Psychiatry and Behavioral Health

Fear of negative evaluation in a university population: The connections of body image, and social anxiety

Segun-Martins, Ibironke Opeyemi

Department of Pure and Applied Psychology, Faculty of Social Sciences, Adekunle Ajasin University, P. M. B., 001, Akungba-Akoko, Ondo State, Nigeria

Correspondence

Segun-Martins

Department of Pure and Applied Psychology, Faculty of Social Sciences, Adekunle Ajasin University, P. M. B., 001, Akungba-Akoko, Ondo State, Nigeria

E-mail: segunmartins@yahoo.com

Tel: +2347032316270

Abstract

This study was a cross-sectional survey design that examined the connections of body image and perceived social anxiety as predictors of Fear of Negative Evaluation (FNE) in a university population in Nigeria. Using accidental sampling technique, two hundred and forty-five (245) students were selected from Adekunle Ajasin University Akungba-Akoko, Ondo State, Nigeria. The participants comprised of 120 [50.6%] males and 117 [49.4%] females. The participants age range from 16 to 34 years, [Mean = SD 22.42; =3.045]. FNE was measured by using Brief Fear of Negative Evaluation Scale, version 2 (BFNE-II), Body Shape Questionnaire (BSQ-8C), and social anxiety was measured using social phobia inventory (SPIN). The result revealed that body shape significantly predicted fear of negative evaluation among undergraduates [β= .03, t= .53, p > .05]. The result showed that social anxiety significantly predicted fear of negative evaluation among undergraduates [β= .51, t= 8.59, p < .01]. Also, body image, and social anxiety jointly significantly predicts fear of negative evaluation among undergraduates [$F_{(2, 242)}$ = 46.63, R = .53, R^2= .23, p <.01]. Based on the findings of this study, it was recommended that, the Nigerian government through the Ministry of Education, in conjunction with National Universities Commission (NUC), as well as other stakeholders should inculcate psychological interventions programmes in school curriculum to expose students to coping strategies and managing fear of negative evaluation.

Introduction

The annals of research have documented that the period of adolescence is characterised by self-discovery, increased representations of social interaction with significant others which often leads to advances in psychological, physiological and social responses, that seek evaluation of self and others [1]. Negative evaluation from significant others have been reported to be significantly linked to social anxiety and poor academic performance and impaired interpersonal relations [2].

Fear of Negative Evaluation (FNE) is a psychological condition characterised by distress over negative appraisals by others irrespective of quality performance been judged [3,4]. In relation to university populations, students fear of negative evaluation turn out to be apparent social situation, testing, class discussion, being on a date, talking to one's superiors, being interviewed for a job, or giving a speech [5]. Social scientists, Watson and Friend [5] asserted that individuals with FNE show higher tendency to give more effort in boring tasks when informed that they would be appraised by others. It is commonplace in campuses to find students who engage in body shaming, objectifying relationships preferences, and evaluation of others in matters of academic performance, appearance, poise, economic background, religious, and ethnic viewpoints.

Physical appearance has been linked to cognitions about self-image and how others evaluate people other than themselves and these cognitions come about through social learning, parental upbringing, culture-ethnic relativity, and significant others [6,7]. Social pressures from colleagues and acquaintances place a psychological burden to fit in and have a sense of belonging such as those that emphasize how we evaluate ourselves in the eyes of others. Perceived body image may be influenced by body changes and the opinions of others around body shape, such as those that portend negative perceptions on adolescents' behavior, mental wellbeing and self-esteem [8,9]. Body image refers to the perceptual belief and feeling an individual has about his or her body and how he/she feels others perceive them. Cognition about body image revolves around how one see's his or her physical size, complexion, weight, facial features, and these

cognitions influence the direction of thought, feelings and behavior about his or her body image [10-13].

Body image is perceived from a dual perspective, from his/her evaluations and the feedbacks from others against the ideal status of body as acceptable in her or her environment [14]. Negative evaluation for an extensive period has been linked to social anxiety [15] and low self-esteem [16]. American Psychological Association [17] defined social anxiety as amarked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny and negative evaluation of others. Negative mental representation leads to over-estimation of negative evaluation by others and, therefore, individuals suffering from the social anxiety show vulnerability [18]. American Psychiatric Association, [17] suggest that individuals suffering from social anxiety every so often experience symptoms of social anxiety without meeting the criteria for a formal diagnosis for social anxiety disorder. The 12-month prevalence rates for children and adolescents for social anxiety disorder are comparable to adults which is around 7%. Studies have shown relationship of the social anxiety with dissatisfaction with body image [15,19]. However, studies conduct in Nigeria concerning this subject-matter is relatively scant and results are inconsistent [20]. Hence, it is important to assess the relation between body image and social anxiety as predictors of fear of negative evaluation among undergraduates in Adekunle Ajasin University Akungba-Akoko, Ondo State.

Statement of the problem

Fear of negative evaluation among undergraduates have become issues of concern among scholars [10,12,13,21]. Fear of negative evaluation among undergraduates have been associated with negative outcomes [3,4]. Also, Brumberg [22] reported that fear of negative evaluation and shape and appearance of their bodies to be the primary expression of their individual identity but researchers have not given the earned attention it deserves. They spend an enormous amount of time away from productive activity because they are anxious about what their bodies look like to themselves and the society [23]. However, it is imperative to state here that, only a handful of studies in Nigeria have worked extensively on fear of negative evaluation among in-school adolescent in universities. This study attempts to fill this chasm by examining how body image and perception of social anxiety would serve as prognosticators of fear negative evaluation in a university population in Nigeria.

Purpose of the study

This present study examined the connections of body image, and social anxiety and how they may act as prognosticators fear of negative evaluation among university students. The specific purposes are:

1. To examine whether or not body image will predict fear of negative evaluation among Adekunle Ajasin University students.

2. To ascertain whether or not social anxiety will predict fear of negative evaluation among Adekunle Ajasin University students.

3. To examine whether or not Body Image and Social Anxiety will have jointly predicted fear of negative evaluation among Adekunle Ajasin University students.

Research hypotheses

H¹. Perceived body image will significantly prognosticate fear of negative evaluation among undergraduates in Adekunle Ajasin University, Ondo State.

H². Social anxiety will significantly predict fear of negative evaluation among undergraduates in Adekunle Ajasin University, Ondo State.

H³. Body image and social anxiety will jointly and significantly predict fear of negative evaluation among undergraduates in Adekunle Ajasin University, Ondo State.

Methods

Research design

This study adopted a cross-sectional survey design. The independent variables (IV) were body image and social anxiety, while the dependent variable (DV) was fear of negative evaluation. .

Study setting

This study was carried out among six faculties situated in Adekunle Ajasin University Akungba-Akoko Ondo State. The choice for using students from this school is primarily because students at all levels and different backgrounds could easily be accessed, and the possibility of reaching large number of study participants was possible. All the research participants were drawn among students using a simple random sampling technique in selecting participants from this area..

Participants

Using accidental sampling technique, a total number of two hundred and forty five (245) students were selected from Adekunle Ajasin University Akungba-Akoko, Ondo state. The participants comprised of 120 (50.6%) males and 117 (49.4%) females. The participants age range from 16 to 34 years, (Mean =22.42; SD=3.045). Also, 184 (76.0%) were Christians, 51 (21.1%) were Muslims, 7 (2.9%) were traditional, (Mean =1.27;SD=0.505). Their faculty type indicated that 50 (20.8%) were science, 32 (13.3%) were agriculture, 54 (22.5%) were social and management sciences, 71 (29.6%) were education, 12 (5.0%) were law, and 21 (8.8%) were arts. The accademic level of the participants showeds that 47 (19.9%) were 100 level, 76 (32.2%) were 200 level 49 (20.8%) were 300 level, 60 (25.4%) were 400 level, and 4 (1.7%) were 500level undergraduates (Mean=2.57;SD=1.122).

Research instruments

Data were gathered via the use of validated questionnaires which comprised of five sections (section A-D). Section A: Socio-demographic information this section made use of socio-demographic to gather information, which include age, sex, religion, faculty of study and level of study. Section B: Fear of negative evaluation, FNE was measured by using Brief Fear of Negative Evaluation scale, version 2 (BFNE-II; [24]). The BFNE-II is a revised version of the Brief Fear of Negative Evaluation scale (BFNE; [25]). It comprises 12 straightforwardly worded items, each rated on a 5-point Likert scale ranging from 0 (not at all characteristic of me) to 4 (extremely characteristic of me). A sample item included, "I worry about what other people will think of me even when I know it doesn't make any difference". The current study reported Cronbach's alpha .79. Higher scores indicated greater fear of negative evaluation and vice versa.

Section C: Body image was measured using brief form of the Body Shape Questionnaire (BSQ-8C). The BSQ-8C consists of 8 items. The full version BSQ is a self-report questionnaire, originally comprising 34 questions measuring the extent of

psychopathology of concerns about body shape. The questions refer to the subject's state over the past four weeks and are answered on a 6-point scale, from never to always. A sample item includes "Have you been afraid that you might become fat (or fatter)?" With higher scores on the BSQ indicating more body dissatisfaction. The BSQ has been shown to have good concurrent and discriminative validity [26]. The BSQ-8C is the short version of the BSQ and consists of eight items extracted from the full version according to Evans and Dolan [27]. The current study reported Cronbach's alpha of .83. High scores indicated high body image and vice versa. Also, Section D: Social anxiety was measured using social phobia inventory (SPIN). The SPIN has 17 items rated on a scale from 0 to 4: not at all, a little bit, somewhat, very much, extremely. A sample item include "I am afraid of people in authority". The scores are on a continuous scale, with higher scores corresponding to greater distress. The current study obtained Cronbach's alpha of .83. High scores indicated high social anxiety and vice versa.

Data analysis

Data analysis was done using Pearson Product Moment Correlation (PPMC) in testing the relationship among the variables while, multiple regression analysis was adopted to test the predictive power of the study variables. All analysis were conducted using SPSS 20.0.

Results

Test of relationship among variables

Pearson Product Moment Correlation (PPMC) analysis was conducted to test the relationship among the variables of the study. The result is presented in table below.

The result in Table 1, showed that body shape had a significant positive relationship with fear of negative evaluation among undergraduates [r (245) = .24, p < .01]. This thus implies that as mental image which an individual has from his/her body increases, fear of negative evaluation also increases.

Also, the result above showed that social anxiety had a significant positive relationship with fear of negative evaluation among undergraduates in Ondo State, [r (245) = .53, p < .01]. This implies that as social anxiety; constant and specified fear from one or a few social situation/s or a performance through which an individual feels that he is exposed to the unfamiliar/ unknown individuals or possible scrutiny on the behalf of others and will be humiliated or ashamed increases, their fear of negative evaluation also increases. However, the socio-demographic characteristic relating with fear of negative evaluation shows that age [r (238) = .02, p > .05], sex [r (237) = -.04, p > .05], religion [r (242) = -.07, p > .05], and academic level [r (236) = .01, p > .05]. This in essence implies that students' fear of negative evaluation cannot be related to personal factors.

Regression analysis of the psychological predictors

In testing independently and jointly the predictive power of the independent variables (body image, and social anxiety on fear of negative evaluation among undergraduates in Adekunle Ajasin University), Multiple Regression was employed in the analysis.

The result in Table 2 above revealed that body shape significantly predicted fear of negative evaluation among undergraduates (β= .03, t= .53, p > .05). This implies that the level of fear of negative evaluation among undergraduates

Table 1: Correlation Matrix Showing the Mean, Standard Deviation and Relationship among the Study Variables

Variables	1	2	3	4	5	6	7
Age	1						
Sex	-.10	1					
Religion	.11	.02	1				
Academic Level	.64**	-.03	.14*	1			
Body Shape	.13	.12	.15*	.11	1		
Social Anxiety	.00	.03	-.01	-.03	.41**	1	
Fear of Negative Evaluation	.02	-.04	-.07	.01	.24**	.53**	1
Mean	22.42	-	-	-	17.91	25.49	32.15
SD	3.05	-	-	-	7.78	11.68	8.90

** p< 0.01, * p < .05, N= 245

Table 2: Summary of Multiple Regression Analysis Showing the Influence of Body Image and Social Anxiety on Fear of Negative Evaluation among Undergraduates

Variables	β	t	p	R	R2	df	F
Body Shape	.23	.53	> .05	.53	.23	2, 242	46.63**
Social Anxiety	.51	8.59**	< .01				

** p< 0.01, *<.05; N= 245

prognosticate perception of body shape of self and by others. This supports hypothesis one and it was accepted. However, the result above as expected showed that social anxiety significantly predicted fear of negative evaluation among undergraduates (β= .51, t= 8.59, p < .01). This implies that constant and specified fear from one or a few social situations or performance through which an individual feels that he is exposed to the unfamiliar or cognitive appraisal of others. This result was in support of hypothesis two, and it was accepted.

Also, the result indicated that body image, and social anxiety jointly significantly predicts fear of negative evaluation among undergraduates [F (2, 242) = 46.63, R = .53, R2= .23, p <.01]. The result was in supports of the formulated hypothesis three, and was accepted. This result was with the indication that the tested factors predicting fear of negative evaluation among undergraduates yielded just 23% variance in it, while other factors not considered will have been responsible for the remaining percentage occurrence in variance of fear of negative evaluation among undergraduates.

Discussion

OThe correlation analysis among the variables was presented in the Table 1 showing the relationship that exist among variables of study (body image, social anxiety, and fear of negative evaluation). With fear of negative evaluation among undergraduates, findings showed that body image had a significant positive relationship with fear of negative evaluation among undergraduates. Similarly, this finding corroborates with the results of Yanover, and Thompson [8] who confirmed positive significant relationship between body image and fear of negative evaluation. A plausible reason for this outcome is that having poor perception of self-esteem which is closely linked to feelings of inferiority complex, poor interpersonal relationship with create feelings of negative self-regard.

Table 2 also demonstrated that social anxiety was significantly positively related to fear of negative evaluation. This implies that constant and specified fear from one or a few social situations or performance through which an individual feels unfamiliar or fear of possible check on the behalf of others and will be humiliated or ashamed is related fear of negative evaluation. This outcome favored Ranđelović and Dorić [28]; Pawijit, Likhitsuwan, Ludington, and Pisitsungkagarn's [29] position that emerging adults are particularly vulnerable to body image dissatisfaction and social anxiety which often mark social adjustment problems and distress with well-being. The prognosticative power of the independent variables (body image and social anxiety) significantly serves as prognosticators of FNE among undergraduates in Adekunle Ajasin University, Akungba-Akoko, Ondo State. This infers that the level of fear of negative evaluation among undergraduates is significantly linked to increased perception of body shape by self and others. Additionally, this study revealed that social anxiety significantly prognosticates fear of negative evaluation among undergraduates. The reason for outcome can be explained in terms of social anxiety which is characterised by apprehension in social situations and campus environment is a buzz of social activities therefore, undergraduates with predisposition to apprehension of this nature have more tendency to perceive higher FNE in student population. Rapee and Lim, [3]; Rapee, and Heimberg, [30]; Rapee and Abbot [18] discovered that negative mental representation leads to over-estimation of possibility of consequence of other's negative evaluation and,

therefore, individuals suffering from the social anxiety show the anxious symptoms and behaviors such as avoidance whom they support their own negative mental representation.

Lastly, body image, and social anxiety will significantly jointly predict fear of negative evaluation among undergraduates was accepted. This result was in support of the findings of Gerada [31]. The results of this study showed that body image and social anxiety jointly significantly predicts fear of negative evaluation among undergraduates in Adekunle Ajasin University, Akungba-Akoko, Ondo State.

Conclusion

Based on the outcomes of this study, it was determined that body image significantly predict fear of negative evaluation among undergraduates. However, social anxiety significantly predicted fear of negative evaluation among undergraduates. Also, this study showed that body image and social anxiety jointly exerted significant predictive influence on fear of negative evaluation among undergraduates in Adekunle Ajasin University Akungba-Akoko Ondo State.

Recommendation

The findings of this study have important implications for institutions, organizations and managers of industries, and concerned individuals. It aids the understanding of body image and social anxiety as very crucial component among undergraduates. Adolescence focus a tremendous amount of attention on their body. Their concerns about their bodies can escalate out of control, often transforming into angst and identity crisis, as well as psychological and physical illnesses [22,23,32]. Today, adolescence view the shape and appearance of their bodies to be the primary expression of their individual identity [22]. They spend an enormous amount of time away from productive activity because they are anxious about what their bodies look like to themselves and the society [32].

Based on the findings of this study, it was recommended that, the Nigerian government through the Ministry of Education, in conjunction with National Universities Commission (NUC), as well as other stakeholders should inculcate psychological interventions programmes in school curriculum to expose students to coping strategies and managing fear of negative evaluation strategies and policies should be implemented to help foster psychological wellbeing of Nigerian undergraduates. It is also suggested that future research should investigate gender difference in body image, and social anxiety in relation to fear of negative evaluation among undergraduates.

References

1. Moeen T, Muazzam A, Zubair B. Development and Validation of Body Image Scale (BIS) For Young Adult Females. Pakistan Journal of Social and Clinical Psychology. 2013;11(1): 52-58.

2. Mahajan N, Kaur J. Relation between locus of control of college teachers and their job satisfaction. International Journal of Applied Psychology. 2012;2(5): 98-103.

3. Rapee RM, Lim L. Discrepancy between self- and observer ratings of performance in social phobics. Journal of Abnormal Psychology. 1992;1 01(4):728.

4. Stopa L, Clark DM. Cognitive processes in social phobia. Behaviour Research and Therapy. 1993;31(3):25 5-267.

5. Watson D, Friend R. Measurement of social-evaluative anxiety. Journal of Consulting and Clinical Psychology. 1969;33(4):448-457.

6. Abadseh A. Dissatisfaction with body image and its relationship with depression in a sample of teenage Palestinian at Gaza strip. Islamic Journal of Educational and Psychological Studies. 2013;21(2):41-61.

7. Ahadzadeh AS, Rafik-Galea S, Alavi M, Amini M. Relationship between body mass index, body image, and fear of negative evaluation: Moderating role of self-esteem. Health Psychol Open. 2018;5(1):2055102918774251.

8. Yanover T, Thompson JK. Eating problems, body image disturbances, and academic achievement: preliminary evaluation of the eating and body image disturbances academic interference scale. Int J Eat Disord. 2008;41(2):184-187.

9. Koyunchu M, Tok S, Canpolat AM. Body image satisfaction and dissatisfaction, social physique anxiety, self-esteem, and body fat ratio in female exercisers and non- exercisers. Social Behavior personality. 2010;38(4):561-70.

10. Pokrajac-Bulian A, Zivcic-Becirevic I. Locus of control and self-esteem as correlates of body dissatisfaction in Croatian university students. European Eating Disorders Review. 2015;13:54-60.

11. Zanjani ZMA, Goodarzi M, Taghavi J, Molazadeh J. Comparison of body image among three groups showing social phobia, shyness and normal individuals. Journal of Psychology. 2010;13:391-406.

12. Crowther J, Williams N. Body image and bulimia nervosa. In Cash T. F, & Smolak L. (Eds.), Body Image: A Handbook of Science, Practice, and Prevention. 2011. NY: Guildford Press. pp. 288-295

13. Wojtowicz AE, von Ranson KM. Weighing in on risk factors for body dissatisfaction: a one-year prospective study of middle-adolescent girls. Body Image. 2012;9(1):20-30.

14. Davison TE, McCabe MP. Relationships between Men's and Women's body image and their psychological, social and sexual functioning. Sex Roles. 2005;5(7):463-475.

15. Izgiç F, Akyüz G, Doğan O, Kuğu N. Social phobia among university students and its relation to self-esteem and body image. Can J Psychiatry. 2004;49(9):630-634.

16. Mirza NM, Davis D, Yanovski JA. Body dissatisfaction, self-esteem, and overweight among inner-city Hispanic children and adolescents. J Adolesc Health. 2005;36(3):267.e16-267.e2.67E20.

17. American Psychological Association. Diagnostic and statistical manual of mental disorders: DSM-5. (Fifth edition). American Psychological Association. 2013.

18. Rapee RM, Abbott MJ. Modelling relationships between cognitive variables during and following public speaking in participants with social phobia. Behav Res Ther. 2007;45(12):2977-2989.

19. Ivarsson T, Svalander P, Litlere O, Nevonen L. Weight concerns, body image, depression and anxiety in Swedish adolescents. Eat Behav. 2006;7(2):161-175.

20. Otakpor AN, Ehimigbai M. Body image perception and mental health of in-school adolescents in Benin City, Nigeria. Niger Postgrad Med J. 2016;23(2):71-78.

21. Calzo JP, Sonneville KR, Haines J, Blood EA, Field AE, Austin SB. The development of associations among body mass index, body dissatisfaction, and weight and shape concern in adolescent boys and girls. J Adolesc Health. 2012;51(5):517-523.

22. Brumberg JJ. The body project: An Intimate History of American Girls. Random House: New York, USA. 1997.

23. Brown LM Gilligan C. Meeting at the crossroads: Women's Psychology and Girls' development. Cambridge: Harvard University Press. 1992.

24. Carleton RN, Collimore KC, Asmundson GJ. Social anxiety and fear of negative evaluation: construct validity of the BFNE-II. J Anxiety Disord. 2007;21(1):131-141.

25. Leary MR. A brief version of the Fear of Negative Evaluation Scale. Personality and Social Psychology Bulletin. 1983; 9:371-375.

26. Cooper P, Taylor M, Cooper Z, Fairburn CG. The development and validation of the Body Shape Questionnaire. International Journal of Eating Disorders. 1987;6:485–494.

27. Evans C, Dolan B. Body Shape Questionnaire: derivation of shortened "alternate forms". Int J Eat Disord. 1993;13(3):315-321.

28. Ranđelović KM, Dorić JDZ. (2017). Fear of negative evaluation and social anxiety in the context of the revised reinforcement sensitivity theory. Zbornik radova Filozofskog fakulteta u Prištini. 2017;47(3):239-259.

29. Pawijit Y, Likhitsuwan W, Ludington J, Pisitsungkagarn K. Looks can be deceiving: body image dissatisfaction relates to social anxiety through fear of negative evaluation. Int J Adolesc Med Health. 2017;31(4):10.1515/ijamh-2017-0031.

30. Rapee RM, Heimberg RG. A cognitive-behavioral model of anxiety in social phobia. Behav Res Ther. 1997;35(8):741-756.

31. Gerada A. The longitudinal association between body image dissatisfaction, social anxiety, and fear of negative valuation in adolescents. Unpublished PhD thesis submitted to the University of Ottawa in partial Fulfillment of the requirements for the Master of Arts in Counselling Psychology. 2020.

32. Pipher MB. Reviving Ophelia: Saving the Selves of Adolescent Girls. New York. 1994.