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Body Type, Self-Esteem and Assertiveness among High School Students in Ghana

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Abstract

The aim of this study was to examine the relationship between body type, self-esteem and assertiveness among adolescents of ages between 13 and 19 years. To achieve this aim, the study sampled 56 male and 94 female adolescents of the Senior High School in Accra, Ghana. Results showed that, higher self-esteem leads to assertiveness. Results also showed that body type perception affects self-esteem. It is, therefore, recommended that Guidance and Counselling officers in our schools should educate adolescent students on the three body types and the advantages associated with being one of these body types. This may help prevent developing body dysmorphic disorder, low self-esteem and non-assertiveness among students with negative perceptions of their body types and the possible effects on their personal relationships with peers, general academic performance and in- school and out-of- school life.

Keywords: body type, self-esteem, assertiveness, high school students, Ghana.

Introduction

Almost every day, we describe and assess the personality of people around us. Personality is a subject of universal interest clouded with mystery and misunderstanding. For many people, this term refers to a person's social values; hence we can deduce that one has a "personality" if he or she is bold, outspoken, punctual, and extraverted or smiles often. This popular view of personality seems to imply that not everyone has a personality. While these informal assessments of personality tend to focus more on mere surface appearance, personality psychologists instead use conceptions of personality that can apply to what one really is (Feist, 1994).

Different psychologists have propounded different meanings of personality with no single definition being acceptable to all of them. According to Allport (1961) personality is the dynamic organization within the individual of those psychophysical systems that determine his characteristic behaviour and thought. Personality is the enduring personal characteristics of individuals and comprises one's self-concept, self-values, attitudes; integration of physical, mental,

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moral, emotional and social qualities exhibited or manifested by an individual to other people (Santrock, 2005; Oladele, 1989).

As these examples imply, there may be different meanings of personality as there are theorists who have tried to define it. Nevertheless, a common theme runs throughout most definitions of personality; it usually refers to the distinctive patterns of behaviour (including thoughts and emotions), that characterize each individual's adaptation to situations of his or her life. Certainly, an individual's personality is difficult to define. In describing personality types, a person can be labelled as introverted or extroverted (Burtaverde, & Mihaila, 2011).

Personality theory developed by Sheldon

Ancient Greek philosophers such as Hippocrates, (400BC) and Galen, (140/150AD) also classified personality types in terms of four types of humours. Each type was believed to be due to an excess amount of one of four bodily fluids. The personalities were termed "humours". This study would concentrate on the personality theory developed by Sheldon (1940), an American psychologist who proposed that there are basically three body types and each body has a specific personality associated with it. The extreme endomorph has the tendency towards plumpness, they tend to have wide hips and narrow shoulders, which makes them rather pear shaped. Quite a lot of fat spreads across the body including upper arms and thighs. They have quite slim ankles and wrists which only serve to accentuate the other parts. The endomorphic personality is associated with the viscerotonia temperament; tolerance, love of comfort and luxury, extraverted, sociable, relaxed, love of food, good humoured, need for affection, fun loving and even temperament. The endomorph tends to have strong social support networks to which they turn to during critical periods (Sheldon, 1940).

The highly ectomorphic physique is fragile and delicate. It is a form of opposite of the endomorphic physique. Physically, they tend to have narrow shoulders and hips, a thin and narrow face, thin and narrow chest and abdomen, thin legs and arms, very little body fat. Even though they may eat as much as the endomorph, they never seem to put on weight. Their ribs are visible and delicate. They have dry skin, fine and fast growing hair. The ectomorphic personality goes hand in hand with cerebrotonia temperament, they are artistic, sensitive, introverted, socially anxious, emotionally restrained, and very thoughtful (Sheldon, 1940).

In the extreme mesomorphic physique, there is a squareness and hardness of body due to large bones and well defined muscles and chest area, with strong forearms and thighs. They have very little body fat, and are generally considered as well-proportioned. The mesomorph is somewhere between the round endomorph and the thin ectomorph. Women in general tend to be less mesomorphy. Women who are primarily mesomorphs rarely show same degree of sharp angularity, prominent bone structure and highly relieved muscles found in their male mesomorphic. Mesomorphic individuals are believed to have somatonia temperament; courageous, energetic, assertive, aggressive, bold. They cherish power and dominance, competitive, and often indifferent about what others think or want. Mesomorphs in general tend to be less stress-prone (Sheldon, 1940). According to Sheldon (1940), the easiest way to get an idea of the variety of the human physique is by looking at the three extremes, even though in actual life the various combinations are much common.

Adolescent and personality type perception

Adolescence is usually marked by dramatic changes in physical appearance; gaining weight can sometimes result directly from the physical changes of puberty (Santrock, 2005; Steinberge, 2002). Mellits and Cheek (1970) reported that in adolescence, boys and girls differ considerably in the development of adipose (fat-bearing) tissues. With increased height, females show a more marked growth of fat than males. Thompson, Sergeant and Kemper (1996) mentioned that, an obese and skinny person has a distorted perception of his or her body shape and size, compares it to others, and sometimes feels shame and anxiety. Being unhappy with one's body can affect how the person thinks and feels about him/herself. A poor body image can lead to emotional distress, low self-esteem, non assertiveness, and eating disorders like anorexia nervosa and bulimia.

Appearance tends to play an important role in one's self-esteem whereas body weight can be another factor for determining attractiveness. It is estimated that current body ideals may promote slimness for women and muscularity for males (Tiggemann, & Pickering, 1996). Consequently,

females have reported a desire to be thinner while males wanted to be heavier. Body image disturbance in this sense has been defined by Smolak (2002) as any form of affective, cognitive, behavioural, or perceptual disturbance that is directly concerned with an aspect of physical appearance. He suggested that, body dissatisfaction for both men and women as well as for adolescents have been shown to be correlated with body mass index, which is calculation of body weight that normally goes with the given height. A person who fits the ideal physical stereotype is perceived to be more sociable, mentally healthy, and intelligent (Feingold, 1992). People who believe that they meet this physical stereotypical standard will experience psychological benefits in their self-esteem (Feingold, 1992).

The concept of self is the accumulation of knowledge about the self, such as beliefs regarding to personality traits, physical characteristics, abilities, values, goals and roles (Santrock, 2002). Beginning from infancy, children acquire and organize information about themselves to enable them understand the relation between the self and their social world. This developmental process is a direct consequence of children's emerging cognitive skills and their social relationships with both family and peers. During middle childhood, the self-concept becomes more integrated and differentiated as the child emerges in social comparison and more clearly perceives the self as consisting of internal psychological characteristics. Throughout later childhood and adolescence, the self concept becomes more abstract, complex and hierarchically organized into cognitive mental representation or self schemas, which directs the processing of self-relevant information. One of the most critical aspects of the self concept is self-esteem. In contrast to self-identity which includes beliefs and cognitions about the self, self-esteem involves our feelings and is therefore an affective component. In the mid 1960s, Morris Rosenberg and other social-learning theorist's defined self-esteem in terms of a stable sense of personal worth (Santrock, 2002).

Self-esteem and body image are influenced by two co-existing means of appraisal; reflected appraisal which means, seeing oneself as others do or think they do, and social comparison which involves comparing and rating oneself against significant others (Health Canada, 1996). Relationships with others also play major role on a person's self-esteem and body image, this includes parents and families, peers, media and culture. For children, the influence of others shifts over time. Up to fifth and sixth grade, parents and siblings tend to be the most influential significant others. In the seventh and eighth grade, friends tend to be the most influential.

By university, friends, teachers and parents tend to equally influence an individual's self-concept (Health Canada, 1996). Ikeda and Naworski (1992) argued that comments by parents and family members can have a huge impact on a child's body image. Friends play an integral part in establishing body image, especially during adolescence. According to Davis (1999), girls engage "in fat talk", in which they complain and find fault with their bodies. Alongside parents and peers, the mass media and prevailing culture views have pervasive influence on body image and self-esteem. Due to the influence of television, it has received special attention as a purveyor of messages containing gender stereotypes (Tiggemann, & Pickering, 1996). The television therefore becomes a matter of concern as media plays a big part in making girls overly concerned about their weight and body shape. They strive for the 'perfect' body and judge themselves by their looks, appearance, and above all thinness, self-esteem and assertiveness (Martin, & Kennedy, 1993).

Assertiveness is an important empowering communication skill. Being assertive means having the ability to express oneself in an effective manner. Assertiveness is a very necessary quality in today's world. Assertiveness is not aggressiveness, it is more like a process of knowing you have a right to be in your place in the world, a right to occupy the space you are in, and a right to get what you want. Assertiveness is a quality best used to develop our confidence. Assertiveness is the ability to express one's own thoughts and feelings and defend one's own right to behave in certain ways, without violating the rights of others. Dorland's Medical Dictionary (1994) defines assertiveness as a form of behaviour characterized by a confident declaration or affirmation of a statement without need of proof. The best way to understand assertiveness is to distinguish it from two other styles people use when dealing with conflict: acquiescence (non-assertiveness) and aggression (Alberti, & Emmons, 1995). Acquiescence is avoiding interpersonal conflict entirely, either by giving up and giving in or by expressing one's needs in an apologetic self-effecting manner. Aggression on the other hand is an effort to attain objectives by attacking or hurting others. Aggressive people trample on others, and their aggressiveness can take such direct forms as threats, verbal attacks, physical intimidation, emotional outburst, and explosiveness (Fensterheim,

1975). Assertiveness does not come easily to most of us; it can put an adolescent into direct conflict with parents, teachers and peers.

Baumeister, Campbell, Krueger and Vohs (2003) believe low self-esteem may cause aggressive and passive personality traits on one hand and depression on the other hand (Santrock, 2002) while high self-esteem may produce assertive personality traits. Being successful in interpersonal relationships, active, assertive, creative, flexible and confident were related with high self-esteem. According to Steinberg (2002), adolescence is a period of transition in which a major recognition of the body takes place. There is a general perception in the western world that, adolescents who tend to be skinny are beautiful or attractive, whilst the overweight adolescents are considered unattractive. Adolescents tend to be extremely critical about their bodies and physical appearance, they usually compare themselves with peers and this may produce anxiety and low self-esteem, and lack of confidence especially when they perceive themselves different from their peers (Santrock, 2005). These are good findings but they cannot be generalized to adolescent students who constitute the population for this study. Hence, the design of this research is to find out, if these findings are true of the adolescent students in Ghana.

Methodology

Research Design

An exploratory quantitative research method was adopted for this study. This approach was chosen because the study entailed variables such as body type, assertiveness, self-esteem, age, gender and personality type. The study was also centered on students of a particular senior high school.

Population

Participants were male and female adolescent students from the Senior High School in Accra, Ghana. A sample of 150 participants, consisting of 50 overweight, 50 under weight and 50 optimal students between the ages of 13 and 19 and in various forms (SHS 1, SHS 2, & SHS 3), were randomly selected for this study. The sample consisted of 56 males (37.3%) and 94 females (62.7%). The criterion for selection was their body type which was done through observation. Overweight participants were labelled as "endomorphs", optimal participants were labelled as "mesomorphs" and underweight participants were labelled as "ectomorphs".

Instruments

Two main instruments were used for the study namely; Rosenberg's self-esteem Scale (1965) and Alberti and Emmons' Assertive Inventory (1995). In addition was a self constructed questionnaire designed to elicit information on respondents' demographics.

Rosenberg's self-esteem scale

The scale was made up of both positive and negative statements, assessed using a 5-point Likert scale ranging from strongly disagree (1), to strongly agree (5). The maximum score is 50, with high score indicating high self-esteem. Items 3, 5, 8, 9 and 10 are reversed scores. Examples of items include, "I feel I am a person of worth, at least on an equal plane with others" and "I feel I do not have much to be proud of". Rosenberg's self-esteem scale had a reliability rating of alpha coefficient (α) of 0.87, which is quite high, indicating that the scale was able to measure what it was intended to measure.

Alberti and Emmons' Assertive Inventory

To measure an individual's assertiveness level, there were 35 items on the inventory and three choices for response which include Yes, Sometimes and No. Sum of the Yes, Sometimes and No responses gave the assertiveness score. The higher the score, the higher the assertiveness level of an individual.

Modification

Three of the items on the Assertive Scale were restructured to suit the target population for appropriate response, but their meanings were not changed. An example of an item changed was: "When you discover a product is faulty, do you return it for an adjustment?" The former form of this item was "when you discover merchandise is faulty, do you return it for an adjustment?"

Scoring

Data from Rosenberg's Self-Esteem Scale was scored by attaching a score of 1-5 on the Likert scale responses of strongly agree, agree, neutral, disagree and strongly disagree. Reverse scoring was applied to negative statements. Assertiveness on the other hand was measured and scored using the Alberti and Emmons' assertiveness scale; the scale consisted of 35 items which was

scored on 1-3 Likert scale responses of yes, sometimes and no. A person's level of assertiveness was obtained by adding the scores attached to the responses, reverse scoring was applied.

Procedure

Following institutional approval, participants were grouped based on their body types and asked to respond to the questions on the questionnaire. Participants were informed of the purpose of the study and gave their consents by agreeing to participate. Participants were required to respond to questions in the questionnaire within 35 to 45 minutes after briefing them on the demands of the questionnaire.

Results

Hypothesis 1: 'Adolescent students with mesomorphic body type will have higher self-esteem compared to those adolescent students with ectomorphic body type'. Relevant information from the analysis on this hypothesis is presented in the [Table 1](#) below;

Table 1. One-Way Analysis of Variance summary table on body type and self-esteem

Ectomorph (n=50)		Mesomorph (n=50)			Endomorph (n=50)	
Body Type	M	SD	df	F	ρ	
Ectomorph	36.00	6.75	2			
Mesomorph	43.56	4.49	147			
Endomorph	32.44	8.22				
Total	37.33	9.73	149	34.648	.001	[2>1>3]

Statistics in [Table 1](#) above revealed that, the mean self-esteem of adolescent students with mesomorphic body type was 43.56 with a standard deviation of 4.49 and the mean self-esteem of adolescent students with ectomorphic body type was 36.00 with a standard deviation of 6.75. This indicated that, differences exist between the self-esteem experienced by mesomorphs and ectomorphs.

Therefore, a significant difference exists between adolescent students with mesomorphic and endomorphic body types in their experience of self-esteem. However, to determine the extent to which adolescent student mesomorphs resulted in higher self-esteem, Bonferroni analysis was resorted to. It was revealed that, body type indeed affects self-esteem, the higher the mean, the higher the self-esteem displayed. This implies mesomorphic adolescent students have higher self-esteem than adolescent student ectomorphs. Thus, hypothesis 1 was accepted.

Hypothesis 2: 'There will be a significant positive correlation between body type and assertiveness'. Relevant information from the analysis on this hypothesis is presented in the [Table 2](#) below.

Table 2. Mean and Standard Deviation of self-esteem and assertiveness

Students (n=150)					
Variables	M	SD	df	r	ρ
Self-esteem	37.33	8.22			
Assertiveness	75.06	11.97			
Total			148	.365	.001

Statistics in the summary [Table 2](#) above revealed that, the mean result of adolescent students' self-esteem was 37.33 with a standard deviation of 8.22. The mean figure of adolescent students' assertiveness was 75.06 with a standard deviation of 11.97. These two means were correlated with the Pearson's Product Moment Correlation Coefficient and results indicated that a positive

correlation existed between the two variables, [$r_{(148)} = .365, \rho = .000$]. Thus, hypothesis 2 was accepted meaning self-esteem affects assertiveness; high self-esteem leads to being assertive and low self-esteem leads to non-assertiveness.

Hypothesis 3: 'Adolescent students with endomorphic body type will have low self-esteem compared to adolescent students with mesomorphic body type'. Relevant information from analysis on this hypothesis is presented in Table 1 above. Statistics from Table 1 revealed that, the mean self-esteem of adolescent students with mesomorphic body type was 43.56 with a standard deviation of 4.49 and the mean self-esteem of adolescent students with endomorphic body type was 32.44 with a standard deviation of 8.22. This result indicated that, a significant difference exists between adolescent students with mesomorphic and endomorphic body types in their experience of self-esteem. However, to determine the extent to which endomorphs resulted in lower self-esteem, Bonferroni analysis was resorted to. It was revealed that, adolescent students with endomorphic body type indeed have lower self-esteem, the lower the mean, the lower the self-esteem displayed. Endomorphic adolescent students have lower self-esteem compared to adolescent students with mesomorphic body type.

Discussion

Results indicated that body type and its perception had influence on self-esteem. Both male and female adolescent students with mesomorphic body type preferred their bodies and thus, had high self-esteem compared to male and female adolescent students with ectomorphic body type. This finding is somehow in line with that of Mishkind, Rodin, Silberstein and Striegel-Moore (1987). They found that majority of men preferred the mesomorphic shape body over the ectomorphic (thin) or endomorphic (fat). Within the mesomorphic category, most men preferred the hypermesomorphic or muscular mesomorphic body. They found that men have a greater degree of body satisfaction when their body shape fits this 'ideal'. When there is a gap between their actual and 'ideal' body types and the greater this gap, the lower their self-esteem.

General observation revealed that, people with the optimal body type (not so fat nor skinny) are considered attractive, and are able to fit in perfectly among friends and during social interaction. This goes a long way to boost their level of esteem. Most people especially males prefer to be mesomorphic rather than ectomorphic or endomorphic. This positive body perception is likely to lead these adolescent students to be more sociable, mentally healthy, and intelligent; and experience psychological benefits in their self-esteem (Feingold, 1992).

The study found a significant positive correlation between self-esteem and assertiveness. According to Murphy (2007), there is a correlation between self-esteem and assertiveness scores. Humphreys (1993) indicated that, people with assertiveness and high self-esteem exhibit the same behaviours. In addition, the study suggested that, low self-esteem may cause aggressive and passive personality traits while high self-esteem may produce assertive personality traits. Thompson et al. (1996) observed that being unhappy with one's body image can affect how the person thinks and feels about him/herself. It is likely that adolescent students who were dissatisfied with their body type can suffer emotional distress, low self-esteem, non-assertiveness and eating disorders like anorexia nervosa and bulimia (Drewnowski, Kurth, & Krahn, 1994).

In the same way dissatisfaction with one's body type is likely to be one of the causes of body dysmorphic disorder among adolescents. It is therefore possible that adolescent students who expressed poor perception of their body type have developed or are likely to develop body dysmorphic disorder. It is also possible that the adolescent students are likely to or have engaged in preoccupation with some imagined defect in appearance although they are normal appearing persons and excessive concern over slight physical defect. They may also engage in frequent mirror checking, regard their dissatisfied body type with embarrassment and loathing and are concerned that others may be looking at or thinking about their body type. They may avoid social activities, work, and school and become housebound and suicidal (Schmidt, & Harrington, 1995). This attitude may affect academic performance negatively.

The results indicated that adolescents with endomorphic body type will have low self-esteem compared to adolescent students with mesomorphic body type. This was in line with the results of Martin, Housley, and McCoy (1988). In order to establish a relationship between obesity and self-esteem, they administered a Rosenberg Self-esteem Scale to 14 and 16 year old girls. Self-esteem scores were categorized by weight and weight by height. Scores on the Quetelet Index for Obesity were correlated with

self-esteem scores. Mean self-esteem of the low-and-middle weight by height group was higher than the mean of the high weight group. In analyzing weight alone, the self-esteem of the middle-weight group was significantly higher than the self-esteem of the high-weight group. The correlation of the obesity index and self-esteem indicated that as weight increased, self-esteem decreased.

In another study, the relationship between obesity and self-esteem was examined prospectively over three years in a cohort of 1,278 adolescents in grades 7 to 9 at baseline. Cross-sectional analysis revealed an inverse association between physical appearance, self-esteem and body mass index in both males and females. In females, body mass index was inversely associated with global self-esteem, close friendship, and behavioural conduct. In males, body mass index was inversely associated with athletic and romantic appeal. These results suggest that low self-esteem may be an important factor in preventing or reversing obesity (French, Perry, Leon, & Fulkerson, 1996). A study by Strauss (2000) also supports the present finding; Strauss's data demonstrates that negative weight perceptions are particularly common among young adolescent white females, which reveals that young obese adolescent females show the lowest levels of self-esteem. Nevertheless, negative perceptions of obesity also exist among adolescent boys. The data also demonstrates significant social consequences of decreasing self-esteem in obese children. Obese children with decreasing levels of self-esteem showed significantly elevated levels of loneliness, sadness, and nervousness. Although these efforts are not unique for obese children, they are nevertheless quite important because nearly 70% of white obese females demonstrated decreasing levels of self-esteem by early adolescence.

Though it is possible that obesity can trigger feelings of low self-esteem, the converse is also true. Feelings of low self-esteem can trigger over eating behaviours that can exacerbate obesity. Overweight adolescents usually feel isolated and lonely among their peers and this may have impact on their level of esteem and the way they feel about themselves can be influenced by many things including comments from family, peers and socio-culture. It is therefore acceptable by this study that, dislike for one's body leads to low self-esteem and non-assertiveness.

Limitation

This study used 150 students and also focused on a target population from one senior high school and therefore, generalization of the findings may be somehow difficult. However, findings from the study could be used in any adolescent issues.

Conclusion

It is therefore concluded that dissatisfaction in body type can seriously affect an individual's self-esteem and assertiveness and by extension academic performance, choice of friends, participation in group work and social relationships. Results indicated that body type and its perception had influence on self-esteem. In addition, the study identified a significant positive correlation between self-esteem and assertiveness. Finally, the study showed that adolescents with endomorphic body type will have low self-esteem compared to adolescent students with mesomorphic body type.

Recommendation

It is therefore, recommended that guidance and counselling officers in senior high schools should educate students on the three body types and the advantages associated with being one of these body types. This may help prevent developing body dysmorphic disorder among adolescent students with poor body type image. In addition, assertiveness training is to be a regular feature of orientation programmes for adolescent students since the three body types will be found with them. The sources and effects of low self-esteem and its implication for poor academic performance, loneliness, depression, social withdrawal, and development of ineffective socialization skills, should be explained to adolescents in senior high schools in Ghana. Adolescents students who are found to have low self-esteem should be taught the four ways to increase self-esteem through, *identification of cause of low self-esteem and the domains of competence important to life, emotional support and social approval, achievement, and coping* (Santrock, 2002).

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