"The Mirror Has Its Disease": Examining the Relationship Between Body Image Shame And Mental Health Problems Among Young Adults.

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Abstract

Young adulthood is a critical developmental phase characterised by challenges in diverse aspects of an individual's life including the pressure to conform to societal standards of beauty. This study explores shameful feelings due to body image as a predictor of psychological distress specifically anxiety and depression among young adults. It was hypothesized that body image shame will significantly and positively predict anxiety and depression among young adults. Using a correlational cross-sectional survey design, data was collected from 234 individuals in the Awka metropolis, Nigeria, utilizing instruments such as Beck's Depression Inventory, Beck's Anxiety Inventory, and the Body Image Shame Scale. Results revealed a significant positive correlation between body image shame and both anxiety and depression. Regression analyses further confirmed that body image shame significantly predicted anxiety and depression. The study's finding was discussed as well as its significance which highlights the negative impact of body image shame on well-being suggesting the need for interventions targeted at promoting positive body image and coping strategies to mitigate the adverse effects of societal beauty standards.

Keywords: body image, shaming, depression, anxiety, mental health

Introduction

Young adulthood is a critical developmental phase characterised by challenges in diverse aspects of an individual's life such as self-identity, school, work and career, relationships, etc. (Jain & Joshi, 2021). These challenges coupled with the burden of decision-making and being aware of the implications of certain choices in later life often account for a source of

stress for young adults. Consequently, the prevalence of mental health problems among this population is high. Yet, their rate of help-seeking is low due to a lack of awareness, stigma, and mental health care not readily available or accessible (Koulouri et al., 2022; Kruzan et al., 2022). Koulouri et al. (2022) observed that the increasing rate of incidence of mental health problems among young adults can be attributed to the mounting socioeconomic pressure on young people. Young people are expected to graduate early, attain financial stability, marry, and sometimes care for ageing parents or sick relatives. Also, there is the expectation of a person's appearance and what constitutes beauty and ideal body shape. These expectations may influence young people's perception of themselves and what they think others think of them leading to mental health problems. Consequently, this study explores shameful feelings due to body image as a predictor of psychological distress.

Baker and Gringart (2009) defined body image as a person's feelings, thoughts and perceptions about their overall body, including age, appearance, race, sexuality and functions. They discussed body image as being multidimensional, consisting of an emotional and cognitive dimension. Cognitive body image includes self-statements and beliefs about the body. Emotional body image is made up of experiences of looks and appearance, whether the experiences they go through are comfortable or uncomfortable and whether there is satisfaction with the body or not. Paslakis et al. (2020) acknowledged the multidimensional nature of the concept. They noted that while no definition enjoys universal acceptance, it is usually seen as an interaction between the extent to which a person is satisfied with their body and how well their self-image depends on their perception of their physical body.

Body image refers to how people think, feel, and perceive their bodies (Divecha et al., 2022). Although most researchers agree that body image is multidimensional in construct, they do not completely agree on the nature or amount of the dimensions. Extant studies have shown that body image is not something static, it could change over time or within a few moments within an individual's lifespan. Cash and Pruzansky (1990) showed that repeated watching of television could change a person's body image by influencing the way they think about their weight, attractiveness, and appearance. Grogan (1999) concluded

from several studies that body image is influenced by many different factors which could be friends, peers, family, teachers, and society and when a person gets older, the influences on body image change and may become stronger or weaker, thus creating flux in body image over the entire life-span.

Individual's reactions to their bodies can be positive or negative. Positive body image is a response characterised by having a sense of profound appreciation and admiration for one's body, and people who respond in this manner "promote positive body image to others and have significant others who unconditionally accept their body, and also feel positive about their own body" (Alleva et al., 2021). Body image dissatisfaction is commonly used to describe an individual's negative reactions to their body. It is discontent with one's body image due to perceived incongruities between one's body and the perception of the ideal (Divecha et al., 2022; Hicks et al., 2022). It has been associated with impaired socio-psychological functioning suggesting that the litany of "perfect bodies" being depicted in print, broadcast, and social media may have some unintended negative consequences.

Negative body image may be associated with a high level of body image-related negative emotions (e.g. anxiety, sadness, distress, self-blame, shame) and depression, as well as low self-esteem (Blashill & Wilhelm, 2014; Gan et al., 2011; Shin & Shin, 2008; Steg et al., 2008). Some people may feel sad, depressed, ashamed, and anxious, which are classified as negative self-conscious emotions when they believe their body figure differs from the societal ideal (Thompson et al., 2003). These emotions can evoke one to hide their bodily imperfections in the context of their exposure to others (Thompson et al., 2003). The above-mentioned emotions can contribute to the constant maintenance of and/or deterioration of negative body image. This may be related to the fact that experiencing negative emotions may be associated with the emergence and maintenance of cognitive distortions about oneself (and one's body image) and engaging in avoidance behaviour such as avoidance of social situations that focus on appearance or eating (Hosseini & Padhy, 2020; Jakatdar et al., 2006; Lydecker, 2015; Scardera et al., 2020).

While extant studies have shown that dissatisfaction with body image can lead to mental health problems such as low self-esteem, mood and anxiety disorders, eating disorders, and social dysfunction (Divecha et al., 2022; Paslakis et al., 2020), certain gaps necessitated this study. Notwithstanding these findings, the literature has yet to explore the effect of body image shame on anxiety and depression among university students, prompting the present study. More so, in the Nigerian context, the literature on body image shame on anxiety and depression is lacking, with no research published in that regard. A closely related study was conducted by Ejike (2015) who revealed that body shape dissatisfaction led to decreased quality of life, and Okoro et al (2021) who reported that the perception of body image and comparison led to lowered self-esteem.

Depression and anxiety are prevalent among university students in Nigeria with a recent study by Odulate-Ogunubi et al. (2023) finding an incidence rate of 65.2% for anxiety and 32.8% for depression among public university students in Lagos State. Dike-Israel & Akinboye (2021) found a prevalence rate of 28.4% and 25.8% for anxiety and depression among medical students enrolled in a private university in Ogun State. Among Pharmacy students in Nigeria, a prevalence rate of 63.5 % and 44.6% for anxiety and depression was found in the Aluh et al. (2020) study. Falade et al. (2020) reported an incidence rate of 25% and 14.3% for anxiety and depression among students enrolled in private and public tertiary institutions in Ekiti State. In studies in Nigeria, antecedent and associated factors of these conditions include stress, low self-esteem, stress, academic achievement, family socioeconomic status, years of study, smartphone addiction, academic workload, gender, present living condition, past failures, and fear of failure (Aluh et al., Ayandele et al., 2020; 2020; Chikezie & Okoro, 2021; Emmanuel, 2016; Nwachukwu et al., 2021; Odulate-Ogunubi et al., 2023).

According to Beck's cognitive model of psychopathology, negative schemas give rise to cognitive distortions which may then act as precipitating and perpetuating factors of mental health problems (Wuth et al., 2022). The theory states that people's response to their environment is mediated by their thoughts and beliefs about the environment. When these thoughts are negative, they may give rise to mental health problems or the cogno-affective aspect of psychiatric illness (Marian & Sava, 2023). Thus, cognitive distortions

may arise when individuals perceive a particular body type as the ideal by societal standards and perceive a discrepancy between the ideal and themselves thereby leading to the onset and maintenance of mental health problems. Also, the quest for the ideal body type may lead individuals to engage in certain risky and unhealthy behaviours such as skin bleaching, cosmetic surgery, use of untested products or herbs for weight loss, which may affect one's health and appearance, further increasing the gap between the individual's perception of the ideal and present self. This may result in self-blame, guilt, and regrets further exacerbating mental health problems. Consequently, this study seeks to identify the role of body image shame on anxiety and depression among young adults. In line with these, the study will investigate the following questions:

1) Will body shaming have a role to play on anxiety among young adults?
2) Will body shaming have a role to play on depression among young adults?

The following is hypothesized in the study:

H1: Body image shame will significantly and positively predict anxiety among young and middle-aged adults.

H2: Body image shame will significantly and positively predict depression among young and middle-aged adults.

Method

Study's Design and Participants

The study adopted a correlational cross-sectional survey design. 234 individuals (male = 43.2%, female = 56.8%) across the Awka metropolis participated in the study. These participants were purposely selected based on the study's inclusion criteria. Selected participants were either "too slim or too fat, or too short or too tall" as these people are most likely to be criticized by others leading to body image shame. The participants, between the ages of 18-40, with a mean age of 27.22 (SD = 5.56) were recruited from the general population

The study's questionnaire elicited responses on participants' age, gender, and level of body image shame, anxiety and depression. The paper and pencil questionnaire were

administered on face-to-face contact using paper. Participants were fully informed about the purpose of the research, the voluntary nature of their cooperation, and the confidentiality of the data collected, which was only used for research purposes. After participants gave their informed consent, the questionnaire was administered and collected. The researchers visited tertiary institutions, private businesses, and gym houses to distribute the questionnaire.

Instruments

The data for the study was obtained using the following instruments: Beck's Depression Inventory (BDI), Body Image Shame Scale (BISS) and Beck's Anxiety Inventory (BAI).

Beck's Depression Inventory: The Beck Depression Inventory was developed by Aaron T. Beck. This is a 21-question multiple-choice self-report inventory, one of the most widely used psychometric tests for measuring the severity of depression. Its development marked a shift among mental health professionals, who had until then, viewed depression from a psychodynamic perspective, instead of it being rooted in the patient's thoughts. There is a 4-point scale (ranging from 0 to 3). Examples of items are: "Sadness: 0. I do not feel sad. 1. I feel sad most of the time. 2. I am sad all the time. 3. I am so sad or unhappy that I can't stand it.", This inventory has demonstrated adequate validity. This instrument has been adopted for use in the Nigerian setting, with the alpha being reliable at 0.81 (Oginyi et al., 2017).

Beck Anxiety Inventory: The Beck Anxiety Inventory (BAI) consists of 21 items with a Likert scale ranging from 0 to 3 and raw scores ranging from 0 to 63. It was developed in 1988 and a revised manual was published in 1993 with some changes in scoring. The BAI scores are classified as minimal anxiety (0 to 7), mild anxiety (8 to 15), moderate anxiety (16 to 25), and severe anxiety (30 to 63). This instrument has been adopted for use in the Nigerian setting, with the alpha being reliable from 70-75 (Elliegwu, 2002).

Body Image Shame Scale: BISS is a 14-item self-report measure that assesses body image shame and its phenomenology. BISS presents a two-factor structure assessing an externalized and an internalized dimension underlying body image shame. The instrument showed very good internal consistency, construct, concurrent and divergent, discriminant

validities and good test-retest reliability. BISS discriminates between women with higher or lower levels of disordered eating behaviours. The scale instructions ask respondents to rate each item according to whether it translates the frequency with which they experience feelings or experiences of shame regarding body image, using a 5-point Likert scale (ranging from 0 = 'Never' to 4 = 'Almost always'). This instrument has been adopted in Nigeria with a Cronbach's alpha of .92 (Duarte et al 2014).

RESULTS

Descriptive, Reliability, and Correlation Analyses

Table 1

Mean, standard deviation, correlation, and internal consistency of research variables

Variable	*M(SD)*	1	2	3
1 Body Image Shame	1.14 (0.93)	**.912**		
2 Anxiety	0.70 (0.63)	.593*	**.937**	
3 Depression	0.66 (0.73)	.553*	.650*	**.959**

Note. *, correlation is significant at .01; boldface value indicates the Cronbach alpha coefficient

As seen in Table 1, all the scales used in the study had satisfactory Cronbach alpha coefficients suggesting they were internally consistent. A medium positive correlation was also observed between the variables of the study.

T-test Analyses

Table 2

Gender differences in body image shame, anxiety, and depression

	Male		Female		*t* (232)	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Body image shame	1.08	0.86	1.29	0.99	-0.98	.326	-0.13
Anxiety	0.84	0.61	0.60	0.62	2.86	.005	0.38
Depression	0.76	0.75	0.58	0.69	1.84	.068	0.24

The assumptions of homogeneity of variance were tested and satisfied through Levene's test. Aside from anxiety where male participants significantly scored higher than female participants, there were no other significant gender differences in body image shame and depression.

Regression Analyses

Table 3

Simple linear regression showing body image shame predicting anxiety and depression

Effect	Estimate	*SE*	95%CI		*p*
			LL	*UL*	
Anxiety	.39	.05	.33	.47	<.001
Depression	.43	.04	.35	.51	<.001

Note. CI = confidence interval; *LL* = lower limit; *UL* = upper limit.

As shown in Table 3, the results indicate that body image shame predicted anxiety (B = 0.39, $p < 0.01$) and depression (B = 0.43, $p < 0.01$).

DISCUSSION AND CONCLUSION

The study investigated the role of body image shame on anxiety and depression among young adults. The findings from the study revealed that body image shame was positively associated with anxiety and depression among young and middle-aged adults. This finding is in line with the extant literature (e.g., Duarte et al., 2015; Kaushik & Batra, 2022; Khanjani et al., 2020; Trindade et al., 2018) which has found a positive relationship between body image shame and appearance anxiety, dysphoria, psychological well-being, self-criticism, stress, depression, generalised anxiety. Related studies have also found relationships between body image dissatisfaction, anxiety and depression (e.g., Pothiraj et al., 2022; Riesco-González et al., 2022; Roomruangwong et al., 2017). Individuals who compare their body image with societal ideals of beauty may be engaging in upward social comparison. This may lead to negative self-perceptions promoting feelings of worthlessness and apprehension over acceptance by members of the society. Also, feelings of shame may distort one's thinking about oneself and prompt an individual to avoid social

situations or engage in risky behaviours, thus maintaining anxiety and depression. The psychosocial impact of body image-related shame can lead to a range of emotional responses, including increased stress, social withdrawal, and a diminished quality of life. Anxiety and depression may emerge as individuals grapple with the emotional burden of shame, feeling judged or rejected based on their perceived physical inadequacies.

Implication of the study

The findings from the study reveals the negative effect body shaming on mental health outcomes especially as regards to anxiety and depression. This is a product of the cognitive process, and the need to adopt positive thought process to live in the world, irrespective of one's appearance, and the perception of the world. These effects also stem from social comparison; hence, the need to socially compare positively in order to have positive effect on people. With body shaming paramount in the society, it is important to develop shield against the impact of body shaming on the wellbeing of individuals. Such shield will help people do away with the impact and avoid the development of anxiety and depression.

Suggestions for Further Studies

Further studies on this should make an inclusion criterion for participants to participate in the study to only allow those who may have experienced body shaming to participate in the study. Also, the sample size needs to be limited, as the study is targeted to an aspect of the population. Future study on this should add the role of parenting style as it mediates the impact of body shaming on anxiety and depression. Lastly, the importance of self-esteem should be added in subsequent research on this to determine the role it plays to shield the impact of body shaming on anxiety and depression.

The study was limited in some areas. Despite the notion that body image shame can also be seen in men, its effect cannot be felt in men, as men are not much interested in physical appearance when compared to women; hence, the inclusion of men in the study may have affected the outcome of the study. In addition, the study didn't first test for those who experience body shaming, as everyone may not experience body shaming irrespective of the tendency of people to body shame. Also, the study was limited to only people from Nnamdi Azikiwe University, and Awka metropolis, which doesn't allow the findings to be

generalized. Further studies on this should make an inclusion criterion for participants to participate in the study to only allow those who may have experienced body shaming to participate in the study. Also, the importance of self-esteem should be added in subsequent research on this to determine the role it plays in shielding the impact of body shaming on anxiety and depression.

REFERENCES

Alleva, J. M., Medoch, M. M., Priestley, K., Philippi, J. L., Hamaekers, J., Salvino, E. N., … Custers, M. (2021). "I appreciate your body, because…" Does promoting positive body image to a friend affect one's own positive body image? *Body Image*, *36*, 134–138. https://doi.org/10.1016/j.bodyim.2020.11.002

Aluh, D. O., Abba, A., & Afosi, A. B. (2020). Prevalence and correlates of depression, anxiety and stress among undergraduate pharmacy students in Nigeria. *Pharmacy Education*, *20*, 236–248. https://doi.org/10.46542/pe.2020.201.236248

Ayandele, O., Popoola, O. A., & Oladiji, T. O. (2020). Addictive use of smartphone, depression and anxiety among female undergraduates in Nigeria: a cross-sectional study. *Journal of Health Research*, *34*(5), 443–453. https://doi.org/10.1108/JHR-10-2019-0225

Baker, L., & Gringart, E. (2009). Body image and self-esteem in older adulthood. *Ageing and Society*, *29*(6), 977–995. https://doi.org/10.1017/S0144686X09008721

Chikezie, U. E., & Okoro, T. E. (2021). Prevalence of depression and associated factors among medical students in a Southern Nigerian university. *Global Journal of Health Science*, *13*(12), 12. https://doi.org/10.5539/gjhs.v13n12p12

Dike-Israel, N. A., & Akinboye, D. O. (2021). Prevalence and Comorbidity of Depression and Anxiety among Medical Students in Babcock University, Ogun State, Nigeria. *Asian Journal of Medicine and Health*, 46–55. https://doi.org/10.9734/ajmah/2021/v19i430321

Divecha, C. A., Simon, M. A., Asaad, A. A., & Tayyab, H. (2022). Body image perceptions and body image dissatisfaction among medical students in Oman. *Sultan Qaboos University Medical Journal*, *22*(2), 218–224. https://doi.org/10.18295/squmj.8.2021.121

Duarte, C., Pinto-Gouveia, J., Ferreira, C., & Batista, D. (2015). Body image as a source of shame: a new measure for the assessment of the multifaceted nature of body image shame. *Clinical Psychology and Psychotherapy*, *22*(6), 656–666. https://doi.org/10.1002/cpp.1925

Duarte, C., Pinto-Gouveia, J., Ferreira, C., & Batista, D. (2015). Body Image as a Source of Shame: A New Measure for the Assessment of the Multifaceted Nature of Body Image Shame. *Clinical Psychology and Psychotherapy*, *22*(6), 656–666. https://doi.org/10.1002/cpp.1925

Emmanuel, L. R. (2016). Prevalence and correlates of depression, anxiety and academic stress among science students in Oduduwa University, Ile-Ife, Nigeria. *TEXILA International Journal of Public Health*, *4*(3), 1–11. https://doi.org/10.21522/tijph.2013.04.03.art001

Falade, J., Oyebanji, A. H., Babatola, A. O., Falade, O. O., & Olumuyiwa, T. O. (2020). Prevalence and correlates of psychiatric morbidity, comorbid anxiety and depression among medical students in public and private tertiary institutions in a Nigerian state: A cross-sectional analytical study. *Pan African Medical Journal*, *37*, 1–15. https://doi.org/10.11604/pamj.2020.37.53.24994

Hicks, R. E., Kenny, B., Stevenson, S., & Vanstone, D. M. (2022). Risk factors in body image dissatisfaction: gender, maladaptive perfectionism, and psychological wellbeing. *Heliyon*, *8*(6). https://doi.org/10.1016/j.heliyon.2022.e09745

Jain, T., & Joshi, P. (2021). The stage of young adulthood: Challenges and issues in career choices. *International Journal of Indian Psychology*, *9*(2), 2023-2030.

Kaushik, P., & Batra, B. (2022). Body Image Shame, appearance anxiety, and mental health well-being among young adults victims of body shaming. *Youth Voice Journal*, *12*, 2–22.

Khanjani, S., Gharraee, B., Farani, A. R., & Foroughi, A. (2020). Psychometric properties of Persian version of body image shame scale: A study in cosmetic surgery clinics. *Iranian Journal of Psychiatry and Behavioral Sciences*, *14*(2). https://doi.org/10.5812/ijpbs.99492

Koulouri, T., MacRedie, R. D., & Olakitan, D. (2022). Chatbots to Support Young Adults' Mental Health: An Exploratory Study of Acceptability. *ACM Transactions on Interactive Intelligent Systems*, *12*(2). https://doi.org/10.1145/3485874

Kruzan, K. P., Williams, K. D. A., Meyerhoff, J., Yoo, D. W., O'Dwyer, L. C., De Choudhury, M., & Mohr, D. C. (2022). Social media-based interventions for adolescent and young adult mental health: A scoping review. *Internet Interventions*, *30*. https://doi.org/10.1016/j.invent.2022.100578

Marian, Ş., & Sava, F. A. (2023). Identifying central negative thoughts using experience sampling and network analysis. *Cognitive Therapy and Research*, *47*(5), 707–719. https://doi.org/10.1007/s10608-023-10400-w

Nwachukwu, C. E., Olufunmilayo, E. O., Otor, V. O., Yakubu, A. O., Akingbade, A. E., Odefemi, O. F., … Abdulmalik, J. O. (2021). Common mental health problems and associated factors among medical students of University of Ibadan, Nigeria. *Journal of Mental Health*, *30*(3), 315–322. https://doi.org/10.1080/09638237.2021.1875404

Odulate-Ogunubi, B., Adelayo, A.Y., Coker, A. O., & Alonge, O. A. (2023) The relationship between self-esteem, anxiety and depression among university students in Lagos, Nigeria. (2023). *Journal of Psychology and Neuroscience*. https://doi.org/10.47485/2693-2490.1064

Pothiraj, P., Shamal, C., & Krishnan, V. (2022). Body image dissatisfaction, depression, and health-related quality of life amongst Indian obese school children: A cross-sectional

study. *Journal of Indian Association for Child and Adolescent Mental Health*, *18*(1), 63–72. https://doi.org/10.1177/09731342221096355

Riesco-González, F. J., Antúnez-Calvente, I., Vázquez-Lara, J. M., Rodríguez-Díaz, L., Palomo-Gómez, R., Gómez-Salgado, J., … Fernández-Carrasco, F. J. (2022). Body image dissatisfaction as a risk factor for postpartum depression. *Medicina (Lithuania)*, *58*(6). https://doi.org/10.3390/medicina58060752

Roomruangwong, C., Kanchanatawan, B., Sirivichayakul, S., & Maes, M. (2017). High incidence of body image dissatisfaction in pregnancy and the postnatal period: Associations with depression, anxiety, body mass index and weight gain during pregnancy. *Sexual and Reproductive Healthcare*, *13*, 103–109. https://doi.org/10.1016/j.srhc.2017.08.002

Trindade, I. A., Marta-Simões, J., Ferreira, C., & Pinto-Gouveia, J. (2018). Chronic illness-related cognitive fusion explains the impact of body dissatisfaction and shame on depression symptoms in breast cancer patients. *Clinical Psychology and Psychotherapy*, *25*(6), 886–893. https://doi.org/10.1002/cpp.2323

Wuth, A., Mishra, S., Beshai, S., & Feeney, J. (2022). Experiences of developmental unpredictability and harshness predict adult cognition: An examination of maladaptive schemas, positive schemas, and cognitive distortions. *Current Psychology*, *41*(10), 7155–7165. https://doi.org/10.1007/s12144-020-01274-2