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RESEARCH ARTICLE



## **Body Image and Eating Disorders among Female Students: A Pilot Nutritional Psychology Study in Ghana**

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### **Abstract**

Body image and eating disorders have emerged as an essential facet of bio-psychosocial well-being. Although considered less prevalent in Ghana than in the West, body image and eating disorders are issues of global concern. One hundred (100) female participants with a mean age of approximately 21 years were recruited after informed consent for this pilot study. Results showed a positive correlation between body image and eating disorders. In addition, there was no significant difference between the levels of university education on female body image and eating distortions in Ghana. These findings underscore the importance for more future studies in nutritional psychology and related clinical management.

**Keywords:** Body Image; Eating Disorders; Female Students; Nutritional Psychology; Ghana.

### **Introduction**

Body image is an individual's attitude towards his or her own body. Individuals with distorted body image perceive their body as ugly or even hideous to others. This negative image of self makes individuals enter into various habits that affect eating and other activities of daily living. As the world transit into a more globalised village, problems of body image seem to be universal across genders, race, age and social class.

Body image is not fixed; it varies over time depending on the enabling factors present. Body image is often affected by numerous factors. These may include media, family, friends, teacher, peer and society. As a result, a person's capacity to withstand body image dissatisfaction views as he/she gets older, may be strengthened or weakened over time (Grogan, 1999).

Much of the increasing tendency in troubled body image has been attributed to global advances in media technology. With current advances in cosmetology and media models, definition of a healthy body image has become challenging for some people. In most cases, media exposure paints a picture of "the ideal beauty". This image often leads to some negative effects and disorders due to its unrealistic and impossible demands (Derenne, & Beresin, 2006; Heatherton, Nichols, Mahamedi, & Keel, 1999).

Disturbance of body image and related problems have also been influenced by ethnicity. From a study done among South African multiethnic communities of blacks, mixed race and whites, dissatisfaction with present body size was significantly higher in whites, compared to black and mixed race females (Caradas, Lambert, & Charlton, 2001).

Nonetheless, ethnicity or race showed no significant difference with self-report of body image and eating disordered behaviours (Hrabosky, & Grilo, 2007; Shaw et al., 2004). Rather, eating concerns and depressive affect were seen as significant predictors of body image concerns for both groups (Hrabosky, & Grilo, 2007).

Body image dissatisfaction is often associated with many disorders ranging from minor to severe complications. Common among these include negative feelings about body images and excessive discomforts which may interfere with activities of daily living. In severe cases, this negative feeling affects eating habits which then lead to disabling conditions like body dysmorphic disorder, anorexia nervosa, bulimia nervosa, anxiety, depression, lowered self-esteem, sexual dissatisfaction and dysfunction (Cash, Ancis, & Strachan, 1997).

Due to the cultural beliefs and societal norms, people overlook the fact that the problems of body image and eating disorders are gradually finding its way into the Ghanaian society. The focus of this research is to identify the influence of body image on eating disorders. To the best of the researchers' knowledge, there have not been enough studies done on body image and eating disorders in among Ghanaian female students. In addition, females were selected for this pilot phase since most studies done in the West and Asia described females to be more predisposed to such conditions (Kagawa et al., 2007; Kiriike, Nagata, Sirata, & Yamamoto, 1998; Howk, & van Hoken, 2003).

## **Method**

### ***Participants***

A convenience sample of hundred (100) female undergraduate students of the University of Ghana whom were interested in the study was selected. The mean age of the respondents were  $20.72 \pm 1.57$  years with most of them in the 20 to 24 years age range. Since this study was a pilot study to explore a more neglected concept in Ghana, only females [who are noted to be much affected] were selected.

### ***Instruments***

The Eating Disorder Diagnostic Scale was used to measure eating disorders (Stice, Telch, & Rizvi, 2000).

The Body Shape Questionnaire was used to measure attitudes towards body image (Cooper, Taylor, Cooper, & Fairburn (1987).

### ***Procedure***

Following all necessary ethical requirements for research among human samples, written consents were obtained from all participants before data collection was done.

Completed questionnaires at the end of data collection, were scored and packed into sealed envelopes to ensure confidentiality and safety of responses.

## **Results**

The participants were grouped into lower [100 & 200] and higher [300 & 400] levels. Findings from the analysis in Table 1 showed that there were no significant difference among the two groups of female undergraduates on their body image [ $t_{(98)} = 0.092, \rho = 0.927$ ] and eating disorder [ $t_{(98)} = 0.631, \rho = 0.530$ ] screening scores.

**Table 1: Independent *t*-Test Showing Comparison between the Body Image and Eating Disorder Screening Scores of female undergraduate Students**

Variables	Groups	Mean	Std. Deviation	<i>df</i>	<i>t</i> -value	<i>p</i> -value
Body Image	Lower Levels	59.98	21.113	98	0.092	0.927
	Higher Levels	60.41	24.952			
Eating Disorders	Lower Levels	13.11	10.144		0.631	0.530
	Higher Levels	11.80	10.522			

On the contrary, the findings in Table 2 showed a significant positive correlation between body image and eating disorder screening scores among female undergraduate students in Ghana [ $r = 0.826, \rho = 0.000$ ].

**Table 2: Pearson *r* Correlation between Body Image and Eating Disorder**

Variables	Correlation coefficient ( <i>r</i> )	<i>p</i> -value
Body image	0.826	0.000
Eating disorder		

### Discussion

This study suggests that there is no significant difference between the body image and eating disorder among students in the lower levels and those in the upper levels. The study conducted by Robinson et al. (1996) affirmed these findings. A person's level in an education does not automatically indicate the likelihood of experiencing body image dissatisfaction and/or eating disorder. Nonetheless, social class and level of education have been found in some previous studies to have some effect on the variability within cultural groups than occurs across cultural groups (Alegria et al., 2007; Farmer, & Ferraro, 2005; Striegel-Moore, Wilfley, Pike, Dohm, & Fairburn, 2000). The lack of significant differences might have ensued as a result of the closeness in gap among the educational levels of participants. For instance, there may be a possible difference between individuals with secondary education and university education.

In addition, this study affirms a significant positive association between body image and eating disorder among female undergraduate students. This supports previous studies which had linked the prevalence of eating disorders to many factors including unrealistic body image (Derenne et al., 2006; Robinson et al., 1996). Though, this study could not observe the reason for these finding, the result show quite higher positive relationship ( $r = 0.8$ ) between the two variables. Future studies may look into the interactional factors that maintain and increase the risk for body image and eating disorders among females.

### Limitation

Despite the research gaps filled by this study, the sample size although adequate for a pilot study may be limited in scope. It is highly recommended that, future studies in Ghana should increase the number of participants from those with no formal education to higher levels of education.

### Conclusion

Body image and eating disorders are issues of global concern. It has been observed that, there is a significant correlation between body image and eating disorders among undergraduate female students in Ghana.

In addition, there is evidence that there was no significant difference between the levels of university education on both female body image and eating distortions in Ghana.

Future research in nutritional psychology and other related areas in Ghana may benefit from a heterogeneous sampling frame, locally sensitive instruments of high ecological validity, and larger sample size.

#### **Acknowledgement**

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#### **Conflict of Interest Statement**

The authors declare that they do not have any conflict of interest.

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