

Relationships among Body Image, Eating Behavior, and Psychological Health of University of Ghana Students

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Abstract

The study examines the relationship among body image, eating behavior, and psychological health among undergraduate students of University of Ghana. A total of 140 students comprising males (n=70) and females (n=70) from collectivistic cultures (n=117) and individualistic cultures (n=23) were conveniently sampled as respondents for the study. Questionnaires containing Body Image Scale (BIS), Eating Attitudes Test-16 (EAT-16), and the General Wellbeing Schedule (GWB) were administered to the respondents. The analyses of data revealed a significant positive relationship between body image and eating behavior, but a negative relationship between body image and psychological health. There was no significant relationship between age and body image and no significant sex differences in body image, eating behavior and psychological health.. Culture had a significant influence on body image and psychological health. Students from individualistic cultures had a more positive body image, but a poorer psychological health than those from collectivistic cultures. These findings are discussed with references to the literature.

Keywords: Body image, eating behavior, psychological health, individualistic cultures, collectivistic cultures

Introduction

Body image is one of the psychological issues that confront both adolescents and young adults. Body image refers to the self-evaluation of a person's body structure in relation to what is generally perceived to be the preferred body shape, structure or size. According to Pruzinsky and Cash (1990), body image is a multifaceted construct involving subjective evaluations of the body. These comprise affective, cognitive and behavioural assessments of size, aesthetics, sensation, function, fitness and health. Such appraisals can lead to a perception of the body quite distinct from its objective size and shape (Pruzinsky & Cash, 1990). Thompson, Heinberg, Altabe, and Tantleff-Dunn (1999) propose a definition that entails "a persistent report of dissatisfaction, concern, and distress that is related to an aspect of appearance. . . . [and] some degree of impairment in social relations, social activities, or occupational functioning. . . ." (p. 11). According to Cash, Phillips, Santos and Hrabosky (2004), this perspective conveys the contemporary definition of "mental disorder" inherent in recent editions of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000). Nevertheless, most body image researchers neglect to assess a continuum of body image disturbance, and instead measure a continuum of dissatisfaction. Body dissatisfaction, a component of body image disturbance, consists of dysfunctional, negative beliefs and feelings about one's weight and shape (Crowther & Williams, 2011).

In the view of Cash (2002), while discontent with some aspect of one's appearance increases one's risk for the experience of emotional distress and psychosocial impairment, dissatisfaction per se is not a sufficiently valid index of dysfunction or disorder. Dissatisfaction is widespread in community samples. Individuals may be dissatisfied with their body weight, or shape, or some facial feature, yet the impact of this negative body image evaluation on actual day-to-day body image experiences and psychosocial functioning can range from minimal to extreme. Thus, body image disturbance is not merely body image dissatisfaction.

An individual may be satisfied or dissatisfied with his or her body shape depending on the extent to which he or she judges it as conforming or not conforming to the preferred standard.

According to Levine and Smolak (2002), the propagation of thin idealized female images in media significantly contribute to widespread body image and weight concerns in people, especially young females. Largely due to Western cultures' focus on an unattainable thin ideal, dissatisfaction with weight and shape is a widespread problem (Tiggemann & Lynch, 2001), as is engaging in maladaptive behaviors related to this dissatisfaction with one's body (Shafran, Fairburn, Robinson, & Lask, 2004). In modern times, people are usually worried with big or fat body shape. Among university female students, moderate or thin body shapes are prized with reputation and the lack of it causes great anxiety and sometimes distress and depression which adversely affects other aspects of their life such as academic and social lifestyles.

Obviously, dieting has critical implications on a person's body image in the sense that diet affects body shape and structure. In the view of Stice (2002), body dissatisfaction is one of the most consistent and robust risk and maintenance factors for eating pathology. Theoretically, body dissatisfaction promotes dieting and negative affect, which in turn increases the risk for eating pathology (Stice, 2002) and set the stage for the development of eating disorders such as anorexia nervosa and bulimia nervosa (Jacobi, Hayward, de Zwaan, Kraemer, & Agras, 2004; Stice, 2002).

Drawing on Festinger's (1954) social comparison theory and its modern applications, Myers, Ridolfi, Crowther, and Ciesla (2012) investigated the relationship between upward appearance-focused social comparisons and body image disturbance using ecological momentary assessment, which allows for examination of these phenomena in their natural context. Myers et al. (2012) found a positive relationship between upward appearance-focused social comparisons and body image disturbance. Upward appearance-focused social comparisons were associated with greater body image disturbance for those with higher levels of thin-ideal internalization and with greater body checking for women with lower levels of feminist beliefs. These findings further illuminate the nature of the relationship between social comparisons and body image disturbance.

A number of researchers identify thin-ideal internalization is a risk factor for body dissatisfaction (Stice, 2002; Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2004; Tiggemann & Lynch, 2001). Thin-ideal internalization occurs when women assimilate the thin ideal and its associated values (i.e., women must be thin to be considered attractive) into their own world view such that these ideas become guiding principles in their lives (Thompson, et al., 2004). According to Tiggemann and Lynch (2001), thin-ideal internalization is problematic because the thin ideal promulgated by the media is often unattainable for most women. Stice (2002) maintains that within the context of etiological models, thin-ideal internalization serves as a mediator between sociocultural pressures to conform to this ideal and body dissatisfaction.

Though researchers have been investigating eating disorders for decades, their focus on the role of culture is more recent. Since full-bodied women are considered healthy in many Latin American cultures, some researchers hypothesize that being of Latino descent might be associated with less body dissatisfaction (Warren, Gleaves, Cepeda-Benito, del Carmen Fernandez, & Rodriguez-Ruiz, 2005). Given the link between body dissatisfaction and eating disorders (Stice & Shaw, 2002), one might speculate then that Latinos would be less susceptible to eating disorders than Caucasians. However, researchers have detected either comparable levels of eating disorder symptoms in Latinos and Caucasians (Crago & Shisslak, 2003) or higher rates in Latinos (Alegria, Woo, Cao, Torres, Meng, & Striegel-Moore, 2007; Perez, Voelz, Pettit, & Joiner, 2002).

To investigate the association between the weight status of first-year female students (FYFS) and various weight management-related characteristics to identify possible components of a weight management programme for students, Cilliers, Senekal and Kunneke (2006) designed a cross-sectional study using 360 FYFS in female residences at a South African university. They observed that underweight, normal-weight and overweight students differed with regard to their perception of their weight, weight goals, and previous weight-loss practices. Among the students, 36.7% had a high self-concept, 43.9% a medium self-concept and 19.4% a low self-concept. Moreover, higher body mass index correlated with a higher body shape score, a lower self-concept, and higher eating pathologies. Normal-weight students were more physically active than underweight or overweight students. Cilliers et al. (2006) concluded that specific weight management-related needs of FYFS include information about supplement use, smoking, realistic weight goals, safe and sound weight-loss methods, weight cycling, body-shape perceptions, eating attitudes and behaviors, self-concept and physical activity.

Levine and Smolak (2005) outlined a feminist model of prevention that focuses on constructs such as gender roles, objectification, and loss of voice as they relate to the development of body image disturbance and eating psychopathology. They identify prototypical elements in feminist approaches to prevention programs, which include creating opportunities and safe spaces for dialogue about gendered issues, emphasizing the importance of participants' experiences rather than "lessons" from experts, and changing the environment in creating healthier norms and practices. Tylka and Augustus-Horvath (2011) suggested incorporating feminist ideas and methodologies such as emphasizing women's internal qualities and providing embodying experiences into future prevention programs. Levine and Smolak (2005) argued that comprehensive prevention programs that emphasize changes in participants' external environment and are integrative in nature, addressing such diverse topics as gender equity, diversity and weight and shape, and issues relevant to both eating disorder and obesity prevention such as maladaptive weight practices and self-esteem will be most effective in the prevention of eating disorders. Pomerleau and Saules (2007) explored differences between women smokers and never-smokers in body image and eating patterns, where they analyzed data obtained from 587 women smokers and nonsmokers with ages from 18 to 55 years old. Using measures of body image, body dissatisfaction, and restrained and disinhibited eating, Pomerleau and Saules (2007) found that smokers did not differ from never-smokers on perceived body shape but they endorsed a thinner preferred body shape and scored lower on body satisfaction than never-smokers. Smokers also scored higher on measures of disinhibited eating. Consequently, Pomerleau and Saules (2007) suggested that women smokers may require help in attaining a more realistic body image and attention to dysfunctional eating patterns if they are to achieve and maintain a healthful weight and/or to quit smoking successfully. They also indicated that overweight smokers may be at elevated risk of relapse in the face of post-cessation weight gain. Humphreys and Paxton (2004) argued that although body image dissatisfaction has been considered largely a female affliction, a growing number of boys and men are also dissatisfied with their body. In their experimental research, Humphreys and Paxton (2004) observed that high internalization of muscular, athletic ideal shape predicted more negative response to viewing images on Body Image and Depression Visual Analogue Scale (VAS). They further observed that body dissatisfaction significantly predicted negative response to Body Shape Liking and Anxiety VAS. On average, adolescent boys in the experiment were not negatively affected by exposure to idealized male images. However, their reaction to the exposure was dependent on individual attributes.

A number of research findings identify a correlation between age and body image concerns. Groesz, Levine, and Murnen (2002) maintained that although body image concerns have become a normative experience for women of all ages, body dissatisfaction appears to increase and climax during the middle and late adolescent years. After viewing 10 thin-ideal stereotype images, Groesz et al. (2002) concluded that adolescent women experienced greater body dissatisfaction than older women. They further explained that in conjunction with developmental processes such as physical maturation, identity development, and peer relationships, media influences are related to body dissatisfaction among adolescent women. Dunkel, Davidson and Qursashi (2010) also asserted that younger Muslim women wearing non-Western clothing and a head veil are significantly less likely to express drive for thinness or pressure to attain a thin-ideal standard of beauty than women wearing Western dress or younger women wearing non-Western dress without a head veil. Older women, while expressing greater discrepancy between their ideal body shape and their current body shape, and less satisfaction with their bodies than younger women, reported less drive for thinness and less pressure to attain the Western thin-ideal standard of beauty than older women. Dunkel, et al. (2010) in this way offered an empirical explanation of how factors such as age and religion may serve as protective factors against a strong or unhealthy drive for thinness or thin-ideal standard.

Perceptions of the body are not restricted to the way the body looks but also the way the body functions. In this sense, Abbott and Barber (2010) empirically explored body image among male and female adolescents using the Embodied Image Scale (EIS), which incorporates body function into body image. Data gathered on pubertal timing, body mass index (BMI) and body image indicated significantly higher value of, behavioral-investment in, and satisfaction with the functional dimension of the body compared to the aesthetic dimension. After controlling for age, pubertal timing, and BMI, females reported significantly higher aesthetic values and aesthetic behavioral-investment, and lower aesthetic satisfaction, functional values, functional behavioral investment and functional satisfaction than male participants.

With the exception of the study by Humphreys and Paxton (2004), all the studies reviewed above have only demonstrated extreme interest in females as subjects of investigation. Levine and Smolak (2005), for instance, went to the extent of developing a feminist model of prevention that focused on constructs such as gender roles, objectification, and loss of voice as predictors of the development of body image disturbance and eating psychopathology. Tylka and Augustus-Horvath (2011) also had suggested incorporating feminist ideas and methodologies such as emphasizing women's internal qualities and providing embodying experiences into future prevention programs. Clearly, these efforts portray gender bias in research. It is a demonstration of a prejudicial stance in research and this is likely to dent the researchers' conclusion. Humphreys and Paxton (2004), though had attempted to resolve this gender bias, they only did so with a retaliatory compensation approach through their exclusive use of only male participants in their study. In other words, they failed to integrate both genders in a single study. Indeed, males cannot be an exception in body image dissatisfaction and therefore ought to be investigated alongside females in a single study.

Again, although a lot of researches have been conducted to investigate the relationship among body image, diet, and psychological health, most of these researches were conducted within the Western cultural context (e.g., Stice, 2002; Thompson et al., 2004; Tiggemann & Lynch, 2001; Alegria et al., 2007; Perez, Voelz, Pettit, & Joiner, 2002; Warren et al., 2005). Little has been done in collectivistic cultures (Cilliers, Senekal & Kunneke, 2006; Dunkel, Davidson & Qursashi, 2010). It is therefore imperative that a similar study be conducted in the Ghanaian context in order to provide the African perspective on this topical area. Additionally, the current research introduces the cultural influence on the development of body image, which hitherto has been ignored by previous researchers. Based on the literature, the researchers formulated and tested the following hypotheses:

1. There will be a positive relationship between eating behavior and body image.
2. There will be a positive relationship between body image and psychological health.
3. There will be a positive relationship between age and body image.
4. Males will have more positive body image and better eating behavior than females.
5. Males will have better psychological health than females.
6. Students from individualistic culture will have higher body image and better psychological health than students from collectivistic culture.

Method

Participants

The researchers made use of undergraduate students of University of Ghana as the research population. The population consisted of both male and female students with an approximated age range from 18 to 45 years. In terms of nationality, majority of the students are local students with Ghanaian nationality whilst a few are foreign students from the Western and Eastern parts of the world. A total sample of one hundred and forty (140) students consisting of an equal number of males ($n = 70$) and females ($n = 70$) were selected with the quota and convenience sampling techniques. The sample consisted of students from individualistic cultures (Western world) ($n = 23$) and students with collectivistic cultures (Eastern world and Africa) ($n = 117$). The ages of the participants ranged from 18 years to 28 years with the mean age of 22.13 and a standard deviation of 2.175. The characteristics of the participants are shown in table 1 below.

Design

The cross-cultural survey research design was used in the study. Participants of different cultural backgrounds were compared on the variables under investigation. Data for the study was gathered through the use of questionnaires. This allowed the researchers to obtain the participants' self-perception of their body image, eating behavior, and psychological health. Thus, the research depended largely on participants' opinions or responses to questions in the questionnaires.

Measures

The research design used for the study was a survey which necessitated the use of a questionnaire in collecting the data. It asked for specific factual information about participants' eating behavior and body image. The demographic variables that were used for this present study are age, gender, level of study, nationality, and religious affiliation. Standardized measures were used to measure the dependent variables in the study. Description of the measures are shown below.

Body Image Scale

In measuring body image, the Body Image Scale (BIS) developed by Hopwood, Fletcher, Lee, and Al Ghazal (2001) was slightly adapted and used. The BIS is a 10 test items which comprised defective items (e.g. feeling feminine, feeling attractive), behavioural items, (e.g. find it hard to look at self-naked, avoid people because of appearance), and cognitive items (e.g. satisfied with appearance, or with scar). Hopwood et al. (2001) reported Cronbach's alpha reliability coefficient value of 0.93. Item alphas ranged between 0.92 and 0.93 (Hopwood et al., 2001). In using the BIS, the researchers eliminated words on "disease" and substituted them with "body shape." Some sampled items on the scale are "Have you been dissatisfied with your appearance when dressed?" "Did you find it difficult to look at yourself naked?" and "Have you been feeling less sexually attractive as a result of your body shape?" Responses on the BIS are denoted as follows: "Not at all" (4 marks); "A little" (3 marks); "Quite a bit" (2 marks); and "Very much" (1 mark). Total scores ranged from 10 to 40. The higher the score, the higher the body image and vice versa.

Eating Attitudes Test

Eating behavior was measured with Eating Attitudes Test-16 (EAT-16; Katherine, Jane, Angela, Denise, Jaime & Loren, 2011) which is an abridged version of the Eating Attitudes Test-26 (EAT-26; Berland, Thompson, & Linton, 1986). The EAT-26 contains three factors: (1) Dieting — drive for thinness and dieting behaviors, (2) Bulimia and Food Preoccupation — food thoughts and bulimic behaviors, and (3) Oral Control — perceived pressure from others to gain weight and control eating (Garner et al., 1982). However, Katherine et al. (2011) identified 4-factor structure on the EAT-16. These are self-perception, dieting, preoccupation, and food control. All four factors were considered in the present study. The 16-item EAT are a better-fitting measure in Caucasian and Hispanic women than the commonly used EAT-26 (Katherine, et al., 2011). The original EAT-26 contains 26 statements representing attitudes and behaviors associated with anorexia nervosa. It has an internal consistency reliability range off .91 (Thomas, Katharine, Melanie, & Joshua, 2004). Ocker, Lam, Jensen, and Zhang (2007) also reported EAT-26 scores' internal consistencies of 0.92 for women and 0.91 for men. Test items on the EAT-16 include "I find myself preoccupied with food;" "I avoid foods with high carbohydrate content;" "I feel that food controls my life;" and "I give too much time and thought to food." EAT-16 uses a 6-point interval response key. Responses range from "Never" (1 mark) to "Always" (6 marks). Total scores range from 16 to 96. Higher scores indicated poorer eating behavior and lower scores reflected better eating behavior.

General Well-Being Schedule

Psychological health was measured through the use of the General Well-Being Schedule (GWB) constructed by Fazio (1977). GWB is a structured instrument for assessing self-representations of subjective well-being. Item-total scale correlations for GWB range from 0.48 to 0.78 for college students. However, subscale-total correlations range from 0.56 to 0.88. An internal consistency coefficient had been reported to be 0.91 for men but 0.95 for women (Robinson, Shaver & Wightsman, 1990). The GWB was adapted to fit the Likert scale response key. Some items on the scale are "I have been feeling very low spirits;" "I have felt so sad, discouraged and hopeless about my life;" "I have been emotionally stable and sure of myself" and "I have been very worried about my health" In terms of scoring, "Strongly Agree" = 1, "Agree" = 2, "Neutral" = 3, "Disagree" = 4 and "Strongly Disagree" = 5. However, there is a reversed scoring for items 3, 9, 11, 13 and 17. Average scores on the scale run from 18 (lowest well-being) to 90 (highest well-being). The higher the score, the healthier the person and vice versa.

Procedure

The researchers approached students at convenient places in the university premises such as lecture halls, tutorial grounds, and hall of residents and sought their permission to participate in the study. To obtain informed consent of participants, the researchers first explained the purpose and significance of the study to the participants. The researchers also assured them of utmost confidentiality in their participation and responses. After obtaining informed consent from a participant, he or she was given the questionnaire to fill. On completion of the questionnaires, the researchers collected and analyzed the data with a computer with Statistical Package for Social Sciences (SPSS) programme.

Statistical Analyses of Data

The Pearson Product-Moment Correlation Coefficient (Pearson r) and the independent-samples t test were used to analyze the research data. The researchers appropriately chose these tests for the data analyses because all the dependent variables in the study were measured on the interval scale, thus satisfying the assumption underlying their use. The Pearson r test was used to find the correlation among variables (see table 2). The independent t test was used to compute gender and cultural differences on the research variables (see tables 3 & 4 respectively).

Results

Table 1: Demographic Distribution of Participants

Variables	Male (<i>n</i> =70)	Female (<i>n</i> =70)	Total (140)
	Mean (<i>SD</i>)	Mean (<i>SD</i>)	Mean (<i>SD</i>)
Age	22.59 (2.22)	21.67 (2.04)	22.13 (2.13)
Culture			
Collectivistic	54	63	117
Individualistic	16	7	23
Education			
Level 100	10	11	21
Level 200	16	24	40
Level 300	23	24	47
Level 400	21	11	32
Religion			
Christianity	63	55	118
Islam	4	13	17
Tradition	3	2	5

Table 2: Relationship among Age, Body Image, Eating Behavior, and Psychological Health

Correlations	1	2	3	4	5	6	7
1. Age	–						
2. Body Image	-.01	–					
3. Self-Perception	.03	.22**	–				
4. Dieting	.03	.29**	.63**	–			
5. Preoccupation	-.05	.29**	.35**	.41**	–		
6. Food Control	.07	.10	.46*	.59**	.26**	–	
7. Psychological Health	.17*	-.30**	-.16	-.13	-.12	-.01	–

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

As expected, body image positively correlated with self-perception [$r = .22, p < .01$], dieting [$r = .29, p < .01$], and preoccupation [$r = .29, p < .01$]. However, there was no significant relationship between body image and food control [$r = .10, p > .05$]. Contrary to prediction, the relationship between body image and psychological health was negative [$r = -.30, p < .01$]. There was however no significant relationship between age and body image [$r = -.01, p > .05$]. (See table 2).

Table 3: Gender Differences in Body Image, Eating Behavior, and Psychological Health

Measure	Male (n = 70)	Female (n = 70)	df	t	sig.
	Mean (SD)	Mean (SD)			
Body Image	16.14 (3.39)	15.17 (4.21)	138	1.51	.14
Self-Perception	7.81 (3.34)	8.54 (3.84)	138	-1.20	.23
Dieting	12.30 (4.16)	13.13 (5.28)	138	-1.03	.30
Preoccupation	9.47 (3.79)	9.17 (4.01)	138	.46	.65
Food Control	10.70 (3.81)	11.63 (4.26)	138	-1.36	.65
Psychological Health	55.94 (7.51)	56.79 (7.33)	138	-.67	.50

The results in table 3 reveal that the body image satisfaction of male students [M = 16.14, SD = 3.39] and female students [M = 15.17, SD = 4.21] did not significantly differ [$t_{(138)} = 1.51, p > .05$]. Similarly, the difference in self-perception of males [M = 7.81, SD = 3.34] and females [M = 8.54, SD = 3.84] was not significant [$t_{(138)} = -1.20, p > .05$]. Dieting among males [M = 12.30, SD = 4.16] and females [M = 13.13, SD = 5.275] was not significantly different [$t_{(138)} = -1.03, p > .05$]. Food control behavior among males [M = 10.70, SD = 3.81] was relatively the same as that of females [M = 11.63, SD = 4.26] [$t_{(138)} = -1.03, p > .05$]. In terms of psychological health, males [M = 55.94, SD = 7.51] and females [M = 56.79, SD = 7.33] did not differ significantly from each other [$t_{(138)} = -.67, p > .05$]. This means the fourth and fifth hypotheses were not supported.

Table 4: Cultural Differences in Body Image, Eating Behavior, and Psychological Health

Measure	Collectivistic (n= 117)	Individualist (n= 23)	df	t	sig.
	Mean (SD)	Mean (SD)			
Body Image	15.24 (3.66)	17.78 (4.08)	138	-2.99	.00
Self-Perception	7.98 (3.49)	9.17 (4.08)	138	-1.46	.15
Dieting	12.64 (4.80)	13.09 (4.81)	138	-0.41	.68
Preoccupation	9.38 (4.00)	9.04 (3.36)	138	.374	.71
Food Control	11.21 (3.91)	10.96 (4.79)	138	.268	.79
Psychological Health	57.13 (6.65)	52.48 (9.71)	138	2.82	.01

As expected, the results show a significant cultural difference in body image satisfaction [$t_{(138)} = -2.988, p < .01$] and psychological health [$t_{(138)} = 2.82, p < .05$]. Students from individualistic cultures had a more positive body image [M = 17.78, SD = 4.08] than students from collectivistic cultures [M = 15.24, SD = 3.66]. On the contrary, students from collectivistic cultures had better psychological health [M = 57.13, SD = 6.65] than students from individualistic cultures [M = 52.48, SD = 9.71]. In terms of eating behavior, there was no significant cultural difference in self-perception [$t_{(138)} = -1.46, p > .05$], dieting [$t_{(138)} = -0.41, p > .05$], preoccupation [$t_{(138)} = .374, p > .05$] and food control [$t_{(138)} = .268, p > .05$]. (See table 4).

Discussion

Much empirical evidence establishes significant relationship among body image, diet, and psychological health among young adults. Further evidence has been obtained in this study. The present study has revealed a significant positive relationship between age and body image; a negative relationship between body image and psychological health; and no significant relationship between age and body image. With respect to gender differences, the study has revealed that males and females do not differ on body image, and eating behavior, and psychological health. In terms of culture, students with individualistic cultural orientation have a positive body image than those with collectivistic cultural orientation. However, students in collectivistic cultural orientation have a greater psychological health than those with individualistic cultural orientation.

The finding of positive relationship between eating behavior and body image implies that whenever people assume greater control over their diet, they begin to feel satisfied with their body image. On the other hand, individuals who are not able to control their eating behavior end up experiencing lower body image satisfaction. This finding agrees with that of Cilliers, Senekal and Kunneke (2006) who discovered after their investigation of the association between the weight status of first-year female students (FYFS) and various weight management-related characteristics that underweight, normal-weight and overweight students differed with regard to their perception of their weight, weight goals, and previous weight-loss practices. Cilliers, Senekal and Kunneke (2006) found out that higher body mass index correlated with a higher body shape score, a lower self-concept, and higher eating pathologies.

The second finding revealed a negative relationship between body image and psychological health. Although this finding did not meet the researchers' expectation of positive relationship between body image and psychological health, it supports the view of Cash (2002) that while discontent with some aspect of one's appearance increases one's risk for the experience of emotional distress and psychosocial impairment, dissatisfaction per se is not a sufficiently valid index of dysfunction or disorder. This view suggests that the possibility of negative relationship between body image and psychological health cannot be ruled out.

Since body image is a subjective psychological feeling of satisfaction or dissatisfaction with one's own body shape and appearance, it is largely based on individual's personal evaluation of the extent to which he or she measures up to preferred standards. According to Pruzinsky and Cash (1990), body image is a multifaceted construct involving subjective evaluations of the body. Such appraisals can lead to a perception of the body quite distinct from its objective size and shape (Pruzinsky & Cash, 1990). Most people maintain favorable feelings with their body image through bad habitual practices like dieting and smoking at the expense of their health. In this sense, they feel good about themselves but they suffer ill psychological health.

Dissatisfaction with weight and shape is a widespread problem (Tiggemann & Lynch, 2001), as is engaging in maladaptive behaviors related to this dissatisfaction with one's body (Shafran, Fairburn, Robinson, & Lask, 2004). Levine and Smolak (2002) argued out that individuals may be dissatisfied with their body weight, or shape, or some facial feature, yet the impact of this negative body image evaluation on actual day-to-day body image experiences and psychosocial functioning can range from minimal to extreme. Thus, body image disturbance is not merely body image dissatisfaction. Stice (2002) cites eating pathology as a mediating link between body image and psychological health. This stance confirms the argument put forward by Levine and Smolak (2002) on the explanation of the negative relationship between body image and psychological health. Stice (2002) believed that body dissatisfaction is one of the most consistent and robust risk and maintenance factors for eating pathology. Body dissatisfaction promotes dieting and negative affect, which in turn increases the risk for eating pathology (Stice, 2002). This can, in turn, set the stage for the development of eating disorders such as anorexia nervosa and bulimia nervosa (Jacobi, Hayward, de Zwaan, Kraemer, & Agras, 2004; Stice, 2002).

The second finding implies that the relationship between body image and psychological health will be positive only if eating pathology as a mediating link is absent. However, whenever eating pathology emerges as a mediating link, the relationship between body image and psychological health becomes negative. In this sense, the study reveals the negative consequences of dieting to maintain a favorable body image. In other words, people who desire to maintain a favorable body image adopt poor eating behavior which leads to various forms of psychological ill health.

In the third finding, age did not have any form of relationship with body image among the university students. This finding does not completely agree with the assertion by Groesz, Levine, and Murnen (2002) that although body image concerns have become a normative experience for women of all ages, body dissatisfaction appears to increase and climax during the middle and late adolescent years. After viewing 10 thin-ideal stereotype images, Groesz et al. (2002) concluded that adolescent women experienced greater body dissatisfaction than older women. They further explained that in conjunction with developmental processes such as physical maturation, identity development, and peer relationships, media influences are related to body dissatisfaction among adolescent women. The disparity between the current observation and that made by Groesz et al. (2002) is attributable to age factor. The ages of the student respondents in the present study ($M = 22.13$, $SD = 2.13$) did not have significant variation and this may have accounted for the lack of relationship with body image. Moreover, the respondents in the present study mostly belong to the same cohort and therefore have a relatively equal understanding of what is preferred body shape or appearance.

The present study showed no gender differences in body image, eating behavior, and on psychological health. This finding is not consistent with the literature. For instance, Levine and Smolak (2005) believed that more young females suffer extensively from body image dissatisfaction than do young males. According to them, the propagation of thin idealized female images in the media accounts for greater body image and weight concerns among young females. Tylka and Augustus-Horvath (2011) supported this view by indicating that among females, moderate or thin body shapes are prized with reputation and the lack of it causes great anxiety and sometimes distress and depression which adversely affect other aspects of their life such as academic and social lifestyles. Other researchers have pointed out that women engage in cognitive evaluation of the self more frequently than men do. Women make upward appearance-focused social comparisons to evaluate their appearance. However, the effects seem to diverge from Festinger's (1954) social comparison theory. Although social comparison theory argues that individuals are most likely to compare themselves to similar others, women compare themselves to unrealistic, thin images of women portrayed in the media just as frequently as they compare themselves to similar peers (Strahan, Wilson, Cressman, & Buote, 2006). Second, although social comparison theory argues that people will not continue to make comparisons if they are unfavorable and/or damaging to one's self-image, women frequently make appearance-related social comparisons (Leahey, Crowther, & Mickelson, 2007), even when they experience detrimental consequences (Strahan et al., 2006). One of the primary consequences of appearance-based social comparisons is body image disturbance (Groesz, Levine, & Murnen, 2002; Myers & Crowther, 2009).

Although most of the past research studies on body image and eating behavior placed greater emphasis on females, this current study validates the argument by Humphreys and Paxton (2004) that body image dissatisfaction can be both male and female issue. Humphreys and Paxton (2004) argued out that although body image dissatisfaction has been considered largely a female affliction, a growing number of boys and men are also dissatisfied with their body. The influence of culture on both body image and psychological health was significant. People with individualistic cultural orientation experienced a positive body image but poorer psychological health than those with collectivistic cultural orientation. These findings relate to the first two findings that showed a positive relationship between eating behavior and body image but a negative relationship between body image and psychological health. In other words, people in individualistic culture experience positive body image satisfaction perhaps due to their engagement in bad habitual practices such as dieting and smoking. Stice (2002), for instance, revealed that out of great concern for maintaining a desired body shape, most young adults adopt a negative attitude towards diets. In extreme cases, some individuals become so desperate that they tend to starve themselves which ultimately results into a number of psychological problems. In this sense, though people in individualistic culture may achieve greater psychological feeling of body image satisfaction, they do so at their own detriment in poor psychological health arising from bad habitual practices.

The social learning theory (Bandura, 1969, 1977; Bandura & Walters, 1963; Jacklin, 1989) provides an explanation to why people in collectivistic culture experience a negative body image but a greater psychological health than those in individualistic culture. The theory explains that individuals' preferences are determined by the conception of learnt social desirability (Jacklin, 1989). People learn about desirable traits based on marked societal standards. In this sense, their preferred body shape would largely be defined by what society defines as ideal. Due to westernization in Africa, western body shape standard appears to be the idealized body shape in Ghana and in most other collectivistic cultures. Consequently, most young adults in collectivistic cultures tend to engage in upward comparison (Festinger, 1954) in an attempt to measure the extent to which they meet such western standards. Their inability to measure up to the standard makes such young adults evaluate themselves poorly on body image. This therefore justifies the underlying assumption of the social comparison theory which indicates that individuals may seek upward comparisons with slightly superior others to gain information on how to improve themselves as long as the comparisons are not harmful (Festinger, 1954; Schutz, Paxton, & Wertheim, 2002).

Limitation of the Study

In conducting this study, the researchers faced the challenge of obtaining adequate number of participants with individualistic cultural orientation. Comparatively, there was significant disparity between the number of participants with collectivistic cultural orientation ($n = 117$) and participants with individualistic cultural orientation ($n = 23$).

Although the researchers had foreseen this problem and had intended to use quota sampling technique to prevent it from occurring, their efforts were unsuccessful due to the limited number of students with individualistic cultural orientation in the Ghanaian university. Thus, the smaller number of participants with individualistic cultural orientation is in itself reflective of the proportion that exists in the research population (university of Ghana undergraduate students). In other words, the population has significantly more students with collectivistic cultural orientation than those with individualistic culture orientation.

Recommendations

Regardless of the above limitation, the following are useful recommendations based on the study's outcome: In order to avoid the problem encountered in this research (sample size disparity), it is recommended that a cross-cultural study with the same variables (body image, eating behavior and psychological health) be conducted with two different populations. One of such populations should be selected from a country with collectivistic culture and the other from a country with individualistic culture. By this way, the desired quota specified for each group would be obtainable.

Based on the findings, it is recommended that people who diet to maintain a positive body image should avoid doing so because it has its own adverse consequences on their psychological health. As has been revealed in the study, body image correlates positively with dieting and negatively with psychological health.

Since culture has significant influence on body image and psychological health, it is recommended that young adults in Africa should make efforts to discover what Africa's ideal body shape is and take pride in it instead of Western ideal body shape. Evidently, students in collectivistic culture suffer lower body image because of their pursuance of western ideal body shape.

Conclusion

In investigating the relationship among body image, eating behavior, and psychological health among young adults, the researchers observed a significant positive relationship between eating behavior and body image. However, a negative relationship was observed between body image and psychological health. This led to the suggestion that dieting to maintain a favorable body image might be detrimental to a person's psychological health and should not be encouraged among young adults. There was no relationship between age and body image. Similarly, no gender differences existed among body image, eating behavior, and psychological health. Cultural influences on body image and psychological health were significant. Students with individualistic cultural orientation had a positive body image than those with collectivistic cultural orientation. However, students in collectivistic cultural orientation had greater psychological health than those with individualistic cultural orientation. This implies that importing Western standards of thin body shapes for Africans is likely to generate problems with body image dissatisfaction. Therefore, young adults in Africa need to explore and discover what should be the ideal African body shape and take pride in it.

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