Relationship Between Body Image Satisfaction and Psychological Well-Being: The Impact of Africentric Values

John Enoch Dotse (Corresponding Author)
Department of Psychology, University of Ghana, Legon
E-mail: Johnoch04@yahoo.com

Maxwell Asumeng
Department of Psychology, University of Ghana, Legon
E-mail: maxasumeng@ug.edu.gh/maxysumeng@gmail.com

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Abstract
Empirical studies established a link between body image measured as body mass index and psychological variables in western cultures with less inclusion of indigenous Africans. The present study investigated the influence of body image satisfaction on the psychological well-being of individuals within the African cultural context. Body image dimension was redefined and expanded to include four other components: facial appearance, appendage appearance, physical appearance, and complexion and body mass index. The sample was drawn from Ghana but covered nationals of 9 African countries. Data were analyzed using the Pearson product moment correlation, analysis of variance and hierarchical multiple regression. Findings revealed significant positive relationship between body image satisfaction and psychological well-being with Africentric values moderating the relationship as hypothesized. Also males were more satisfied with their body image than females. However, contrary to expectation level of education had no significant effect on a person’s body image satisfaction.

Keywords: Body image, Africentric values, Psychological well-being
1. Introduction

According to World Health Organization (WHO) (2013), several individuals make the attempt to change something about their bodies. The attempt to change complexion and facial looks for example is more common among blacks possibly due to dissatisfaction with their body images. Approximately 77% of Nigerian women have been found to engage practices to change their complexion due to dissatisfaction with their skin colour (WHO, 2013). Body image refers to individuals’ perceptions and attitudes toward their physical appearances (Cash & Pruzinsky, 2002). It is the mental representation we create of what we think we look like which may or may not bear a close relation to how others actually see us (Cash & Smolak, 2011). Others have conceptualized it as body mass index which is related to a person’s weight (Cash, 2012). This suggests that the weight and appearance of a person are integral component of body image appraisal. Body image perception is subject to all kinds of distortions from internal elements like our emotions, moods, early experiences, attitudes of our parents, and these strongly influences our behaviour (Warren, Castillo, & Gleaves, 2009). Pre-occupation with body image is widespread among American women, and, to a lesser extent, among males. It is found to be a driving force in eating disorders and attempts at changing ones complexion (Durkin & Paxton, 2002).

Cash (2011) proposed that there are two components in the body image attitudes. One is the evaluation that individuals have of their bodies, such as body dissatisfaction. The other component is the investment individuals put in their appearances, including the degree of importance placed on appearances. The investment component has been studied less than the evaluation component in empirical research (Cash, 2011). Both evaluation and investment aspects of body image are related to psychological functioning. Body image evaluation such as body dissatisfaction was a significant predictor for both depression and low self-esteem among Caucasian, African American, Latino, Asian, and multiethnic ninth grade boys and girls (Nishina, Ammon, Bellmore, & Graham, 2006). Body image investment, such as high levels of importance placed on body image, was related to low self-esteem, worse self-evaluation, and less satisfaction with physical appearance among Korean and American female college students (Jung & Lee, 2006). Body shame which stemmed from the inability to meet the societal body ideals predicted depression; higher levels of body shame related to higher levels of depression (Teo, Philipp, Naus, & Chamberlain, 2008). However the beliefs people have about themselves, those around them, and the environment sometimes distort reality (Bandura, 1997).

There are several independent factors that have been shown to negatively affect body image. These include peer factors and consumerism, family characteristics, media portrayal of the thin ideal, individual personality traits (Vander Wal & Thelen, 2000), body weight, stigmatization and health messages (Paquette & Raine, 2004). The extent to which these factors interact with each other and contribute to body image development may vary according to age, gender and key developmental milestones, level of education and more importantly race. A person’s body image is dynamic; fluctuating as new life experiences are encountered (Paquette & Raine, 2004). Body image discontent is common in western societies and seemed to be creeping into the African societies possibly due to imbibitions of foreign cultures and increase literacy rate (Altabe, 1998). Individuals become aware of what
Body image dissatisfaction can make an individual withdraw from society and among peers (Tylka, 2011). It is a common knowledge that in modern time’s beauty especially among females is defined partly by body structure. Once the individual perceives either through remarks from people or by self-evaluation that his/her body appearance is incomparable to that of others, it tends to affect their general feeling and well being. Some express this through the comments they make when they see others they consider to posses the ideal body features.

According to Bio-ecological model (Bronfenbrenner, 1989), every individual is part of a macro-system that is the culture and social context. The macro system indicates the culture that transmits body ideals and micro system is the family and peers that determine what desired body shape and size is. Body ideals and expectations vary among cultures, and their definitions of attractiveness are different. For example, Chinese Americans with more Chinese values place more importance on psychological traits and behavioral manners when defining male and female attractiveness; however, those with more individualistic values emphasize physical appearance more (Cheng, 2000). A careful study of the general literature shows that the link between body image and psychological well-being is not clearly established. Also studies on body image, race, sex, and psychological factors were conducted among Black Americans and Hispanics whose cultural values are not reflective of native Africans. For that reason mostly the African self-consciousness measures were used (Yam, 2013). However attempts to change ones physical looks example body bleaching seemed to be most reported among Africans (WHO, 2013).

The concept of Africentric value assesses Africans experience of the world (Parham, 2002). It entails level of adherence to African cultural practices and belief systems that determine the identity of Africans and people of African descent and how they perceive themselves (Grills & Longshore, 1996). Studies suggested that “a positive relationship exists between healthy mental functioning and an African-centered identity; thus, identification with a strong Africentrism may be associated with one’s progressive mental health functioning (Akbar, 1981; Azibo, 1996; Kambon, 1996; Nobles, 1986; Parham, 2002). The Grills and Longshore (1996) measure of africentric values potentially opens an avenue to explore and test this claim. Therefore this measure might provide a direct benefit to testing the intervening effects of an African-centered identity on mental health and other psychological or behavioral indices” as in the present study.
1.1 Research Questions
What is the relationship between body image satisfaction and psychological wellbeing?
What is the impact of africentric values on the relationship between body image perception and psychological wellbeing?
Do socio demographic factors such as sex and level of formal education, influence body image satisfaction?

2. Literature Review

2.1 Theories of Body Image and Psychological Well-being

2.1.1 Cognitive theory of Body Image
The cognitive approach to body image dissatisfaction is of the view that people who are preoccupied with body size and shape interpret information related to body image in a biased manner. Specifically, these individuals may differentially attend to and remember body-related stimuli, which in turn perpetuate dissatisfaction with their body images (Williamson, & Blouin, 2000). Further “individuals may judge ambiguous situations or stimuli in a manner congruent with their negative beliefs regarding their appearance” (Jackman, Williamson, Netemeyer, & Anderson, 1996). For instance a teenager preoccupied with weight may interpret another's laughter as directed toward his body size, rather than a funny joke. It is assumed that this biased cognitive processing occurs automatically, outside the conscious awareness of the individual (Williamson, 1996).

2.1.2 Developmental and Socio-Cultural Theories of Body Image
Developmental and sociocultural theories explain how one’s body image develops. An understanding of these theories lends considerable insight into understanding why a negative body image has been shown repeatedly in obese populations. Developmental theorists have focused on the importance of childhood and adolescence as a critical period during which the development of body image occurs (Heinberg, 1995). Factors such as pubertal timing and teasing have been implicated as variables which may contribute to body image development. Socio-cultural theories have targeted social comparison and socio-cultural messages regarding appearance and beauty as important factors in the development of body image. Sociocultural approaches seek to understand human behavior by examining how cultural values influence individual values and experiences, and how these values are reflected in a person’s cognitions and behaviors (Cash & Pruzinsky, 2004; Jackson, 2004).

In particular, social expectancy theorists argue that cultural values shape how individuals perceive and evaluate others, and that this, in turn, influences how others evaluate themselves (Jackson, 2004). In terms of body image, this theory posits that within a culture, people share socially defined standards of attractiveness, as well as expectations about people that are considered attractive. As a result, they behave differently towards individuals that are considered to be attractive, and in turn, this differential behavior leads to differences in how individuals respond to such treatment. Finally, these behavioral differences in treatment of individuals deemed attractive or unattractive by cultural standards shape self concept (Jackson, 2004).
2.2 Related Empirical Studies

2.2.1 Body Image Perception and Psychological Factors

People with eating disorders tend to over-evaluate their appearance and have high levels of dysfunctional beliefs about appearance. However, having high levels of dysfunctional beliefs about appearance is not common in the general population (Fairburn, 2008). Lin and Reid (2008) examined the role of dysfunctional beliefs about appearance in the relationship between media exposure and anti-fat attitudes. People who spent more time reading fashion magazines had higher levels of dysfunctional beliefs about appearance, which led to high levels of body dissatisfaction and anti-fat attitudes. Dysfunctional beliefs about appearance were found to be predictors of body image, body dissatisfaction, valuing of thinness, and self-esteem (Carroll & Spangler, 2001; Spangler, 2002). Dysfunctional beliefs about appearance were also found to play central roles in causing eating disorders. People with high levels of dysfunctional beliefs about appearance tend to have high levels of dietary restriction (Spangler, 2002). Based on the above review; it is predicted that;

**Hypothesis 1:** There will be a significant positive relationship between body image satisfaction and psychological well being.

2.2.2 Culture and Body Image Perceptions

The role of culture is very crucial in the formation of one’s body image (Yam, 2013). Studies on cultural influences on body image perceptions, however, seem to be inconclusive. Some studies supported the positive relationship between acculturation and body dissatisfaction and eating disorders. In Pumariega’s (1986) study, the more acculturated Hispanic American adolescents were, the more likely they were to have disordered eating attitudes. Among Mexican American women, high levels of acculturation to American society and internalization of American societal body ideals were related to low desirability for the larger body shape and low levels of body satisfaction (Turnage, 2004). Internalization of societal body ideals explained more variance in predicting desirability for larger body shape and body satisfaction than acculturation (Alvarez, 2003). Other studies supported the negative relationship between cultural norms and body dissatisfaction or eating disorders. In Rumaldo’s (2011) study, Hispanic American women who identified more with both U.S. and Hispanic cultures were less likely to have body dissatisfaction and eating disorders, with only body dissatisfaction statistically significant. Compared with Hong Kong-born female college students with western acculturation, those with high levels of traditional Chinese identity reported having higher levels of body dissatisfaction and eating disorders (Lake, Staiger, & Glowinski, 1999).

Interviews with therapists with experiences in eating disorder treatment among Asian American women found that the stressful process of acculturation played an important role in clients’ eating disorder formation (Smart, Tsong, Mejia, Hayashino, & Braaten, 2011). To these Asian American clients, eating disorder behaviors were a way to cope with stresses related to achieving success and cultural dissonance. Their definition of success includes striving toward high standards of thinness. Cultural dissonance of traditional Asian values emphasized at home while experiencing mainstream U.S. values is another origin of stress (Stark-Wroblewski, Yanico, & Lupe, 2005). From the above literature it can be deduced that
cultural variables shape an individual’s orientation towards the body and goes to affects his/her psychological health.

Reddy and Crowther (2007) found that South Asian American women with greater cultural values conflict had more maladaptive eating attitudes and body dissatisfaction. Among Mexican American female college students, cognitive marginalization acted as a moderator in the relationship between internalization of societal body ideals and body dissatisfaction. The relationship was stronger for those with more difficulties in accepting dominant White cultural beliefs than those with fewer difficulties. The authors posited that difficulties in accepting White cultural beliefs with highly internalized societal body ideals would confront Mexican American females with more acculturative stressors, which may heighten their dissatisfaction with body image (Warren, Castillo, & Gleaves, 2009).

Being overweight as a young child consistently predicts body dissatisfaction and disordered eating behaviour (Vander Wal & Thelen 2000). Obesity stigmatization reinforces society’s notion of weight acceptability. Prejudice, labeling, stigmatization and discrimination based on weight are widespread in contemporary societies like Australia; where the thin ideal is held up as the cultural “norm”. Interestingly, obesity stigmatization remains an issue, despite the increasing prevalence of obesity. Stigmatizing occurs at interpersonal levels, in social encounters, school or work situations and even in the public domain. Whilst in recent years, social norms have greatly reduced the stigmatization of racial, religious, sexual or gender groups, it is still considered socially acceptable to “jokingly” remark on a person’s physical shape or size (Sobal, 1999). A study by Myers and Rosen (1999) highlights that obesity stigmatization is a common experience and can lead to greater psychological distress, further body image dissatisfaction, more attempts to cope (including use of food) and even more severe obesity. A careful study of the general literature shows that studies on race, sex, body image and psychological factors were conducted among Black Americans and Hispanics whose cultural values are different from indigenous African. But in a likewise manner Africentric values can have intervening effect on body image perceptions and psychological health. On the basis of this, it is hypothesized that;

**Hypothesis 2: Africentric values will moderate the relationship between body image satisfaction and psychological well-being.**

2.2.3 Socio Demographic Factors, Body Image Satisfaction and Psychological Well-Being

Durkin and Paxton (2002) investigated predictors of change in an individual’s satisfaction with the body, depression and anxiety after exposing girls of grades 7 and 10 to idealized female advertising images. Stability in their body satisfaction and dissatisfaction, physical appearance, tendency to engage in comparison, internalization of thing body ideals, self-worth, depressive feelings, identity problems and body mass index (BMI) were examined. After a week, the participants were made to view either images of idealized females or fashion accessories. Assessments on state body satisfaction, state depression and state anxiety then followed. For all the grades significant decrease in state body satisfaction and a significant increase in state depression due to viewing the female images were observed. With the grade 7 girls, decrease in state body satisfaction was predicted by stable body dissatisfaction and body mass index, while significant predictors of decreases in the measures of negative affect included internalization of the thin-ideal and appearance comparison. With
the girls of Grade 10, decrease in state body satisfaction and the observed increase in state depression was predicted by internalization of the thin-ideal, appearance comparison and stable body dissatisfaction. The findings point to the significant influence of idealized body images on psychological variables.

Studies on body image for the past 50 years regarding psychological well-being revealed that women have higher levels of depression and lower self-esteem than men (Nolen-Hoeksema, 2001) in relation to dissatisfaction with body image. Other studies suggest that women have generally higher body dissatisfaction than men. Besides changes in weight, participants in weight loss programs often report improved life satisfaction and feeling more positive about their bodies and their new-learned abilities, such as being physically active and self-managing their weight. Research has shown that these psychological improvements can be associated with weight changes (Blaine, 2007; Maciejewski, 2005). While treatment-related psychosocial changes (improved body image) are considered valuable outcomes per se and a natural consequence of losing weight, they are not necessarily viewed as mediators or enabling factors for behavior change. Myers and Rosen (1999) found that obesity stigmatization is a common experience and can lead to greater psychological distress, further body image dissatisfaction, more attempts to cope including use of food and even more severe obesity.

Psychological well-being, family functioning, extraversion, perceived physical attractiveness and weight reported by adolescents students revealed that girls were significantly more likely than boys to be dissatisfied with their weight and physical appearance, and these factors explained significantly more variation in self-esteem and psychological well-being than other psychological variables (Delfabbro, Winefield, Anderson, & Winefield, 2011). With the data relationship between body dissatisfaction and self-esteem for adolescent girls was not moderated by school type (Delfabbro, Winefield, Anderson, & Winefield, 2011). On the basis of the literature on socio-demographic factors relating to body image and psychological variables, it is hypothesized that;

**Hypothesis 3:** Males are more likely to be satisfied with their body image than females.

**Hypothesis 4:** Individuals who are highly educated are more likely to be satisfied with their body image than those with lower levels of education.

### 3. Methodology

#### 3.1 Research Design

The study adopted the cross-sectional survey method. This is because the data was collected from two or more groups of participants at the same, rather limited time on an issue of interest (Smith & Davis, 2004).

#### 3.2 Participants

Individuals between the ages of 12 to 50 (from adolescent ages to middle adulthood) served as the sample frame. This population was most suitable because it is within these ages that an individual is really concerned about the body and appearance. A total of 100 participants constitute the sample for the study. At least 10 participants each were drawn from Volta region, Eastern region, Central region, Ashanti region and Upper West Region with Greater Accra region contributing 10 indigenes and 30 nationals from other African countries. The countries include Nigeria, Senegal, Liberia, Cote D’Voire, Togo, Namibia, Ethiopia and
Cameroun who could all understand and communicate in English. This ensured the representation of different ethnic groups and African nationalities in the sample. There were 56 females against 44 males. Their ages ranged from 15-49 with the modal age being 15-25. 45 are married, 51 are single while 4 are divorced. 4% had basic education, 44 secondary education, 12 diploma, 40 first degree and 10 masters degree and above.

3.3 Measures

**Socio demographic factors**: socio-demographic factors collected include sex, level of education, and age. Of interest to the study is the sex differences and level of education.

**Body Image Satisfaction Scale**

The 20 item questionnaire, assess both the subjective appraisal and social-behavioral components of body image. Items were adapted from two different scales; the Body shape questionnaire (Cooper, Taylor, & Fairburn, 1987) and Satisfaction with Appearance Scale (SWAP) (Lawrence et al., 1998). The scale was piloted for the present study using 35 Ghanaian samples. Principal component factor analysis produced five factors with all the factor loadings above 0.3 (see Table 1 and Figure 1). The five (5) factors: facial appearance (5 items), appendages appearance (4 items) physical appearance (6 items), complexion (5items), and body mass index (5 items). Cronbach alpha of 0.82 was observed for the total scale. The Cronbach Alpha for the sub scales includes; facial appearance 0.70, appendages appearance 0.78, physical appearance 0.79, complexion 0.66, and body mass index 0.70. Sample items include: *I feel my face look a great deal better than that of the average person, I feel that my limbs are disproportionate to my body, Generally I feel obnoxious about my physical structure, When I compare my skin colour to others I "come up short" and I have felt excessively large and rounded.* The scale is cored on 7-point from 1 = strongly disagree to 7 = strongly agree. Negatively worded items are scored in a reversed valence. A higher score on a facet reflect more satisfaction with that aspect of the body.
### Table 1. Factor analysis of body image satisfaction scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facial Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the appearance of my scalp</td>
<td>.62</td>
</tr>
<tr>
<td>I am satisfied with the appearance of my face</td>
<td>.75</td>
</tr>
<tr>
<td>If I have my way I could have changed my nose</td>
<td>.67</td>
</tr>
<tr>
<td>I admire my eyes when I see them in a mirror</td>
<td>.58</td>
</tr>
<tr>
<td>I feel my face look a great deal better than that of the average person</td>
<td>.64</td>
</tr>
<tr>
<td><strong>Appendages Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with the appearance of my arms</td>
<td>.73</td>
</tr>
<tr>
<td>I am satisfied with the appearance of my legs</td>
<td>.39</td>
</tr>
<tr>
<td>I am worried about other people seeing rolls of flesh around my waist or stomach</td>
<td>.42</td>
</tr>
<tr>
<td>I feel that my limbs are disproportionate to my body</td>
<td>.82</td>
</tr>
<tr>
<td><strong>Physical Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>I feel that my height is unattractive to others</td>
<td>.83</td>
</tr>
<tr>
<td>Generally I feel obnoxious about my physical structure</td>
<td>.52</td>
</tr>
<tr>
<td>I have felt discriminated because of my physical appearance</td>
<td>.55</td>
</tr>
<tr>
<td>I worry about my body not being good enough</td>
<td>.50</td>
</tr>
<tr>
<td>I am concerned my body is not muscular or strong enough</td>
<td>.41</td>
</tr>
<tr>
<td>I have felt that it is not fair that other people are thinner than me</td>
<td>.69</td>
</tr>
<tr>
<td><strong>Complexion</strong></td>
<td></td>
</tr>
<tr>
<td>I satisfied with the shade of my skin colour</td>
<td>.57</td>
</tr>
<tr>
<td>I sometimes feel like changing my complexion</td>
<td>.69</td>
</tr>
<tr>
<td>When I compare my skin colour to others I &quot;come up short&quot;</td>
<td>.55</td>
</tr>
<tr>
<td>I think in my society others do not see my skin colour as beautiful</td>
<td>.49</td>
</tr>
<tr>
<td>It is better to have a lighter skin than dark skin</td>
<td>.62</td>
</tr>
<tr>
<td><strong>Body Mass Index</strong></td>
<td></td>
</tr>
<tr>
<td>I have noticed the shape of other people and felt that my own shape compared unfavorably</td>
<td>.42</td>
</tr>
<tr>
<td>I always feel I should be more lighter than I am now</td>
<td>.76</td>
</tr>
</tbody>
</table>
I have been particularly self-conscious about my shape and weight when in the company of other people.

I have felt excessively large and rounded.

If I gain weight, I get anxious and depressed.

*Extraction Method: Principal Component Analysis.*

![Scree Plot](image)

Figure 1. Screeplot of the factor analysis of the items on the body image scale.

**Psychological well-being scale (Ryff, 2004)**

The psychological well-being scale was used to measure the dependent variable (Psychological well being). It has a Cronbach alpha of ($\alpha = .87$). Psychological well-being is a multifaceted concept that taps on “subjective, social, and psychological aspects and “health-related behaviours” as well. The scale is grounded in theory and measures multiple dimensions of the concept. The scale is made up of forty-two (42) self report items with each item reflecting both negative and positive emotional symptom. The scale has facets of Autonomy, Environmental Mastering, Personal Growth, Positive Relations, and Purpose in life and Self-Acceptance. The score ranges from strongly agree = five (5) to strongly disagree = 1. The internal consistency for the various facets include Autonomy .86, Environmental Mastery .98, Personal Growth .87, Positive Relations .91, Purpose in life .90 and
Self-Acceptance .93. In scoring the Psychological wellbeing scale, the scores of Autonomy, Environmental Mastering, Personal Growth, Positive Relations, Purpose in life and self-acceptance is calculated by summing up the scores for the relevant items. On the contrary, lower scores indicate that the individual finds it difficult to deal with a particular concept.

**Africentric Values Scale (Grills & Longshore, 1996)**

The self-report measure of Africentric values, developed from “Nguzu Saba”, entails the conceptualization of Africans and people with African descent consistent with African values and “principles for healthy daily living”. Primarily it aims at ‘conceptualizing’ Africans from their own perspective. Africentric values were measured with the Africentric Values Scale (Grills & Longshore, 1996). The scale is a 15-item likert scale which taps on Africentric values and behaviours as opined by the ‘seven principles of the Nguzu Saba’. Responses are anchored on 4-point likert scale from 1 = *strongly disagree* to 4 = *strongly agree*. Reliability coefficients ranged from .62 to .82 (Grills & Longshore, 1996). Items that do not ‘reflect Africentric values’ (e.g., “The success I have had is mainly because of me, not anyone else”; “I have very little faith in Black/African people) were reverse-scored.

### 3.4 Procedure

Upon consent of the participants a total of 120 sets of the questionnaire were randomly distributed to them. Some participants were guided by explaining to them what a particular statement on the scale/questionnaire means and how a response according to the preference of the participant would be indicated. Names of participants were not taken to ensure confidentiality in the handling of data. However participants were made to disclose their ages, sex, educational levels, nationality and other information which were relevant in testing some of the hypotheses stated. Out of the 120 questionnaires collected, 100 were found useful for the analysis representing 83.3% response rate.

### 4. Results

#### 4.1 Descriptive Statistics
Table 2. Pearson’s Correlation among the Study Variables and Descriptive Statistics (N = 100)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>-</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age</td>
<td>-</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Level of Education</td>
<td>0.03</td>
<td>0.071</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. Body Image</td>
<td>.137*</td>
<td>.238**</td>
<td>-0.031</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Facial appearance</td>
<td>0.13</td>
<td>0.03</td>
<td>0.13</td>
<td>0.11</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Appendage appearance</td>
<td>.20**</td>
<td>-0.01</td>
<td>21**</td>
<td>0.06</td>
<td>.15*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Physical appearance</td>
<td>0.42</td>
<td>0.05</td>
<td>.51**</td>
<td>.18*</td>
<td>.17*</td>
<td>-0.05</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Complexion</td>
<td>.34**</td>
<td>0.08</td>
<td>.35**</td>
<td>0.09</td>
<td>0.1</td>
<td>.18*</td>
<td>-0.07</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9. Body mass index</td>
<td>0.05</td>
<td>-0.02</td>
<td>0.06</td>
<td>-.15*</td>
<td>0.09</td>
<td>-0.05</td>
<td>-0.12</td>
<td>-.24**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Africentric values</td>
<td>0.047</td>
<td>.152*</td>
<td>-0.06</td>
<td>0.053</td>
<td>-0.22</td>
<td>.25*</td>
<td>-.22**</td>
<td>-.14*</td>
<td>.14*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>11. Psych Well-being</td>
<td>-.277**</td>
<td>0.022</td>
<td>-.210**</td>
<td>.238**</td>
<td>.141*</td>
<td>.26**</td>
<td>-0.12</td>
<td>-0.13</td>
<td>.19**</td>
<td>0.251</td>
<td>-</td>
</tr>
</tbody>
</table>

**Na = Not applicable.**

**p < .01; *p < .05; Na= Not applicable.**

Tables 3 above shows that majority of the independent variables related significantly with the dependent variable.

4.2 Hypotheses Testing

Hierarchical multiple regression analysis was performed to test Hypotheses and 2. Psychological wellbeing was regressed on body image satisfaction at the first step of the model, followed Africentric values at the second step, and then the interaction term of body image satisfaction and Africentric values at final step. Following Baron and Kenny (1986), scores on the independent variable (body image satisfaction) and the moderator (Africentric values) were centered prior to creating the interaction term. The remaining hypotheses (Hypotheses 3 and 4) were tested using a two-way ANOVA.

**Hypothesis 1:** There will be a significant positive relationship between body image satisfaction and psychological well being. As shown in Table 6, the results indicated that there was a significant positive relationship between body image satisfaction and psychological well being ($\beta = .238$, $p < .01$). The hypothesis is therefore supported.

**Hypothesis 2:** Africentric values will moderate the relationship between body image satisfaction and psychological well-being.
Table 3. Results of hierarchical multiple regression analyses for the moderation effect of africentric values on the relationship between body image and psychological well-being

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
<th>β</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>27.94</td>
<td>4.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Body image satisfaction</td>
<td>.256</td>
<td>.083</td>
<td>.238**</td>
<td>44.003</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>27.68</td>
<td>4.29</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Body image satisfaction</td>
<td>.262</td>
<td>.080</td>
<td>.243**</td>
<td>22.985</td>
</tr>
<tr>
<td></td>
<td>Africentric values</td>
<td>.133</td>
<td>.075</td>
<td>.251**</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>27.92</td>
<td>4.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Body image satisfaction</td>
<td>.281</td>
<td>.079</td>
<td>.261**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Africentric values</td>
<td>.133</td>
<td>.077</td>
<td>.251**</td>
<td>17.508</td>
</tr>
<tr>
<td></td>
<td>Body image satisfaction X Africentric values</td>
<td>.032</td>
<td>.013</td>
<td>.196*</td>
<td>.018</td>
</tr>
</tbody>
</table>

R² = .057, .151 and .201 for step 1, 2 and 3 respectively. ΔR² = .094 and .050 for steps 2 and 3 respectively, *p < .05, **p < .01, ***p < .001

As shown in Table 3, the interaction between body image satisfaction and psychological well-being (body image satisfaction X psychological well-being) was statistically significant (β = .196, p < .05). This indicates that africentric values moderated the body image-psychological well-being relationship. In view of this the hypothesis that Africentric values will moderate the relationship between body image satisfaction and psychological well-being was partly supported.

![Moderation graph for Africentric Values as moderator of the relationship between body image satisfaction and psychological well-being](image-url)

Figure 2. Moderation graph for Africentric Values as moderator of the relationship between body image satisfaction and psychological well-being
The decreasing effect of body image satisfaction on psychological wellbeing is dependent on whether the individual holds high, moderate or low Africentric values. Africentric values plays an enhancing role (where increasing the moderator would increase the effect of the predictor on the outcome) in the relationship between body image satisfaction and psychological wellbeing. The graph in Figure 2 indicates that lower psychological well-being is associated with lower body image satisfaction under conditions of lower Africentric values whereas higher psychological well-being is associated with higher body image satisfaction under conditions of higher Africentric values.

Figure 3. Observed model of Africentric values as moderator of relationship between body image satisfaction and psychological well-being

**Hypothesis 3**: Males are more likely to be satisfied with their body image than females.

**Hypothesis 4**: Individuals who are highly educated are more likely to be satisfied with their body image than those with lower levels of education. These hypotheses were analyzed using the two-way ANOVA.
Table 4. Summary of means, Standard deviations of sex differences and level of education on body image satisfaction

<table>
<thead>
<tr>
<th>Sex</th>
<th>Level of education</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Low</td>
<td>42.47</td>
<td>8.95</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>45.68</td>
<td>7.86</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44.04</td>
<td>8.74</td>
<td>44</td>
</tr>
<tr>
<td>Female</td>
<td>Low</td>
<td>36.00</td>
<td>7.49</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>34.54</td>
<td>7.86</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35.28</td>
<td>7.99</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>Low</td>
<td>39.23</td>
<td>8.29</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>40.11</td>
<td>8.01</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>39.66</td>
<td>8.65</td>
<td>100</td>
</tr>
</tbody>
</table>

Higher education= first degree and above, lower level of education: below first degree.

From the Table 4 above the mean of males with higher education is \( M = 45.68, \ SD = 7.86 \) and that of males with low education \( M = 42.47, \ SD = 8.95 \). The mean for females with higher education is \( M = 34.54, \ SD = 7.86 \) and that females with low education is \( M = 36.00, \ SD = 7.49 \).

Table 5. Two-way ANOVA result summary for the effect of sex differences and level of education on body image satisfaction

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>668.25</td>
<td>1</td>
<td>668.24</td>
<td>10.39</td>
<td>.001</td>
</tr>
<tr>
<td>Level of education</td>
<td>1667.35</td>
<td>1</td>
<td>1667.35</td>
<td>25.92</td>
<td>.582</td>
</tr>
<tr>
<td>Sex * educ</td>
<td>.64</td>
<td>1</td>
<td>.64</td>
<td>.010</td>
<td>.921</td>
</tr>
<tr>
<td>Error</td>
<td>15951.44</td>
<td>248</td>
<td>64.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>249936.00</td>
<td>252</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Result of the Two-Way ANOVA analysis in table 5 indicate that there was a significant main effect for sex on body image satisfaction \( F(1, 248) = 10.39, p = .001 \). The result further shows that level of education categorized as high and low also has no significant main effect on body image satisfaction \( F(1, 248) = 25.92, p = .582 \). The interaction effect \( F(1, 248) = .010, \)
did not reach statistical significance. The mean of males \( (M=44.04, SD =8.74) \) is found to be higher than that of females \( (M=35.28, SD = 7.99) \). However the mean for highly educated \( (M=40.11, SD = 8.01) \) is closer to that of those with low education \( (M=39.23, SD = 8.29) \). The second hypothesis that Males are more likely to be satisfied with their body image than females is therefore supported. But, the third hypothesis that Individuals who are highly educated are more likely to be satisfied with their body image than those with lower levels of education is not supported. Therefore level of education did not have any significant impact on body image satisfaction.

5. Discussion

5.1 Relationship Between Body Image Satisfaction and Psychological Wellbeing

Results found a significant positive relationship between body image satisfaction and psychological well being to support the first hypothesis. This finding implies that the more satisfied one is with his/her body image the more likely it is that he she will experience higher or better psychological wellbeing. The finding is consistent with existing studies (Carroll & Spangler, 2001; Spangler, 2002). Depending on the society within which one finds him/herself, there are ideal body images cherished by many and even though there may be individual differences. Observations and popular opinions in modern times points to the fact that beauty especially among females is defined partly by body structure and once the individual perceives either through remarks from people or by self evaluation that his/her body appearance is defective and unsatisfactory as compared to that of others, it tends to affect their general feeling and well being. Some express this through the comments they make when they see others they consider to posses the ideal body features.

It can however be noted that this perception may be merely based on belief. According to the Cognitive behavioral theory experiences help individuals form beliefs. Beliefs they have about themselves, the people around them or the environment sometimes truly reflect people and the environment; other times these beliefs distort reality (Williamson, 1996). The way we deal with situations affects the outcome and then confirms or modifies the existing beliefs. Individuals are encouraged to reframe the distorted beliefs or modify behaviors to enlarge the positive outcomes, which leads to positive cognition and affect (Regehr, 2001).

5.2 Africentric Values as a Moderator of the Relationship Between Body Image and Psychological Well-Being

The second hypothesis shows that africentric values moderated the relation between body image satisfaction and psychological wellbeing. Therefore the extent to which body image satisfaction predicts psychological wellbeing is partly dependent on ones cultural (Africentric) values. The moderation indicates that lower psychological well-being is associated with lower body image satisfaction under conditions of lower Africentric values whereas higher psychological well-being is associated with higher body image satisfaction under conditions of higher Africentric values. This emphasises the crucial role our cultural values and believes play in the appraisal we make of ourselves most especially as Africans. Indoctrinating individuals in their cultural values therefore has the propensity of reducing the negative image people have about themselves. This will possibly reduce practices such as skin bleaching, cosmetology surgery and other attempts to change something about one’s body.
which is very prevalent among Africans (WHO, 2013).

The finding that africentric values moderated the relation between body image and psychological well-being is consistent with findings by Reddy and Crowther, (2007) who found that among South Asian American women, greater cultural values conflict was related more to maladaptive eating attitudes and body dissatisfaction. The relationship was stronger for those with more difficulties in accepting dominant White cultural beliefs than those with fewer difficulties. The present finding may be as a result of the fact that, Ideal body shapes, size and the general physical appearance is defined by the society within which one finds him/herself (Jackson, 2004). However the adulteration of several cultures especially in Africa is and the imbibitions of these “foreign cultures” seemed to be changing these ideals to suit the western culture. The western societies will mostly outdoor slim/slender body shapes as beauty among females as seen in beauty pargents while being muscular and thick is desired of the males. To a true African (with higher scores on africentric values) even though the macular structure is desired of males, having slim body shape does not necessarily connote beauty for a female. The “fat” lady will be as outdoorable as any other. In terms of complexion, the notion is that whatever is “white” is most beautiful and most cherished. In study done among Mexican American women, high levels of acculturation to American society and internalization of American societal body ideals were related to low desirability for the larger body shape and low levels of body satisfaction. Internalization of societal body ideals explained more variance in predicting desirability for larger body shape and body satisfaction than acculturation (Alvarez, 2003).

5.3 Influence of Socio-Demographic Factors on Body Image Satisfaction

The findings further revealed that gender differences exist in body image satisfaction with males feeling more satisfied with their body images than females. In the world of women almost in almost every culture particular attentions are paid to body image. Women generally see their body image as reflecting who they are and in many situations have misrepresented body image or appearance with “personality”. They judge all manner of persons including potential partners using body image. From the literature body image studies for the past 50 years (Feingold & Mazzella, 1998) regarding psychological well-being, revealed that women have higher levels of depression and lower self-esteem than men (Kling, Hyde, Showers, & Buswell, 1999; Nolen-Hoeksema, 2001) in relation to dissatisfaction with body image. Previous research revealed that women have generally higher body dissatisfaction than men. Frazier & Lisonbee (1960) indicated that boys focus on size and strength, which is an indicator of power, while girls focus on appearance. Besides changes in weight, participants in weight loss programs often report improved life satisfaction and feeling more positive about their bodies and their new-learned abilities, such as being physically active and self-managing their weight. Research has shown that these psychological improvements can be associated with weight changes (Blaine, 2007; Maciejewski, 2005). In agreement with existing studies “girls were significantly more likely than boys to be dissatisfied with their weight and physical appearance and these variables accounted for more variation in self-esteem and psychological wellbeing than other measures”.

There was no significant difference between highly educated and those with low education in body image satisfaction as revealed by the results to disconfirm the second hypotheses. This
implies that level of education has no significant influence on body image satisfaction. Once an individual is dissatisfied with his/her body image it takes nothing like education to change that perception or belief. This can be as a result of the fact that the idea of idealize body has been formed through societal cultural influences which education cannot easily change. In two separate studies “strong relationship between body dissatisfaction and self-esteem for adolescent girls was not moderated by school type” (Blaine, 2007; Maciejewski, 2005). Although it is theorized that internalization of societal body ideals could increase the importance that individuals place on appearance, it is also argued that individuals who put greater importance on appearance are more sensitive to societal body ideals. When asked to choose a game piece they wanted to be (thin, average, or fat) while playing a board game, a majority of three-year-old girls chose the thin body size game piece, indicating they had already internalized thin ideals (Harriger, Calogero, Witherington, & Smith, 2010).

5.4 Theoretical and Social Implications of the Findings

Body image appraisals in any form are influenced by the cognition and the developmental processes of an individual (Blowers et al., 2000). “Ideal body” therefore is a concept an individual forms in relation to the cultural values of his/her society. Attempt at changing features and image such as skin bleaching and cosmetology surgeries is borne out of negative appraisals people make of their body image. Given the reality of the level of body image dissatisfaction and is subsequent psychological effects on individuals in today’s society implies that changes must occur both on an individual and societal level to decrease the incongruent feeling not espoused by our culture in order to reduce body image disparagement. From a cultural viewpoint, weight-management and body image enhancement programs, and increased publicity of stereotypes encountered by individuals with certain types of bodies may eventually lead to sweeping changes in societal attitudes and practices.

5.5 Recommendations for Practice and Future Research

∇ Emphasis be laid on developing in children African cultural identity so that they appreciate their body image. This can start from the home and to our schools by making it part of our educational curriculum.

∇ Psycho-educational interventions (e.g., media literacy training) by counselors will be effective in reducing internalization of societal body ideals by helping individuals recognize unrealistic societal body ideals. For example, women who attended a media literacy program with exposure to the ideal body pictures reported fewer weight concerns when compared with those who did not attend (Yamamiya, Cash, Melnyk, Posavac, & Posavac, 2005).

∇ Efforts at decreasing appearance-related distress, reducing self-defeating “body-talk”, and loosening rigid ideas of an acceptable weight and shape may be effective in achieving improvements in body image.

∇ Longitudinal designs will be helpful in the future research since the current study used only cross sectional data. An individual’s perception at different stages of life about body image may change.

5.6 Summary and Conclusions

The study examined the influence of body image and educational level on psychological wellbeing of individuals using a sample of 100 individuals of varied ages. It concludes that;
there is a significant positive relationship between body image satisfaction and psychological well being which implies that the more satisfied one is with his/her body image the more likely it is that he/she will experience higher or better psychological wellbeing. However no significant difference between highly educated and those with low education in body image satisfaction was found. This means level of education has no significant influence on body image satisfaction. Gender differences however exist in body image satisfaction with males feeling more satisfied with their body images than females.

The limited sample size could affect the statistical power of the tests conducted. The influence of acculturation highlighted in the review of literature has not been measured to see its intervening role. Even though an attempt was made to check acculturation by excluding individuals who ever stayed abroad including South Africa, the media for instance television could be a very strong source of influence which could have an influence on the participants just being physically present in those cultures.

Despite the limitations, this study advances the understanding of psychological outcomes related to dysfunctional beliefs about appearance among individuals. Since internalization of societal body ideals predicts dysfunctional beliefs about appearance, interventions that focus on reducing internalization of societal body ideals might help individuals overcome the difficulties. People especially women who do not feel good about themselves are the ones who bleach in order to or engage in some forms of surgery to enhance their body image.

References


WHO. (2013). Research for universal health coverage; Geneva, World Health Organization


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