, I. (1997). Mixing Qualitative and Quantitative Methods in Sports Fan Research. *The Qualitative Report*, 3 (4). Retrieved from June 11, 2007 from the World Wide Web: www.nova.edu/ssss/QR/QR3-4/jones.html
- Kakeshita, I. S., & de Sousa Almeida, S. (2006). Relationship between Body Mass Index and Self-Perception among University Students. *Rev Saúde Pública*, 40 (3), 1 – 7.
- Keski-Rahkonen, A. (2005). Acculturation, Obesity and Eating Disorders. *European Eating Disorders Review*, 13, 297 – 300.
- Khalique, S. (2006). *South African Pile on the Pounds to Avoid AIDS Stigma*. The Independent (London). August 14. Retrieved March 20, 2007 from the World Wide Web: www.findarticles.com/p/articles/mi_qn4158/is_20060814/ai_n16649263
- Kilicarslan, A., Isildak, M., Guven, G. S., Tanriover, M. D., Duman, E., Saracbası, O., & Sozen, T. (2006). Demographic, Socioeconomic and Educational Aspects of Obesity in an Adult Population. *Journal of the National Medical Association*, 98 (8), 1313 – 1317.
- Klaczynsk, P. A., Goold, K. W., & Mudry, J. J. (2004). Culture, Obesity Stereotypes, Self-Esteem, and the “Thin Ideal”: A Social Identity Perspective. *Journal of Youth and Adolescence*, 33 (4), 307 – 317.
- Klumbiene, J., Petkeviciene, J., Helasoja, V., Prättälä, R., & Kasmel, A. (2004). Sociodemographic and Health Behavior Factors Associated with Obesity in Adult Populations in Estonia, Finland and Lithuania. *European Journal of Public Health*, 14 (4), 390 – 394.
- Kruger, H. S., Venter, C. S., & Vorster, H. H. (2001). Obesity in African Women in the North West Province, South Africa is associated with an increased risk of Non-Communicable Diseases: the THUSA Study. *British Journal of Nutrition*, 86, 733 – 740.
- Kruger, H. S., Puoane, T., Senekal, M., & van der Merwe, M. (2005). Obesity in South Africa: Challenges for Government and Health Professionals. *Public Health Nutrition*, 8 (5), 491 – 500.
- Lainand. (2007). *Black Women and Body Image: Race, Ethnicity, & Culture Body Image*. Retrieved October 18, 2007 from the World Wide Web: www.blogger.org/node/21829.
- Latha, K. S., Supriya, H., Bhat, S. M., Sharma, P. S. V. N., & Pooja, R. (2006). Body Image, Self-Esteem and Depression in Female Adolescent College Students. *Journal of Indian Association for Child and Adolescent Mental Health*, 2 (3), 78 – 84.

- Lean, M. E. J. (1996). *Obesity: A Clinical Issue*. London: Science Press, Ltd.
- Le Grange, D., Louw, J., Breen, A., & Katzman, M. A. (2004). The Meaning of Self-Starvation in Impoverished Black Adolescents in South Africa. *Culture, Medicine and Psychiatry*, 28, 439 – 461.
- Levy, S. S., & Ebbeck, V. (2005). The Exercise and Self-Esteem Model in Adult Women: The Inclusion of Physical Acceptance. *Psychology of Sport and Exercise*, 6, 571 – 584.
- Lindeman, A. K. (1999). Quest for the Ideal Weight: Costs and Consequences. *Medicine and Science in Sports and Exercise*, 31 (8), 1135 – 1140.
- Littlewood, R. (2004). Globalization, Culture, Body Image and Eating Disorders. *Culture, Medicine and Psychiatry*, 28, 249 – 259.
- Lynch, F. (n.d.). The Problem of Obesity: Definition and Distribution of Obesity. Retrieved April 10, 2007 from the World Wide Web: www.engology.com/articleobesity.htm
- Marcus, M. D., Moulton, M.M., & Greeno, C. G. (1995). Binge Eating Onset in Obese Patients with Binge Eating Disorder. *Addictive Behavior*, 20, 747 – 755.
- Marcus, M.D., Smith, D. E., Santelli, R., Kaye, W. (1992). Characterization of Eating Disordered Behavior in Obese Binge Eaters. *International Journal of Eating Disorders*, 12, 249 – 255.
- Markus, H. R., & Kitayama, S. (1991). Culture and the Self: Implications for Cognition, Emotion, and Motivation. *Psychological Review*, 98 (2), 224 – 253.
- Marieb, E. N. (2001). *Human Anatomy & Physiology*. (5th ed.). San Francisco: Benjamin Cummings.
- Marshall, B. (n. d.). *The History of Body Mass Index – Height and Weight Matter*. Retrieved April, 2007 from the World Wide Web: www.thehistoryof.net/32736-history-of-body-mass-index.html
- Marshall, C., & Rossman, G. B. (1995). *Designing Qualitative Research*. (2nd ed.). California: SAGE Publications, Inc.
- Mays, N., & Pope, C. (2000). Qualitative Research in Health Care: Assessing Quality in Quantitative Research. *British Medical Journal*, 320, 50 – 52.

- McLeod, J. (2003). *An Introduction to Counselling*. (3rd ed.). Maidenhead: McGraw-Hill.
- Mciza, Z., Goedecke, J.H., Steyn, N.P., Charlton, K., Puoane, T., Meltzer, S., Levitt, N.S., & Lambert, E.V. 2005. Development and Validation of Instruments Measuring Body image and Body Weight Dissatisfaction in South African Mothers and their Daughters. *Public Health Nutrition*, 8 (5), 509-519.
- Montague, M. C. (2003). The Physiology of Obesity. *The ABNF Journal*, 14 (3), 56 – 60.
- Murphy, K. R., & Davidshofer, C. O. (2001). *Psychological Testing: Principles and Applications*. (5th ed.). Upper Saddle River, NJ: Prentice Hall International, Inc.
- Nasser, M. (1997). *Culture and Weight Consciousness*. London: Routledge.
- Nasser, M. (1998). Culture and Weight Consciousness. *Journal of Psychosomatic Research*, 32 (6), 573 – 577.
- Nau, D. S. (1995). Mixing Methodologies: Can Bimodal Research be a Viable Post-Positivist Tool? *The Qualitative Report*, 2 (3). Retrieved June 11, 2007 from the World Wide Web: www.nova.edu/ssss/QR/QR2-3/nau.html
- Notman, M. T. (2003). The Female Body and Its Meaning. *Psychoanalytic Inquiry*, 23 (4), 572 – 591.
- Nwaefuna, A. (1981). Anorexia Nervosa in a Developing Country. *British Journal of Psychiatry*, 138, 270.
- O'Neill, R. (2006). *The Advantages and Disadvantages of Qualitative and Quantitative Research Methods*. Retrieved June 11, 2007 from the World Wide Web: www.roboneill.co.uk/papers/research_methods.htm
- Park, J. (2003). Adolescent Self-Concept and Health into Adulthood. *Health Reports (Statistics Canada, Catalogue 82 -300)*, 14 Suppl, 41 – 52.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods*. (3rd ed.). California: SAGE Publications, Inc.
- Peltzer, K. (1995). *Psychology and Health in African Cultures: Examples of Ethnopsychotherapeutic Practice*. Frankfurt: IKO – Verlag für interkulturelle Kommunikatin
- Peltzer, K. (2001). Psychosocial Correlates of Healthy Lifestyles in Black and White South Africans. *Social Behavior and Personality*, 29 (3), 249 – 256.

- Peltzer, K. (2003). Body Image and Physical Activity among Black University Students in South Africa. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 9 (2), 208 – 217.
- Perdue, W., Mensah, G., Goodman, R., Moulton, A. (2005). A Legal Framework for Preventing Cardiovascular Diseases. *American Journal of Preventative Medicine*, 29 (5), 139 – 145.
- Pesic, M. (n.d.). *The History of Obesity*. Retrieved April 14, 2007 from the World Wide Web: <http://ezinearticles.com/?The-History-of-Obesity&id=357342>
- Peterson, R. A. (1944). *Constructing Effective Questionnaires*. Thousand Oaks: Sage Publications 2000.
- Phinney, J. S. (1989). Stages of Ethnic Identity in Minority Group Adolescents. *Journal of Early Adolescence*, 9, 34 – 49.
- Phinney, J. S. (1990). Ethnic Identity in Adolescents and Adults: Review of Research. *Psychological Bulletin*, 108, 499 – 514.
- Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A New Scale for Use with Diver Groups. *Journal of Adolescent Research*, 7, 156 – 176.
- Powell, J. L, & Longino, C. F. (2002). Postmodernism versus Modernism: Rethinking Theoretical Tensions in Social Gerontology. *Journal of Aging and Identity*, 7 (4), 219 – 226.
- Powers, S. K., & Howley, E.T. (2004). *Exercise Physiology*. (5th ed). Versailles, KY: McGraw-Hill pp. 364-365
- Prentice, A. M., Jebb, S. A. (2001). Beyond Body Mass Index. *Obesity Reviews*, 2, 141 – 147.
- Puhl, R. M., & Brownell, K. D. (2003). Psychosocial Origins of Obesity Stigma: Toward Changing a Powerful and Pervasive Bias. *Obesity Reviews*, 4, 213 – 227.
- Puoane, T., Fourie, J. M., Shapiro, M., Rosling, L., Tshaka, N.C., & Oelofse, A. (2005). Big is Beautiful – An Exploration of Urban Black women in a South African Township. *South African Journal of Clinical Nutrition*, 18 (1), 6 – 15.
- Puoane, T., Steyn, K., Bradshaw, D., Laubscher, R., Fourie, J., Lambert, V., & Mbananga, N. (2002). Obesity in South Africa: The South African Demographic and Health Survey. *Obesity Research*, 10 (10), 1038 – 1048.

- Reas, D. L., Masheb, R. M., & Grilo, C. M. (2004). Appearance vs. Health Reasons for Seeking Treatment among Obese Patients with Binge Eating Disorder. *Obesity Research*, 12 (5), 758 – 760.
- Reimers, K. (2000). Eating Disorders and Obesity. In T. R., Baechle, & R. W., Earle. (Ed.). *Essentials of Strength Training and Conditioning*. pp. 259 – 272. Human Kinetics: Champaign, IL.
- Riley, N. M., Bild, D. E., Cooper, L., Schreiner, P., Smith, D. E., Sorlie, P., & Thompson, J. K. (1998). Relation of Self-Image to Body Size and Weight Loss Attempts in Black Women: The CARDIA Study. *American Journal of Epidemiology*, 148 (11), 1062 – 1068.
- Roberts, R., Phinney, J., Masse, Chen, Y., Roberts, C., & Romero, A. (1999). The Structure of Ethnic Identity in Young Adolescents from Diverse Ethnocultural Groups. *Journal of Early Adolescence*, 19, 301 – 322.
- Robbins, I. (1958). An Analysis of Horney's Concept of the Real Self. *Educational Theory*, 8 (3), 162 – 168.
- Rosen, J. C., Jones, A., Ramirez, E., & Waxman, S. (1996). Body Shape Questionnaire: Studies of Validity and Reliability. *International Journal of Eating Disorders*, 20 (3), 315 – 319.
- Rosenthal, R., & Rosnow, R. L. (1991). *Essentials of Behavioral Research: Methods and Data Analysis*. (2nd ed.). Boston, Massachusetts: McGraw-Hill.
- Sadock, B. J., & Sadock, V. A. (2003). *Kaplin & Sadock's Synopsis of Psychiatry*. (9th ed). Philadelphia, Pennsylvania: Lippincott Williams & Wilkins.
- Schooler, L., Ward, M., Merriwether, A., & Caruthers, A. (2004). Who's that Girl: Television's Role in the Body Image Development of Young White and Black Women. *Psychology of Women Quarterly*, 28, 38 – 47.
- Seale, C. (1999). Quality in Qualitative Research. *Qualitative Inquiry*, 5 (4), 465 – 478.
- Senekal, M., Steyn, N. P., Mashego, T. B., & Nel, J. H. (2001). Education of Body Shape, Eating Disorders and Weight Management Related Parameters in Black Female Students of Rural and Urban Origins. *South African Journal of Psychology*, 31 (1), 45 – 53.
- Shilling, C. (2003). *The Body and Social Theory*. (2nd ed.). London: SAGE Publications.

- Sigall, B. A., & Pabst, M. S. (2005). Gender Literacy: Enhancing Female Self-Concept and Contributing to the Prevention of Body Dissatisfaction and Eating Disorders. *Social Science information*, 44, (1), 85 – 111.
- Simon, B., Pantaleo, G., & Mummendey, A. (1995). Unique Individual or Interchangeable Group Member? The Accentuation of Intragroup Differences Versus Similarities as an Indicator of the Individual Self Versus the Collective Self. *Journal of Personality and Social Psychology*, 69, 106 – 119.
- Sirgy, M. J. (1982). Self-Concept in Consumer Behavior: A Critical Review. *The Journal of Consumer Research*, 9 (3), 287 – 300.
- Soh, N. L., Touyz, S. W., & Surgenor, L. J. (2006). Eating and Body Image Disturbances Across Cultures: A Review. *European Eating Disorders Review*, 14, 54 – 65.
- Speiser, P. W., Rudolf, M. C. J., Anhalt, H., Camacho-Hubner, C., Chiarelli, F., Eliakim, A., Freemark, M., Gruters, A., HersHKovitz, E., Iughetti, L., Krude, H., Latzer, Y., Lustig, R. H., Pescovitz, O. H., Pinhas-Hamid, O., Rogol, A. D., Shalitin, S., Sultan, C., Stein, D., Vardi, P., Werther, G. A., Zadik, Z., Zuckerman-Levon, N., & Hochberg, Z. (2005). Consensus Statement: Childhood Obesity. *The Journal of clinical Endocrinology & Metabolism*, 90 (3), 1871 – 1887.
- Stets, E. J. (1995). Role Identities and Person Identities: Gender Identity, Mastery Identity, and Controlling One's Partner. *Sociological Perspectives*, 38, 129 – 150.
- Steyn, N. P. (2005). Big is Beautiful – and Unhealthy and Confusing? *South African Journal of Clinical Nutrition*, 18 (1), 4 – 5.
- Swartz, L. (1985). Anorexia Nervosa as a Cultural-Bound Syndrome. *Social Science and Medicine*, 20 (7), 725 – 730.
- Tannock, C. (2005). *Obesity*. Retrieved April 23, 2007 from the World Wide Web: www.charlestannock.com/speech.asp?id=880.
- Thompson, J. K., Shroff, H., Herbozo, S., Cafri, G., Rodriguez, J., & Rodriguez, M. (2007). Relations among Multiple Peer Influences, Body Dissatisfaction, Eating Disturbance, and Self-Esteem: A Comparison of Average Weight at Risk of Overweight, and Overweight Adolescent Girls. *Journal of Pediatric Psychology*, 32 (1), 24 – 29.
- Thompson, J. K., van den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J. (2004). The Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3): Development and Validation. *International Journal of Eating Disorders*, 35, 293 – 304.

- Thompson, L. L. (n.d.). *The Effect of Body Image on Self-Esteem across Ethnicity*. Retrieved March 2, 2005 from the World Wide Web: www.psych.uncc.edu/Thompson.pdf
- Thomas, J. R., & Nelson, J. K. (2001). *Research Methods in Physical Activity*. (4th ed.). Champaign, IL: Human Kinetics
- Thomas, J. P., & Szumukler, G. I. (1985). Anorexia Nervosa in Afro-Caribbean Extraction. *British Journal of Psychiatry*, 146, 653 – 656.
- Turner, J. C., Oakes, P. J., Haslam, S. A., & McCarthy, C. (1994). Self and Collective: Cognition and Social Context. *Personality and Social Psychology Bulletin*, 20 (5), 454 – 463.
- Van Leeuwen, J. A., Waltner-Toews, D., Abernathy, T., & Smit, B. (1999). Evoking Models of Human Health Toward an Ecosystem Context. *Ecosystem Health*, 5 (3), 204 – 219.
- Viljoen, H. (2003). Depth Psychological Approaches: The Socially-Orientated Psychoanalytical Theories. In W., Meyer, C., Moore, & H., Viljoen. (Ed.). *Personology: From Individual to Ecosystem*. (3rd ed.). pp. 152 – 185. Sandown, S.A.: Heinemann
- Wadden, T. A., & Phelan, S. (2002). Assessment of Quality of Life in Obese Individuals. *Obesity Research*, 10 (Suppl, 1), 50s – 57s.
- Walker, A. R. P., Adam, F., & Walker, B. F. (2001). World Pandemic of Obesity: The Situation in Southern African Populations. *Public Health*, 115, 368 – 372.
- Waller, G. (2000). The Media's Role in the Psychopathology of the Eating Disorders. In D. Gaskill, & F. Sanders (Ed.). *The Encultured Body: Policy Implications for Healthy Body Image and Disordered Eating Behaviours*. pp. 55 – 57. Brisbane: Queensland University of Technology. Retrieved June 19, 2008 from the World Wide Web: www.hlth.qut.com/nrs/publications/the_encultured_body.pdf#page=67
- Wanneburg, G. (2006). *South African Women become More Weight Conscious*. Retrieved March 20, 2007 from the World Wide Web: www.redorbit.com/news/health/347607/otuh_african_women_become_more_weight_conscious/index.html

- Wardle, J., Waller, J., & Rapoport, L. (2001). Body Dissatisfaction and Binge Eating in Obese Women: The Role of Restraint and Depression. *Obesity Research*, 9 (12), 778 – 787.
- Wassenaar, D., le Grange, D., Winship, J., & Lachenicht, L. (2000). The Prevalence of Eating Disorder Pathology in a Cross-Ethnic Population of Female Students in South Africa. *European Eating Disorders Review*, 8, 225 – 236.
- Watson, D. (1996) Individuals and Institutions: The Case of Work and Employment. In M., Wetherell (Ed). *Identities, groups and Social Issues*. pp. 239 – 298. London: SAGE Publications LTD
- Webb, T. T., Looby, E. J., & Fults-McMurtery, R. (2004). African-American Men's Perceptions of Body Figure Attractiveness: An Acculturation Study. *Journal of Black Studies*, 34 (3), 370 – 385.
- Weinberg, R. S., & Gould, D. (2003). *Foundations of Sport and Exercise Psychology*. (3rd ed.). Champaign, IL: Human Kinetics.
- Westkott, M. (1989). *Female Relationality and the Idealized Self*. Retrieved May 18, 2007 from the World Wide Web: http://plaza.ufl.edu/bjparis/essays/westkott_relation.pdf
- Wetherell, M. (1996). Group Conflict and the Social Psychology of Racism. In M., Wetherell (Ed). *Identities, groups and Social Issues*. pp. 175 – 238. London: SAGE Publications LTD.
- Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in Qualitative Research. *Qualitative Health Research*, 11 (4), 522 – 537.
- Williamson, D. A., Womble, L. G., Zucker, N. L., Reas, D. L., White, M. A. Blouin, D. C., & Greenway, F. (2000). Body Image Assessment for Obesity (BIA-O): Development of a New Procedure. *International Journal of Obesity*, 24, 1326 – 1332.
- Wolf, C., & Tanner, M. (2002). Straight to the Point: Obesity. *Western Journal of Medicine*, 176 (1), 23 – 28.
- Worrell, F. C., Conyers, L. M., Mpofu, E., & Vandiver, B. J. (2006). Multigroup Ethnic Identity Measure Scores in a Sample of Adolescents from Zimbabwe. *Identity*, 6 (1), 35 – 59.
- Yamamiya, Y., Cash, T. F., Melnyk, S. E., Posavac, H. D., & Posavac, S. S. (2005). Women's Exposure to Thin-and-Beautiful Media Images: Body Image Effects of Media-Ideal Internalization and Impact-Reduction Interventions. *Body Image*, 2, 74 – 80.

Zhang, Y. (2006). *Content Analysis (Qualitative, Thematic)*. Retrieved May 7, 2007 from the World Wide Web:
www.ils.unc.edu/~yanz/Content%20analysis.pdf

Zhao, F., Stephens, S. D. G., Sim, S. W., & Meredith, R. (1997). The Use of Qualitative Questionnaires in Patients having and being Considered for Cochlear Implants. *Clinical Otolaryngology*, 22, 254 – 259.

APPENDIX A: BODY MASS INDEX (BMI)

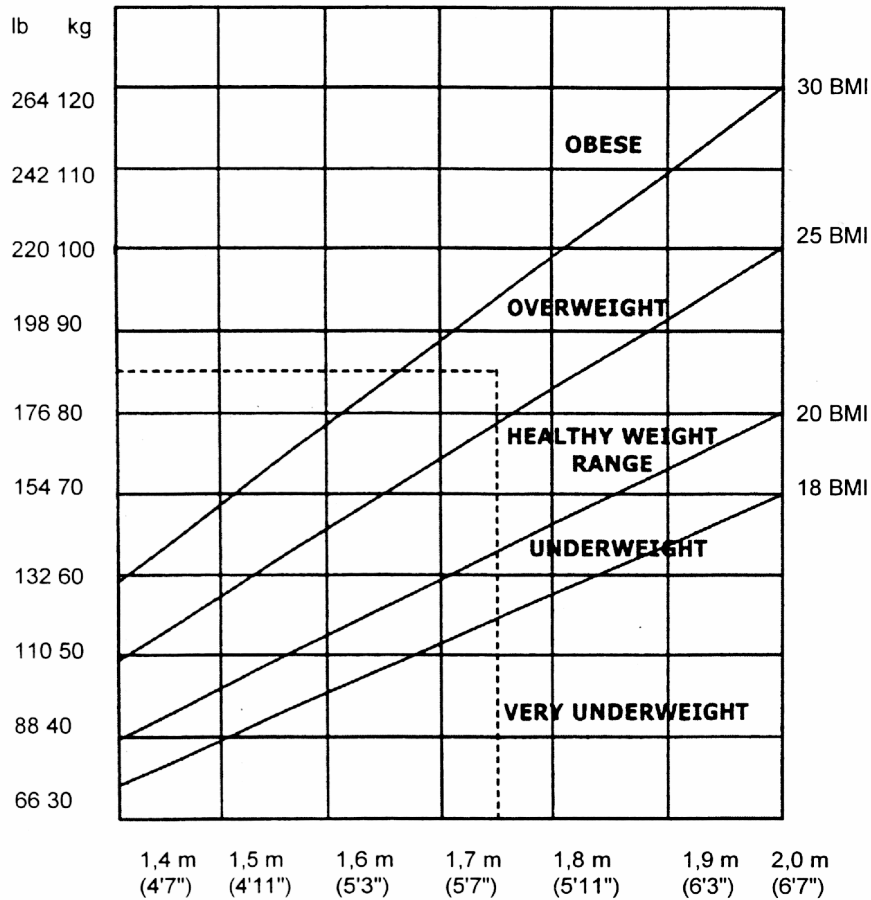
NUMBER:.....

HEIGHT:.....KG

WEIGHT:.....M

Body Mass Index (BMI) = Weight (Kg) / Height ²

(BMI = weight in kg divided by height squared)



Height in metres (feet and inches) – without shoes

CURRENT BMI STANDARDS ADOPTED:

- | | |
|--------------------------------------|-------------|
| ➤ Underweight | < 18.5 |
| ➤ Normal | 18.5 – 24.9 |
| ➤ Overweight | 25.0 – 29.9 |
| ➤ Obesity-Class I | 30.0 – 34.9 |
| ➤ Obesity-Class II | 35.0 – 39.9 |
| ➤ Obesity-Class III (Morbid Obesity) | ≥ 40 |

Powers, S. K. and Howley, E.T. (2004)*Exercise Physiology*. (5th ed). Versailles, KY: McGraw-Hill pp. 364-365

APPENDIX B

Informed Consent



Good day

My name is Lameez van Schalkwyk and as part of my work towards my Masters degree in Psychology, I am conducting research exploring the effect of culture body image and weight. The research examines and explores the effects of ethnicity and social and social-cultural factors on body image and weight. The study might offer the opportunity to understand the differences in perceptions of appearance, weight and self-concept across specific ethnic groups within South Africa. In doing so it contributes to the existing knowledge of self-concept. Further it may benefit health and fitness professionals across a number of professions to understand negative and positive influences upon the self and approach the issue of weight appropriately and effectively. Therefore, I would like to invite you to participate in this study.

It will involve taking measurements, such as height and weight to calculate your Body Mass Index (BMI), and completion of three questionnaires: The Multigroup Ethnic Identity Measure, The Body Shape Questionnaire, and The Sociocultural Attitudes Towards Appearance Scale – 3. It is estimated that your participation will take approximately 30 to 45 minutes and will involve completing the following questionnaires and placing them back in the envelope provided.

Your information will be kept confidential and will only be seen by myself and my supervisor at the University of the Witwatersrand and no information that could identify you would be included in the final dissertation. Thereafter the information may be published, sharing only the outcomes of the study to the general community. Filling out these questionnaires is regarded as consent to participate in this study. It will be helpful if all questions are completed, but if you wish you may leave out specific questions.

If at any point you do feel distressed and feel you may require counseling, please feel free to contact any of these associations for assistance.

- SA Depression and Anxiety Group: (011) 783 – 1474
- Stress Clinic: (011) 475 – 3975

If you have any questions or comments concerning this study, you can contact me at 072 - 655 - 6215 or lameezvanschalkwyk@yahoo.com or my supervisor Mrs. Heste Endrody-Younga at (011) 717 - 4527

Thank you
L. van Schalkwyk

.....

APPENDIX C

THE MULTIGROUP ETHNIC IDENTITY MEASURE (MEIM) (ADDITIONAL QUESTIONS)

16 – Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)

17 – Has your body concept been influenced by one of the two or both? (please indicate and explain):

- Family and/or Peers (friends)

18 – Are you attempting to loose weight?

If yes...

a) Please explain which method you are using to loose weight

b) What factors has contributed to your weight gain?

Thank you for your time and patience

APPENDIX D: NORMALITY CHECK - HISTOGRAMS

Figure 4: Test for Normality- Body Shape Questionnaire

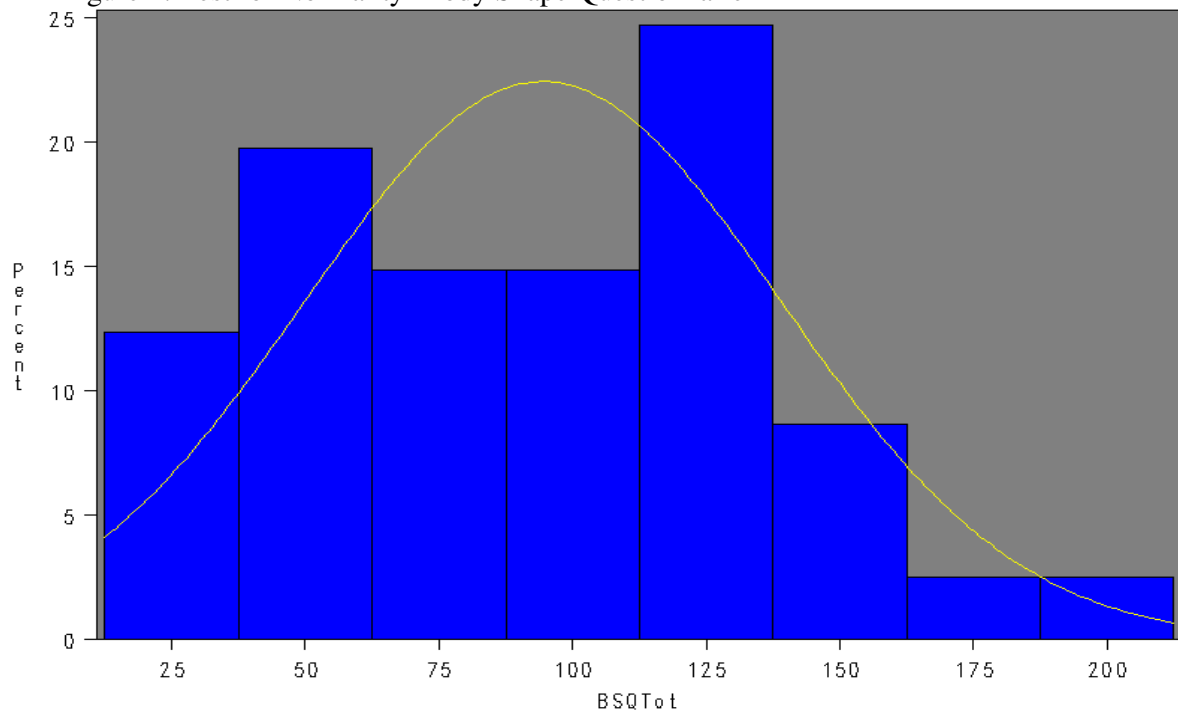


Figure 5: Test for Normality- Sociocultural Attitudes Towards Appearance Scale-3 (SATAQ-3)

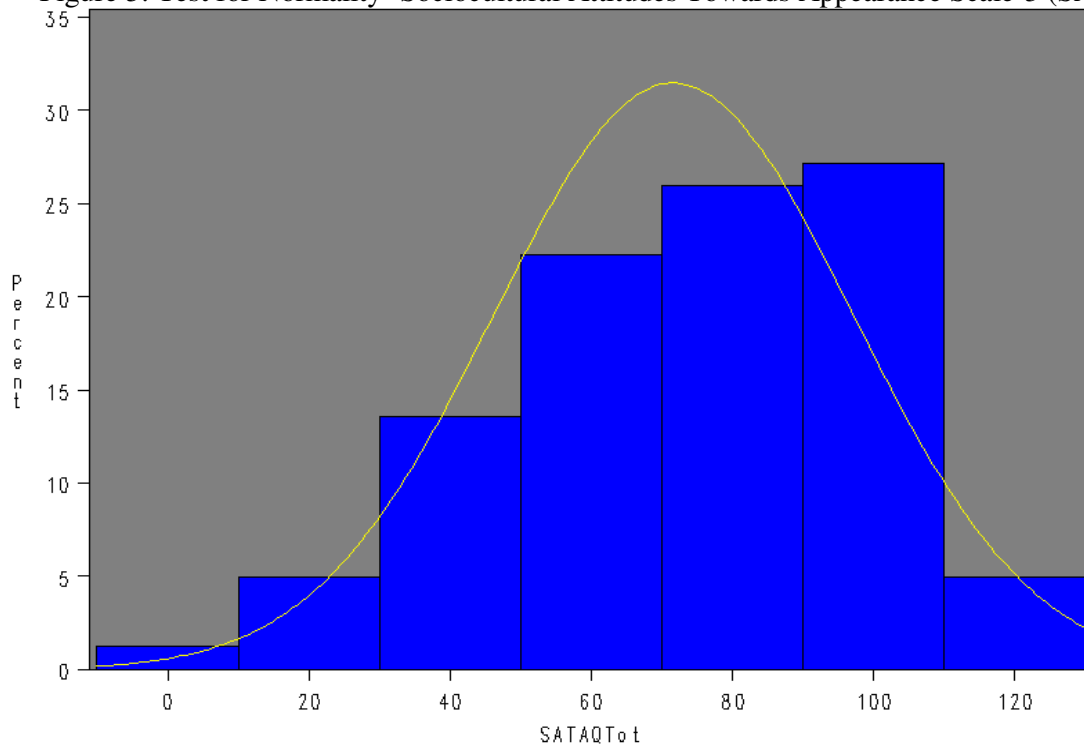


Figure 6: Test for Normality- Multigroup Ethic Identity Measure (MEIM)

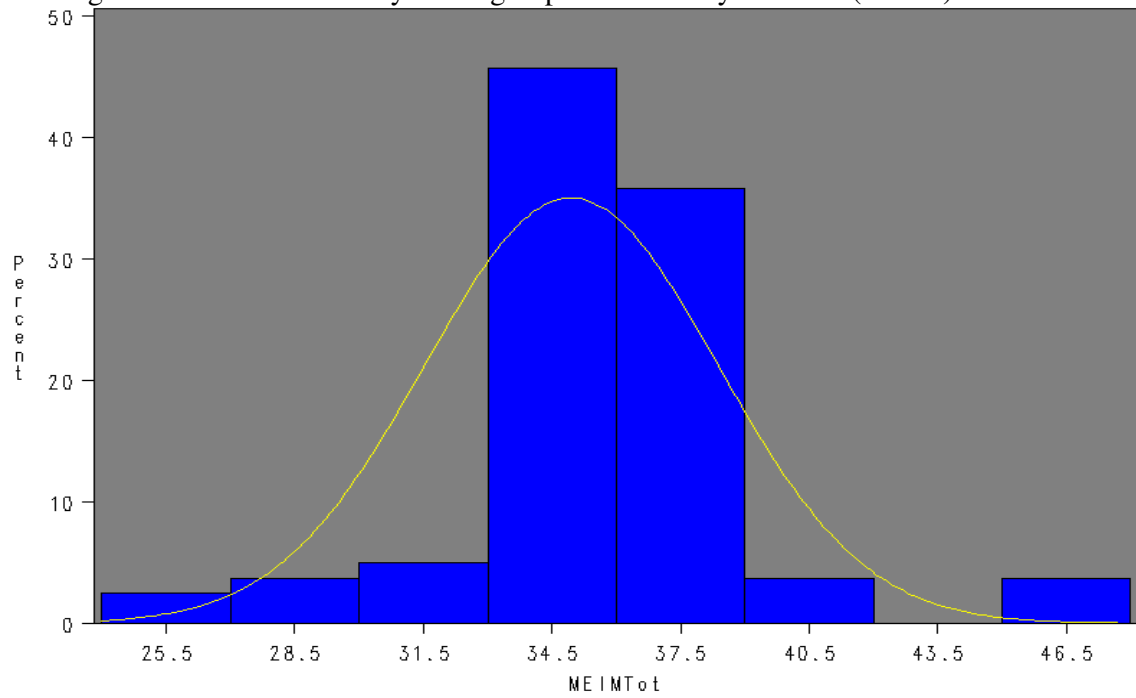


Figure 7: Test for Normality- SATAQ-3 (Internalization General)

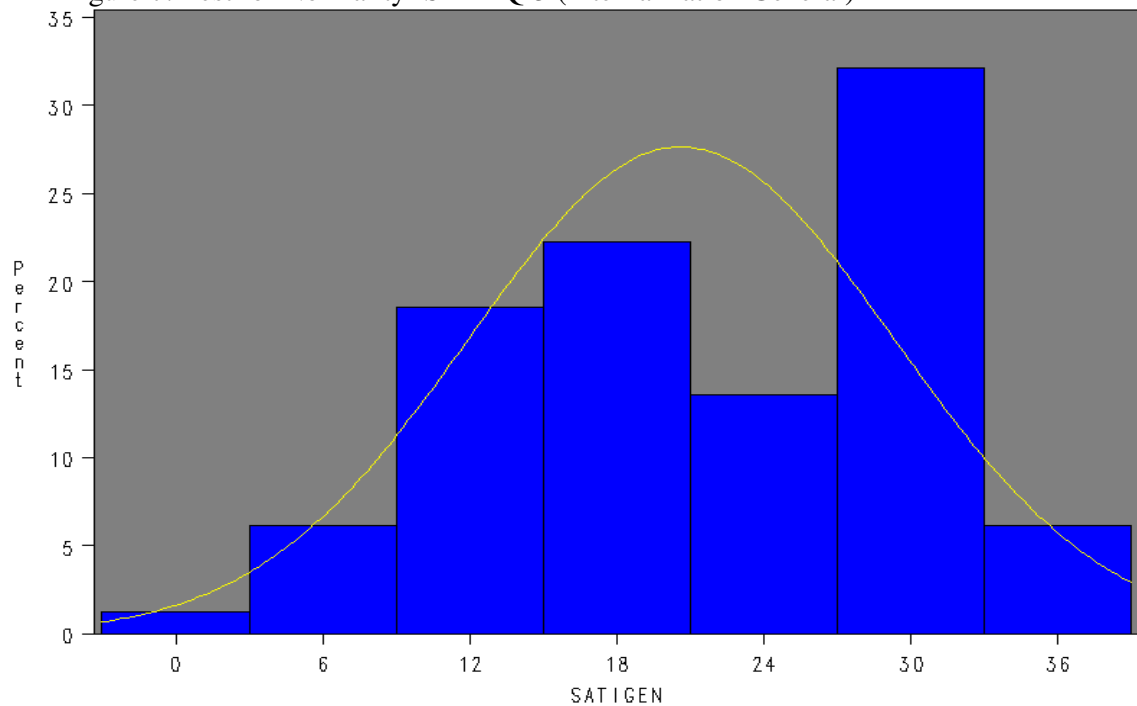


Figure 8: Test for Normality- SATAQ-3 (Internalization Athlete)

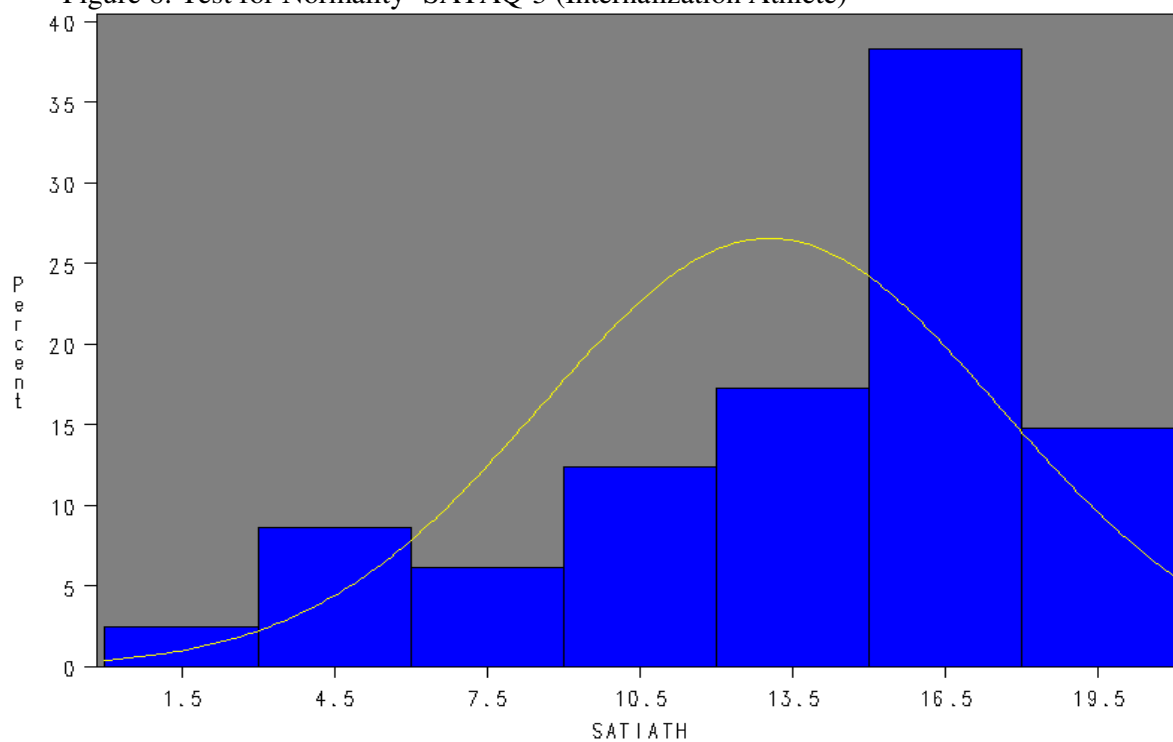


Figure 9: Test for Normality- SATAQ-3 (Pressure)

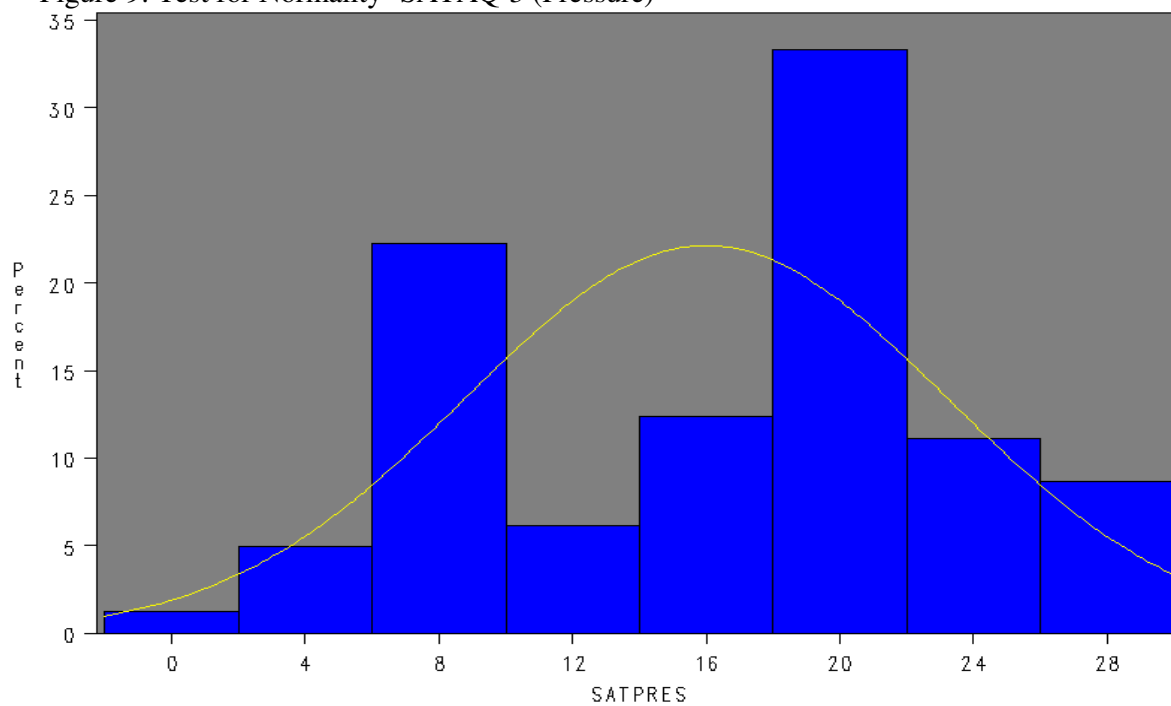


Figure 10: Test for Normality- SATAQ-3 (Information)

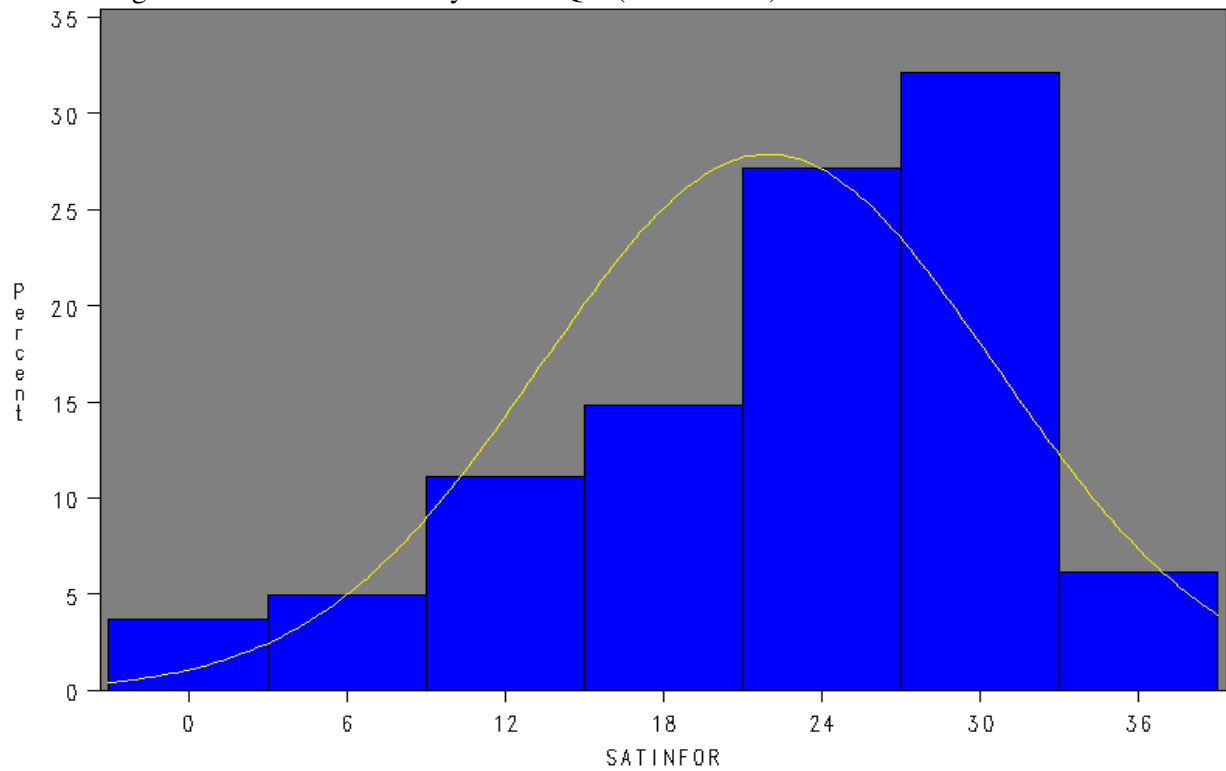


Figure 11: Test for Normality- MEIM (Ethnic Identity)

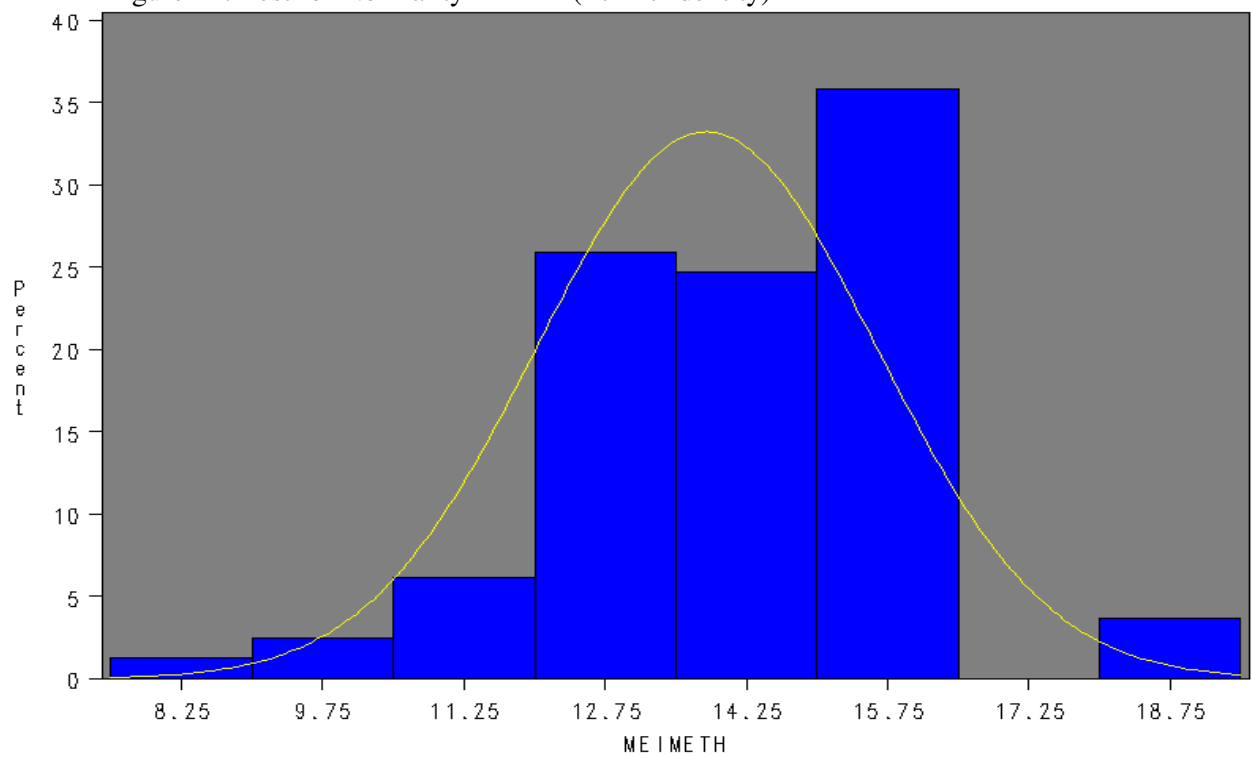
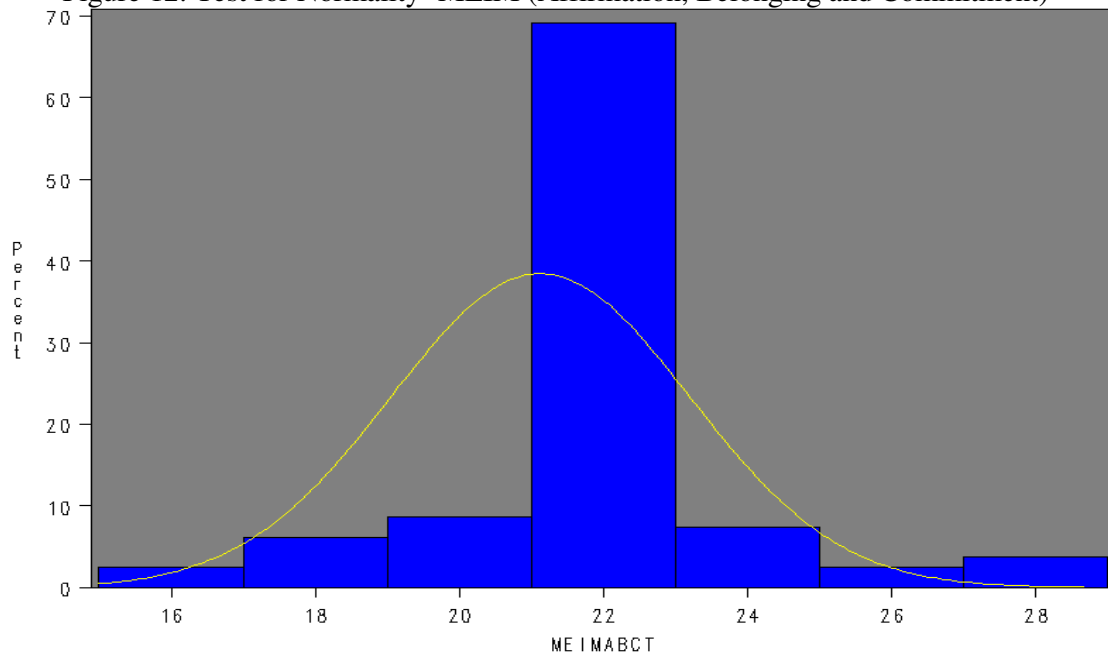


Figure 12: Test for Normality- MEIM (Affirmation, Belonging and Commitment)



APPENDIX E: QUALITATIVE DATA

Participant: 1	Ethnicity= African	BMI= 20.4 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes in the olden days an African women was expected was expected to be big. However due to illness the situation has changed. I don't want to be bigger than I am. I think a lot of black African women do not take care of their bodies; I exercise because I don't want to not care.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes both family and friends said I should gain weight that it's just the family thing – I decided to avoid being big at all cost. Body concept has been influenced by the family into looking after it and having a positive concept.		
Peers seem to like the idea of a person being healthy (even when they're not so that influences me)		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
No		

Participant: 2	Ethnicity= African	BMI= 27.9 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes. If they see a person being too thin, they think that she/he is sick. So its better to keep your body size		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Family- my family believes that if I loose weight, it means I'm suffering, so I should always keep my body the way they used to it.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Signed up for the gym so that I can keep my body fit. I go to the gym most of the time. - I eat too much junk food, my heart is free, so there is nothing that will make me loose weight if I'm not suffering		

Participant: 3	Ethnicity= African	BMI= 19.95 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		

Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		

Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Cut down on the amount of food I take, walking, gym - Stayed with a friend for awhile and we cooked everyday.		

Participant: 4	Ethnicity= African	BMI= 28.7 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		

No I believe that my weight and body image is all about how I look after and take care of myself.
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)
Neither
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
• Yes • I am on a diet, I eat small portion of meals 5 times a day. I go to the gym 3 times a week for 30-45mins. • Eating junk food • Eating right before I go to bed

Participant: 5	Ethnicity= Caucasian	BMI= 20.2 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, most white women in today's society aim to keep a desirable weight, although black women are beginning to become more aware of their body as they are more involved in society and public actions than years before		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Both, My family has been involved in a number of different sports through their lives. This allowed me the opportunity to get involved in sports and compete at highly competitive level. My friends are very fashionable and are aware of their body image which has also influenced my body concept.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Not really loose, but maintain my weight. I do a fair amount of exercised and monitor what I eat. • I snack quite a bit but I've starting monitoring my meals and cutting out on carbs. • When I'm bored I eat.		

Participant: 6	Ethnicity= Caucasian	BMI= 18.9 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Perhaps. The media often illustrates the perfect white women in magazines and adverts which on some conscious and unconscious level does have an impact on how I perceive my weight and body image. Often women are depicted as being flawless, blonde, beautiful, thin and big busted and I'm none of these which makes me feel inadequate. I know that I could only look like these women if I have plastic surgery.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes. My mother is overweight which makes me very aware of what I could become. Additionally, I danced for many years; I started at 3½ which made me aware of my weight from a very young age. They definitely would encourage you to be thinner even if you weighed 47kg. They'd tell you, you were wobbly and pinch your fatty bits even if you weren't fat. I think that stays with you for life. My friends are very weight conscious. They often look at bigger people and comment negatively about them.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		

• Yes • I'm always trying to loose weight. At the moment I'm gyming, working, playing tennis and eating less. • Laziness and eating rubbish. My weight fluctuates all year round based on my stress levels. I had a stage this year where my weight didn't budge.

Participant: 7	Ethnicity= African	BMI= 26.4 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes because in my ethnic group being thin is considered as being unable to support i.e. nutritionally ¹ . So being bigger or average weight means that you're well taken care of thus you have money		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes, peers because they always tell if I've gained or lost weight which always makes me think of loosing weight or just remain the size that I am.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • By going to the gym and eating a healthy balanced diet • Unhealthy diet.		

Participant: 8	Ethnicity= African	BMI= 30.4 (obesity: class I)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, as Africans or black we tend to have more voluptuous bodies as compared to members of other ethnic groups. As much as I love being African I do not like the shape I am.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Family and peers. Parents especially my mother always comments on how overweight I am. This makes me hate my body even more. Peers always make more comments of peoples bodies which makes me very self conscious of my own body.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Aerobics and cutting down on the size of the meals I take • Too much junk food and lack of exercise.		

Participant: 9	Ethnicity= African	BMI= 26.6 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, I inherited it from my family (mother).		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Both. Most of my friends are my weight and they want to slim.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Dieting/gym		

I think I'm eating what ever I come across
--

Participant: 10	Ethnicity= Caucasian	BMI= 21.4 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes. Western/European cultures believe a slender body is nice, not like the African cultures.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>		
Mostly peers as they would mention what they find attractive. Family would accept me in any form as long as I'm healthy.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - Regular exercise - Inactivity – less sport than I used to do, too little time, due to varsity work		

Participant: 11	Ethnicity= Caucasian	BMI= 21.3 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes there is a stereotype that white women should be tall, thin and pretty and black women are known to have big bums.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>		
No.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		

Participant: 12	Ethnicity= Caucasian	BMI= 20.8 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Being Portuguese has had an impact as in our culture the girls have to appear well groomed and thin as look good for the man. Portugal was known to have high rate of anorexia. Because of this the girls compete against each other to obtain the best look. (subconsciously though).		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>		
There is huge influence from mainly family. They will be straight forward and tell you if you have put on weight, however they don't allow one to become too thin. As long as you are healthy weight for your body and height.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- No. If I feel I am gaining weight I just reorganize my diet and exercise more. I follow a healthy diet cutting out junk food completely. - Decrease in exercise and increase in unhealthy food options		

Participant: 13	Ethnicity= Caucasian	BMI= 21.6 (Normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
To an extent, yes, culturally it is considered better for one to be conscious of weight and body image but not obsess over it.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		

- Family and/or Peers (friends)
Both. Family is conscious of weight and makes an effort to eat a healthy diet, not to overeat. Friends~ large number of my friends are heavily involved in sport/physical activity thus strive to have a body that is toned and low BF%
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain
• Yes • Increasing exercise • Eating a healthier diet with more fresh fruit and vegetables while maintaining adequate carbohydrate intake for energy source.
• Stress • Lack of exercise • Processed foods such as take aways.

Participant: 14	Ethnicity= Caucasian	BMI=21.3 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Yes, I believe that from what I perceive Caucasians should be you to try harder to be the same. Generally I would say Asian girls have very small, petite figures but it would not pressure me in being like that. Yet if I see a white thin model I believe its possible for me to look the same.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain): - Family and/or Peers (friends)		
Definitely my family. My parents put a lot of pressure on me in becoming thinner to what I used to be like. I'm not big but could maybe loose 5kg.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• I try with exercise but do not always have time. So now I try with diet, cutting out carbs or eating as little as possible. • Exercise gives results but it takes to long • Varsity, eating a lot more and exercising less.		

Participant: 15	Ethnicity= African	BMI= 21.1 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
No I don't think so because of globalization, generally black people are more voluptuous, however I'm not and I don't feel bad about either. More young black people avoid or don't have the big typical black body...where I come from – Zambia.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain): - Family and/or Peers (friends)		
Well my parents push me for healthy living and my friends don't really care or if they do then they don't mention it. My mum is big boned but she never pushed me to gain or loose weight.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• No, I want to maintain my weight.		

Participant: 16	Ethnicity= Caucasian	BMI= 22.5 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
There is a lot of media that favours thin/ethnic body images mostly I don't respond to		

these but the media definitely sets this up as valuable. I assume that other ethnic groups have different pressures.
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)
Not family, though I like that I look good enough amongst peers.
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
• Mostly exercise. Trying to eat healthy but like fatty foods and wine. • Stopped smoking

Participant: 17	Ethnicity= African	BMI=21.1 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
No it does not. Black women are supposed to be all curvy to be attractive re. big hips and bottom. But I'm okay the way I am, Thank you.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Maybe my friends as most are bigger, than I am and are trying to loose weight. So I try to be their size. Not that I was big once upon a time. My weight always ranges between 50-52kg which in my opinion is not bad at all.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Definitely not		

Participant: 18	Ethnicity= African	BMI=26.2 (Overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, African women often tend to have bigger features. If you don't have big bum or body, most African people wonder if something is wrong. However most of it is genetic.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes my mother and father mostly mother thinks I should keep my body the way it is. My friends think I should loose more weight.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes, dieting and exercise at gym • Junk food and overeating • Genetic heritage.		

Participant: 19	Ethnicity= African	BMI=25.3 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, African individuals have larger bodies, also it is more accepted		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes mother thinks I should keep my weight or people will think I'm sick Friends like my shape but think a lot of appearance.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• No just keep fit • Wrong foods		

Participant: 20	Ethnicity= White	BMI= 22 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Not at all.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Not at all. Never has a real problem though I was just shy.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
No		

Participant: 21	Ethnicity= African	BMI= 27.3 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, we have voluptuous bodies it's a normal part of our history and genetic makeup.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes family. Mother says I shouldn't try to loose weight.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
No		

Participant: 22	Ethnicity= African	BMI= 26.1 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes African people tend to pick up a lot of weight especially in butt, breast and hips		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
No. maybe family mother and grandmother are overweight		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - Exercising but I think I'm eating wrong foods - Inherited body but mainly eating more than I should		

Participant: 23	Ethnicity= African	BMI= 28.7 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes African have large bodies		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Family often how saying how much weight I should loose or keep		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - Exercise and dieting (restrict food intake) - Too much meat		

Participant: 24	Ethnicity= African	BMI= 25.7 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes had to explain cause, ethnicity has been a great influence in my weight especially lower body (butt and thighs).		

Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>
Yes, mother. Wants me to live an African life saying that body is fine for me. A good symbol of womanhood. Friends think I should loose weight
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
• Yes • Exercise, eating fruits and vegetables • Family heritage. I'm a vegetarian cant eat meat don't eat bad foods

Participant: 25	Ethnicity= African	BMI= 24.8 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>	Yes body is genetically inherited from my fathers side.	
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>	No	
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>	• No I'm happy with my body although it is round and concerned about parts of it. Now and then it disturbs me but I don't feel like loosing my heritage • Family heritage and eating incorrectly	

Participant: 26	Ethnicity= African	BMI= 20.3 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>	Yes but people can change their bodies . I perceive that my body is influenced by my family but I have control	
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>	None	
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>	• None. But I'm exercising to keep fit • Mainly eating wrong but happy with weight	

Participant: 27	Ethnicity= African	BMI= 26.1 (obeseI)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>	I come from background where body is dictated by culture. Media plays role in trying to stay thin or be thin which is not healthy	
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>	Family – mother think wont get husband if don't loo like wife forcing me to keep weight	
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>	• Yes • But secretly trying to exercise • Lots of meat and pap.	

Participant: 28	Ethnicity= African	BMI= 24.9 (normal)
------------------------	---------------------------	---------------------------

Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>
No unless you are referring to genetics
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>
Yes, mainly friends always pressure to look different but happy with my thighs. African men love big bodies
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
• Yes • Exercise and dieting
• Eating all wrong food (chocolate, ice-cream) • Hate eating vegetables even though I know its good.

Participant: 29	Ethnicity= African	BMI= 22.6 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>	Hardly if anything my ethnic group encourages large body than I wish for myself	
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>	Yes my mother has put pressure and value on thinness as long as I can remember. She is commented on my weight every time I gained a few kilos' – told her I didn't like so she stopped.	
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>	• Yes, starvation mostly and some exercise I walk to campus. Each trip is about an hour. I would like to go jogging as well but I don't have the time. • Used to be much smaller when I jogged.	
	• Like I have said reduce exercise, also I have been eating larger portions of food.	

Participant: 30	Ethnicity= African	BMI= 28.6 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>	Well for some yes the main thing is African women are larger, so I don't mind looking the way I am	
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>	Peers mainly-they think I have nice shape which not actually influenced by being fat	
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>	• Not really I just enjoy exercise • African heritage	

Participant: 31	Ethnicity= Caucasian	BMI= 26.1 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>	Sometimes white people are often bombarded by the media of western resources which state attractiveness and beauty.	
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>	I live with my father most of the time and he thinks I look okay but I still attempt to	

loose weight. My mother is very thin. She travels a lot and see her only two or three times a month.

Question 18: *Are you attempting to loose weight?---Method ---- Factors contributing to weight gain*

- Always
- Exercise, pills and dieting
- Control what eating and overeating

Participant: 32 **Ethnicity= African** **BMI= 27.01 (overweight)**

Question 16: *Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)*

Yes Africans are larger people

Question 17: *Has your body concept been influenced by one of the two or both? (please indicate and explain):*

- Family and/or Peers (friends)

No

Question 18: *Are you attempting to loose weight?---Method ---- Factors contributing to weight gain*

- No
- no

Participant: 33 **Ethnicity= Caucasian** **BMI= 20.9 (normal)**

Question 16: *Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)*

At some point cause media has a great influence on body perception.

Question 17: *Has your body concept been influenced by one of the two or both? (please indicate and explain):*

- Family and/or Peers (friends)

Peers often think I should try to pick up extra weight and family thinks I should maintain.

Question 18: *Are you attempting to loose weight?---Method ---- Factors contributing to weight gain*

- No really, just exercising to maintain.
- Eating too much.

Participant: 34 **Ethnicity= African** **BMI= 18.6 (normal)**

Question 16: *Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)*

Yes in a way. African women are more prone or told to keep their bodies big. But it just comes as you get older (especially the bums).

Question 17: *Has your body concept been influenced by one of the two or both? (please indicate and explain):*

- Family and/or Peers (friends)

Family thinks I should put in weight, but because my friends and finance like my body so I always try to keep weight down.

Question 18: *Are you attempting to loose weight?---Method ---- Factors contributing to weight gain*

- Not really I just don't eat a lot sometimes I hardly eat
- Not much, but meat is a big source for me. I love the stuff

Participant: 35 **Ethnicity= African** **BMI= 32.5 (overweight)**

Question 16: *Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)*

Yes but I do not like the idea that my body is the way it is. I am around and loosing weight is very difficult. But I would never do anything to harm myself.

Question 17: *Has your body concept been influenced by one of the two or both? (please indicate and explain):*

- Family and/or Peers (friends)
Family - thinks I have an African body and its something I should be proud of. Friends – all my friends are much thinner and are mostly white girls, so it affects me. My boyfriend likes the way I look, but doesn't make me feel okay.
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
• Always • Exercise and trying to exercise really hard, haven't seen changes. Maybe thinking of getting a trainer.
• Mainly African heritage, big ass , big breast.

Participant: 36	Ethnicity= African	BMI=32.04 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes definitely yes, because we have a natural habit of picking up weight easily. I think its so unfair especially for African women. On while women they are more thin and (okay) have pressure upon them but African women have to worry about big butts and culture which states that they are suppose to have these big lower body (including thighs).		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Yes oh yes. The culture states that the mother should teach daughters how to look as they get older. It's a symbol of men's wealth (big women). My friends are from the same cultural group and most of us are big/overweight, most are comfortable but we are not happy (even though they say they are). My other thin friends are not always nice to be with cause they always showing off.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • I'm attempting to loose weight through exercise and cutting out points of my meats.		
• Overeating, family stating should look healthy (good for labola).		

Participant: 37	Ethnicity= African	BMI= 16.4 (underweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes but you have the control to change it but her dieting comes up sooner or later.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Family thinks too thin. Want me to pick up Friends and boyfriend think I look okay, so like to have good body.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• No, just exercising to keep healthy and when eat wrong things I will try to exercise harder to loose or get rid of the weight I put on.		
• Mainly eating wrong foods.		

Participant: 38	Ethnicity= African	BMI= 27.6 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Sometimes, Africans are generally larger but think its something to be proud of. If you have it flaunt it.		

Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)
Family and friends because friends want me to loose but family thinks I should stay this weight.
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
- Like my weight so no, just want to stay fit. - Eating a lot but mainly family values.

Participant: 39	Ethnicity= African	BMI= 26.3 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Not really, believe its in the ability of the person, but african's are often overweight.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
None		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - Diet and exercise - Eating too much.		

Participant: 40	Ethnicity= Caucasian	BMI= 22.1 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Not quite but the maintain is a big influence		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
None		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - I exercise two times a day for 4days a week each an hour or 1½hrs. - Eating all wrong things		

Participant: 41	Ethnicity= African	BMI= 24.6(normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
No		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - Diet - Wrong foods		

Participant: 42	Ethnicity= African	BMI= 20.4 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
No but influenced by west		

Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)
None
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
No

Participant: 43	Ethnicity= African	BMI=25.7 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, my ethnic identity is a direct reflection of myself, they have a bigger body overall compared to other races. My body is fairly big but I'm comfortable with it, more than most I could say.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Yes. My family wants (especially mother) thinks I should stay the same way, even friends. My cousins however think I should loose (they very thin).		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- No. I am happy with my body - Overeating - Eating wrong foods - Cultural life		

Participant: 44	Ethnicity= African	BMI=20.8 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
No. your weight lies in your own hands. Even if African women are bigger they can change it.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Not friends, but family my mother always states that should try to keep control of the weight.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• On and off • Lots of exercise • See food is my downfall, I love food		
• Food, food, food. Its my comfort zone.		

Participant: 45	Ethnicity=Caucasian	BMI=27.4 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Maybe. Western culture often are at the forefront of most trends which are set. I suppose white females are often under loads of pressure to be thin compared to African groups.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Family and friends think I should try to loose weight. My father is an athlete so there is some pressure especially since my mother and friends are thin.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• All the time. I've tried to stop eating, worked for awhile but became sick. Now		

eating smaller amounts (if not stressed out or menstruating).
• Overeating • Stress • Anxiety • Junk food

Participant: 46	Ethnicity=Caucasian	BMI=21.9 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Yes, there is a “general” consensus that while people should be thinner and is a big stereotype which affects us. I try not to allow to be pressured into feeling the need to be thin.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Yes all the time from friends and family that if I lost a little more weight then I would look better than I already do.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Just maintaining and attempting to get sexy abs. • Stress mainly.		

Participant: 47	Ethnicity=African	BMI=23.8 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Yes. African people (women) are larger especially with coming of age. The media plays a huge role upon influencing African people to be thinner like white people (women).		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
None		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Here and there (butt, trying to firm it up because its already big). • Not much • Meat and pap maybe I love the stuff.		

Participant: 48	Ethnicity=African	BMI=25.3 (overweight)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
No. but the media does.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Family - (mother thinks I should loose weight)		
Friends insists weight loss should happen.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Yes • Exercise and dieting • Overeating		

Participant: 49	Ethnicity=African	BMI=25.8 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes in way because African culture states women should be bigger, have fat, cause it makes you look like a women and fertile.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Just at gym cause friends are there. Mother likes my weight.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• No • Just keeping fit, but in some way I'm thinking about it • Eating too much		

Participant: 50	Ethnicity=African	BMI= 27.5 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
yes African women are big		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Other wants me to loose weight		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Exercising • Eating less • Eating a lot of junk food.		

Participant: 51	Ethnicity=Caucasian	BMI=36.4 (obeseII)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Being my weight is no joke especially when you are white. There is an expectation that white people are suppose to be thinner. Always feel pressure everywhere		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Family always teasing me trying to get me to loose weight. Friends hardly have, but these I do have to tell me about my health		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Eating less, eating salads and lean meats. • Exercise in gym is always hard so I try the machines every so often • Walking is what I often do • Stress, loss my father and mother very young • Overeating (comfort eating) • Boerewors		

Participant: 52	Ethnicity=African	BMI=30 (obeseI)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes African heritage is important concept, body play a big part in fertility and being a		

symbol to others for husband
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>
Family especially husband, doesn't want me to loose the weight even if affects how I feel bad
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
• Yes • But very little after having children (2) its tough • Exercise and eat less
• Overeating

Participant: 53	Ethnicity=African	BMI=32 (obeseI)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes very hard to get away from. Need to have big body to get husband		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>		
Mainly mother. Convinced me to keep weight, help with knowing your husband		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Not happy with way I look. Husband cheat on to many times • Exercise		
• Too much food I eat.		

Participant: 54	Ethnicity=African	BMI=24.4 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes large bodies are great they sexy and African guys love it. Culturally they want it		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>		
Mainly my boyfriend especially now being so far from home. But mother will want me to loose weight.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Very small amount though • Dieting and exercise		
• Eating too much		

Participant: 55	Ethnicity=African	BMI=26.3 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - <i>Family and/or Peers (friends)</i>		
Family and friends		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		

• Yes • Exercise eating right
• Eating too much

Participant: 56	Ethnicity=African	BMI=25.8 (overweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes value is placed upon African women's bodies and need to bear children. But media is playing a big role in changing these concepts.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Yes		
Family wants me to stay the way I am but friends think should try and loose weight. Its hard when most of them are bones.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Eating all right foods and controlling when I eat • Exercising now and then		
• Mothers home cooking		

Participant: 57	Ethnicity=caucasian	BMI=20.4 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
I suppose the media is a great influence in bringing across, how society view women should look and most do debate thin body for weight women		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Peers mainly in pressuring me to maintain the way I look even I feel overweight. Guess coz my mother and aunt are models, makes it hard.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Exercise • Food is no problem coz I'm a vegetarian		
• Stress about thinking about thinking about my body when I eat a lot.		

Participant: 58	Ethnicity=Caucasian	BMI=16 (underweight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes especially if you white, people have a strange sense that you are suppose to be thinner than other ethnic groups		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Mainly my mother and her side of the family, she is naturally skin and bones. My friends are too thin I agree but its inherited.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Not at all		

• Nothing – fast metabolism

Participant: 59	Ethnicity=caucasian	BMI=20 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Barely, I think the media is a great influence run by racial factors. In some cases it may be true because most African women/girls are bigger especially breast, butt and thighs		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Friends think I look like Michelle Phieffer and want to loose to look like her. Not interested but often very tempting.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• No but extremely athletic so always exercising and because I play for a team, sometimes I want to look athletic for myself not based on other people.		
• none		

Participant: 60	Ethnicity=Caucasian	BMI=19.8 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, Europeans are very healthy conscious people and being Caucasian there at times are pressure to find a healthy equilibrium with ones body		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Mainly family. I think Swedish people are always first on the health scene so my family are always active and buying into ideas on health and fitness		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Not loosing weight just attempting to tone.		
• Unhealthy eating.		

Participant: 61	Ethnicity= Caucasian	BMI=20.3(normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, I'm constantly bombarded by today's culture of attempting to loose weight to be thin especially if you are white, interesting study combining with ethnicity		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Friends think I'm perfect, while my family think I could pick up more weight.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Always • Cause I'm not always satisfied • Exercise and eating correctly • Eating wrong foods		

Participant: 62	Ethnicity=Caucasian	BMI=18.6 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes my weight is okay and I'm cool with body image even though I have to say there		

is a hell of a lot of pressure on white people /girls to be thin even if they do look sick.
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)
Friends think I'm okay Mother want me to pick up a little more weight.
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>
- No - Just maintaining
Eating wrong sorts of foods

Participant: 63	Ethnicity=Caucasian	BMI=20.8 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yip. There is a whole lot of pressure on white folks to be thin, sexy and "leaders" in industry. Women in general (not matter the race thing) have to be thinner to succeed in anything (work and love).		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
Friends think I could loose more, mother think I should maintain rather than picking up or loosing		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Yes - I'm on a low carb diet, more protein and doing circuit training and jogging - General stress has made me overeat more than I should.		

Participant: 64	Ethnicity=Caucasian	BMI=20 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
White people have the tendency to be thinner, in so perceiving it seems that they are forced within their social grouping to look the standard. It makes me want and need to be thinner		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
None		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
- Always exercising and dieting - Wrong type of foods - Not cooking properly, take aways/fast foods		

Participant: 65	Ethnicity=Caucasian	BMI=22 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, ethnic group do look different. Indians are very thin and whites are a little large while African women are larger at the lower extremities, but don't affect me		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i> - Family and/or Peers (friends)		
None, except my boyfriend. Hate when he tells me I have picked up or have lost too much, he does not know who he wants " <u>me</u> " to be.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		

• No
• Nothing at present

Participant: 66	Ethnicity= Caucasian	BMI=24 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Even though I do not think media should influence people, they influence me. People should be able to decide for themselves. My ethnic identity as a Caucasian individual is largely influenced by white stereotypes (blonde, pretty, slim, sexy).		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Friends think I'm overweight (considering I feel the same), my mother thinks they crazy. My cousins think I'm fine, just need to shape/tone.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Yes • But mainly tone. • Exercise and eating more of the correct foods.		
• Eating incorrectly		

Participant: 67	Ethnicity=Caucasian	BMI=24 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Yes, as a white, employed female general body image plays a part. Where I work, overweight females get jobs easily but a white females looks quite sluggish, unnatural (not being racist, just what happens). It affects you as a person.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Family and friends especially when conversation revolves around weight and how other people look. You wonder what they say about you when you aren't around.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Yes • Exercising mostly		
• Not eating so I've seen to have store all the food, and when I do it is the wrong.		

Participant: 68	Ethnicity=Caucasian	BMI=26.2 (overweight)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Not an easy question to answer as most people are either the cause of their own weight. However most white people often feel that being a white women means being thinner. African women are much larger and it appears to be a feature amongst the majority of this cultural group.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Friends. Think should look after myself (body!!!) better. They are half my size and its horrible when they talk about shape.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Yes		

• Exercise and dieting
• Eating the incorrect foods.

Participant: 69	Ethnicity=Caucasian	BMI=23.5 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Could say that it may be true come to think about it. The European/western/American world dominates the scene of appearance upon women's facial and body concept. It thus affects how other women over the world perceive how they view their bodies. Media has a great deal of clout upon this issue. They are the one's who make the feel they have to be extremely thin an appearance which is not easily overcome once you (me) feel that you wont and need to look like other "perfect" women		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
My family thinks my weight is healthy but its tough when peers think or talk about my weight or others. You join into these conversations thinking to yourself just how bad you feel about your own		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Yes slightly • Just exercising • Overeating		

Participant: 70	Ethnicity=Caucasian	BMI=22.6 (normals)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Yes white individuals do need t have a thinner body, according to the general concept of how it appears. But fortunately- apart from this stereotype – it has no affect upon me or I feel I could fall into this eating disorder trap.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
No		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• No • No but if could gain weight, probably snacking on all the wrong foods		

Participant: 71	Ethnicity=Caucasian	BMI=27.5 (overweight)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Oh definitely. African people are much larger, white people have been given the overall stereotype that they should be thinner. Most people in white communities are forced to be thinner cause from a very young age parents, friends even teachers could tease/mock you for being overweight. The media is a definite example of how they changing concepts across cultures globally for women to be thin rather than health.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Because I've often been teased, I find it hard just to separate who influences me more, but here at university its mainly been friends and at home my mother – often telling me to loose weight to look good.		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		

• Yes • Exercising and dieting
• Eating, foods which are not good.

Participant: 72	Ethnicity=Caucasian	BMI=23 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes white people are generally thinner compared to Africans but not like Indians (man they thin).		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
My mother always nagging me to stay thin, lots of pressure cause never look good enough for her. Friends think I could tone up.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes • Low carb diet, with exercise for toning and sculpting • Just eating and snacking too much.		

Participant: 73	Ethnicity=Caucasian	BMI=40.9 (obeseIII)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes. On the one hand, I'm perceived by others to display the perfect African structure with certain parts more exaggerated, but this isn't a problem depending on certain people. Others on the other hand, think I'm grossly overweight and aren't afraid to tell me to my face. I like that I have what is considered "African features" but I wish they weren't so exaggerated.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Definitely both. Some people feel that I'm beautiful just the way I am because for a person of my weight I carry myself well. Others feel that I need to make a lot of changes, like they feel sorry for me or like I embarrass them or something.		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
• Yes, I try to exercise at least twice a week if I can. Mostly by going to the gym and training with my instructor or playing squash. I also try to eat foods that is good and nutritious and supports these activities but its hard because my schedule changes depending on my pressure regarding school work. • Not eating well – eating the wrong foods or missing meals and then overeating because I'm hungry and compensating for the missed meal.		

Participant: 74	Ethnicity=Caucasian	BMI=20.9 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Not really. Its how you control it but media plays a role. The main people seen there are Caucasians and how they present their bodies. I suppose there is a possibility because they influence perceptions about health and fitness (even though they may not be)		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		

Mother thinks I'm too thin. Friends think I look fine. However it confuses me cause I'm not happy with my body. I think I'm slightly overweight.
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain
• Yes diet and exercise
• Wrong, fatty foods

Participant: 75	Ethnicity=Caucasian	BMI=21.4 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Yes but so does the media. White people are often forced to be thinner		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Friends mainly through constant conversations about weight		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Not really. Trying to control it by eating right and exercising		
• Snacking • Stress- exams.		

Participant: 76	Ethnicity=Caucasian	BMI= 21.3 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Not quite even though genetically black people (women) are much bigger in certain areas		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Friends mainly through their conversations about other girls		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• No		

Participant: 77	Ethnicity=Caucasian	BMI=21 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
No cause you have control. Regardless of genetics		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
None		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• No		
• Chocolates and cakes		

Participant: 78	Ethnicity=Caucasian	BMI=22.3 (normal)
Question 16: Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)		
Nope. Cant explain just don't believe it does.		
Question 17: Has your body concept been influenced by one of the two or both? (please indicate and explain):		
- Family and/or Peers (friends)		
Now and then my friends complain that I'm picking up or loosing makes me want to		
Question 18: Are you attempting to loose weight?---Method ---- Factors contributing to weight gain		
• Sort of		

Eating correctly and regular exercise
Overeating, stress.

Participant: 79	Ethnicity=Caucasian	BMI= (weight)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes, I think a lot of white women experience a lot of pressure.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Family think I should try and loose weight		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
Steak and ice-cream.		

Participant: 80	Ethnicity=Caucasian	BMI= 24 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes. Most white people have the stereotype looming in their heads of extreme thinness. Its not just ethnicity, but culture plays a big role.		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Parents think I'm too big, even though I'm happy with weight, but insecure about my body		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
No, but exercise to control it		
Eating foods which are extremely fatty!		

Participant: 81	Ethnicity=Caucasian	BMI=24 (normal)
Question 16: <i>Would you say that your ethnic identity has an impact on how you perceive your weight and body image? (please explain)</i>		
Yes. Even though I have a generally good concept of my body. European and American portrayal of white women or women in general drives me crazy		
Question 17: <i>Has your body concept been influenced by one of the two or both? (please indicate and explain):</i>		
- Family and/or Peers (friends)		
Friends want to look good so they force their perception upon you		
Question 18: <i>Are you attempting to loose weight?---Method ---- Factors contributing to weight gain</i>		
Yes		
Exercise also attempting to sculpt body		
Eating too much.		
