



Psychological Impact of Fear of Fatness Moderated by Personality in a Sample of University Students

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Authors' contributions

This work was carried out in collaboration among both authors. Authors GEA and JAA designed the study, wrote the protocol, coordinated data collection and analysis. Author GEA wrote the first draft of the manuscript. Both Authors read and approved the final manuscript.

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ABSTRACT

Background/Objective: Health and socio-cultural concerns have led to a situation in which the slim body mentality is now a global phenomenon, raising the potentials for fear of fatness which, in turn, can significantly compromise psychological well-being. Research also indicated that other factors, apart from actual body mass index play important roles in peoples' fear of fatness. The observed dearth of empirical research on these important issues necessitated the present study. The objective of this study was to investigate the association between fear of fatness and psychological well-being and the extent to which personality variables (core self-evaluations) moderated the association.

Method: The study was a cross-sectional survey. A multi-stage sampling technique was used to select 790 undergraduate students of Olabisi Onabanjo University, Ago-Iwoye, Nigeria. Participants were personally interviewed, using standardized, psychometrically-robust and widely-used measures of fear of fatness, core self-evaluations, and psychological well-being. Participants were personally interviewed by the researchers and trained assistants.

Results: Fear of fatness was very high among the respondents in the present study. Fear

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of fatness { $F(1,786) = 14.62$; $p < .01$ } and core self-evaluations { $F(1,786) = 13.09$; $p < .01$ } independently influenced psychological well-being. The joint effect was also significant { $F(1,786) = 10.74$; $p < .01$ }. Psychological well-being rose appreciably with increasing core self-evaluations even among the high fear of fatness individuals, who ordinarily had very low psychological well-being. This indicated that core self-evaluations significantly moderated the impact of fear of fatness on psychological well-being.

Conclusions/Recommendation: Fear of fatness is very high among university students in Nigeria. Counselling and psycho-educational programmes should be organized for young people with a view to educating them on self-acceptance and core self-evaluations, thereby boosting their psychological well-being.

Keywords: Fear of fatness; psychological well-being; personality; students; Nigeria.

1. INTRODUCTION

Overweight and obesity represent a global public health problem because of their effect on individuals, families and communities. It is estimated that about one billion people are overweight and more than 300 million obese worldwide [1]. Overweight and obesity are reported to account for 44% of the global burden of diabetes mellitus, 23% of ischaemic heart disease and 7% – 41% of some malignancies [1]. It is estimated that of the projected 64 million deaths worldwide in 2015, 41 million (64%) will result from non-communicable diseases (NCDs), of which obesity is a major contributor [2]. Overweight and obesity are on the increase in Africa and might assume an epidemic dimension in the near future [3,4]. The reported prevalence of overweight and obesity amongst urban dwellers in Africa is 35% and it is estimated that by 2025, 75% of the obese people worldwide will reside in the developing world [1,4]. The reported prevalence of overweight and obesity amongst urban dwellers in Jos, North Central Nigeria is 21.4% [5]. Another study from Lagos, South-West Nigeria, reported the prevalence of obesity amongst urban dwellers to be 6.9% [6].

In addition to the health implications, body size and fatness are imbued with cultural meaning in all human societies [7]. As noted by Brewis and colleagues [8], in much of the industrialized West slimness is associated with health, beauty, intelligence, youth, wealth, attractiveness, grace, self-discipline, and goodness whereas fatness and obesity are associated with ugliness, sexlessness, and undesirability as well as moral failings, such as a lack of self-control, social irresponsibility, ineptitude, and laziness. Implicit in these socio-cultural valuations are increasing prejudice reported by the fatter members of society in places such as the United States [9-11]. The technically obese (those with body mass index greater than 30) have less career and educational access, lower pay, and worse health care service, and they are significantly more likely to be fired, bullied, teased, and romantically rejected [10]. Profoundly, many Americans say they would rather die younger or be blind than be obese [12]. The globalization of slim-body ideals in the recent times have led to a situation whereby many of the places where large or fat bodies were reported to be valued or viewed neutrally now increasingly state a preference for slim bodies on standard body image scales [13,14]. Implicit in all these are themes of fear of becoming fat and an obsession with maintaining ideal body size.

The diagnostic criteria for anorexia nervosa (AN) include an “intense fear of gaining weight or becoming fat” as a central characteristic of the disorder [15]. Also referred to as fear of fatness, fear of weight gain, morbid dread of fatness, and weight phobia, the construct is generally defined as the degree to which an individual is concerned about gaining weight

and/or becoming overweight. The salience of fear of fatness as a key construct involved in eating dysfunction is supported by clinical evidence, including its co-occurrence with a drive for thinness [16], observed and reported relevance for individuals with bulimia nervosa [17] and ability to predict restrictive eating [18].

Fear of fatness is caused mainly by society pressures and expectations. People are consistently being encouraged to maintain ideal weights and for overweight people to take action aimed at reducing weight with a view to promoting health and general well-being. The unflattering portrayals of obese persons pervade popular culture, while multiple studies document that children, adults, and even health care professionals who work with obese patients hold negative attitudes toward overweight and obese persons [19,20]. Given the current societal and cultural ideals of slimness and dieting, which permeate the modern society, many people, especially young persons have unreasonable fears of fatness. Thus, attempts to combat the single issue of obesity have unveiled numerous other problems to be dealt with (such as fear of fatness), most of which pose their own health hazards.

Many young people simply have come to dislike their bodies even when nothing is wrong with their bodies or weights, objectively [21]. Girls, relative to boys, often think they are fat even when they are not [22]. Consequences of fear of fatness may include stunted growth, crash dieting or bingeing, smoking and consumption of laxatives [23]. Implicit in all these is a tendency to experience psychological distress [23,24]. People categorized as 'fat' may feel unworthy and may develop low self-esteem [24-26], while those at no risk of obesity might find themselves in a mindset where they feel they have to be thin [27]. By creating distress among obese and non-obese people as a result of desperation to feel socially ideal, fear of fatness may, therefore, compromise an individual's psychological well-being.

Certain factors can significantly moderate the psychological impact of fear of fatness. One important moderating variable may involve differences in personality make-up of individuals. Because personality is central to an individual's functioning across several domains of life and defective personality has been implicated in many forms of maladaptive behaviours, people with more robust personality may be more resilient and adaptive in face of social, physical and psychological challenges [28]. Some of the personality factors that have been implicated in this regard include perceived personal control [29,30], hardiness [30], emotional stability or neuroticism [31], self-esteem [32] and locus of control [33]. An emerging body of literature suggests that a higher – order self-evaluative personality trait called core self-evaluations (CSEs) [34], composed of some of psychology's most studied traits – neuroticism, self-esteem, locus of control and generalized self-efficacy – represents ability or skills across many domains. For example, people with high CSEs have been shown to demonstrate more effectiveness in overcoming obstacles by using better problem-solving strategies [35], higher stress tolerance [33], and ability to cope better with frustrations and unpredictable situations [35]. The CSEs traits may, therefore, significantly moderate the deleterious impact of fear of fatness. This line of research, however, remains largely unexplored.

Research addressing gender differences generally suggest that females exhibit higher levels of fear of fatness than males [36]. Women seem to be more concerned about obesity than men and are two to three times more likely to seek weight-loss treatment [37]. Research has found that women experience greater dissatisfaction with their weights and shapes than men do, and this dissatisfaction increases with BMI [37]. Women also perceive greater stigmatization in relation to obesity and are under greater pressure to be slim compared to men [37,38]. Age is also likely to be an important factor in fear of fatness. Younger persons,

especially younger women appear to be at an increased risk of both fear of fatness [39] and obesity [40].

Overall, it is evident that health and socio-cultural concerns have led to a situation in which the slim body mentality is now a global phenomenon, raising the potentials for fear of fatness which, in turn, can significantly compromise psychological well-being. It is also plausible to opine that a host of other factors (other than actual BMI) play important roles in peoples' fear of fatness. Despite the apparent significance of this construct in eating pathology and its impacts on psychological well-being, relatively little research has assessed this fear of fatness in Nigeria. Although some investigators argue that fear of fatness is a core feature of anorexia nervosa [41], others suggest that it is a Western-specific characteristic requiring reevaluation of its applicability to anorexia nervosa across cultures [42]. Consequently, further research investigating fear of fatness and its moderators is warranted.

Fear of fatness research, generally, has not received much attention in Nigeria. An understanding of the psychological impacts of fear of fatness as well as its moderators may help in designing intervention programs aimed at helping individuals who present with this problem. In the present study, we investigated fear of fatness among randomly selected undergraduate student of a Nigerian university. We also examined the impact of fear of fatness on psychological well-being as well as the extent to which the impact was moderated by CSEs.

2. MATERIALS AND METHODS

2.1 Setting/Participants

The setting of the study was the Main Campus of the Olabisi Onabanjo University (OOU), an Ogun State Government-owned multi-campus university. The main campus (hosting faculties of Arts, Sciences, Social and Management Sciences, and Education) is located in Ago-Iwoye. Other campuses are located in Ayetoro (hosting the College of Ariculture), Ibogun (hosting the College of Engineering) and Sagamu (hosting the College of Health Sciences). The university has a population of over 10,000 undergraduate students, with over fifty percent of the students' population being in the main campus. Ago-Iwoye, the host community of the university, is a semi-urban community located in Ijebu North local Government area of Ogun State, Nigeria. Because OOU is a non-residential university, majority of the students reside in the Ago-Iwoye community with the local populace.

Participants were seven hundred and ninety undergraduate students of OOU, randomly selected from four faculties and twenty departments of the university. Participants' mean age was 22.10 (SD = 5.19). Out of the 790 participants, 490 (62.02%) were females and 300 (37.97%) were males. Majority of participants (458 or 57.97%) were of Yoruba ethnicity, 225 (28.48%) were of Igbo ethnic origin while 107 (13.54%) were of other ethnic origins. In terms of marital status, 653 (82.66%) of participants were single while 137 (17.34%) were married (See Table 1).

Table 1. Variables of study

Variable	(n = 790)
Gender	
Males	300 (37.97%)
Females	490 (62.02%)
Age: Mean (SD)	22.10 (5.19)
Ethnicity	
Yoruba	458 (57.97%)
Igbo	225 (28.48%)
Others	107 (13.54%)
Faculties	
Arts	200 (25.31%)
Education	195 (24.68%)
Sciences	197 (24.94%)
Social and Management Sciences (SMS)	198 (25.06%)
Levels of study	
100 level	200 (25.31%)
200 level	199 (25.19%)
300 level	196 (24.81%)
400 level	195 (24.68%)
Marital status	
Single	653 (82.66%)
Married	137 (17.34%)
Religious affiliation	
Christianity	415 (52.53%)
Islam	263 (33.29%)
Traditional	92 (11.65%)
Others	20 (2.53%)
Fear of fatness: Mean (SD)	27.14 (7.18)
Core Self-evaluations: Mean (SD)	32.58 (6.83)
Psychological Well-being: Mean (SD)	53.11 (8.94)

2.2 Measures

A standardized questionnaire was used to collect relevant data in this study. Participants supplied their background information on age, gender, marital status, level of study in the University, and ethnic origin by checking the appropriate option or writing out the information. Fear of fatness was assessed with the Goldfarb's Fear of Fat Scale [43]. The instrument is a 10-item self-report measure which assesses an individual's fear of fatness on a 4-point Likert scale, with options ranging from "Very Untrue" (1), "Somewhat Untrue" (2), "Somewhat True" (3) to "Very True" (4). High scores on the scale generally indicate a greater tendency toward fear of fatness. The authors have reported a Cronbach's alpha coefficient of .85 [43]. In this study, a Cronbach alpha coefficient of .79 was obtained for the scale.

The 12-item Core Self-evaluations Scale (CSES) was used to assess core self-evaluations. Developed by Judge and Colleagues [44] as a direct and relatively brief measure of the CSEs traits (high self-esteem, high generalized self-efficacy, emotional stability and internal locus of control), the instrument is scored along a five-point Likert scale with options ranging from "Strongly Disagree" (1) to "Strongly Agree" (5), and with higher scores denoting high CSEs and vice-versa. Six items on the scale are reverse scored (items 2, 4, 6, 8, 10 and

12). Robust psychometric properties have been reported for the scale [44-46] including an average reliability of .84, test re-test reliability of .81; item-total correlations ranging from .48 to .55 as well as high and positively correlated inter-item matrices (when the negatively worded items had been reverse scored). In the present study; a coefficient alpha of .86 was obtained.

Psychological well-being was assessed using the Ryff's Psychological Well-being Scale [47]. The RPWB scale (shortened version) consists of a series of statements reflecting the six areas of psychological well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Respondents rate statements on a scale of 1 to 6, with 1 indicating strong disagreement and 6 indicating strong agreement. High scores on the scale generally indicate satisfaction with life. The scale has been shown to have good psychometric properties [47]. In this study, a coefficient alpha of .73 was obtained for the scale.

2.3 Procedure

A multi-stage sampling technique was used to select participants from four faculties and various departments domiciled in the Main Campus of OOU. The four faculties were Arts, Education, Sciences, and Social/Management Sciences. Using the balloting method, five departments were randomly selected from each faculty, yielding twenty departments. From each of the selected departments, forty students were randomly chosen (ten students per level of study, since there are 100, 200, 300 and 400 levels in each department), using systematic sampling technique.

Approvals were sought and obtained from relevant university authorities, having certified that the study was not in breach of any ethical regulation. Participants were informed that the exercise was for research purpose, and their anonymity as well as the confidentiality of the expected responses was guaranteed. Informed consent was implied by participants' signing of the "Informed Consent" form attached to the questionnaire and completion of the questionnaire. A total of eight hundred questionnaires were personally administered to participants by the researchers and two trained assistants in lecture rooms before or immediately after lectures. Approximately, it took about 15 minutes to complete the questionnaire. The administration of the questionnaire cut across ages, genders, faculties, departments and levels of study. At the end of the four-week data collection exercise, seven hundred and ninety questionnaires were returned with usable data. This represented a 98.75% return rate. Data generated were analysed with the Statistical Package for the Social Sciences (SPSS 17).

3. RESULTS

We correlated the variables in the study (see Table 2), using linear correlational analysis (Pearson Product Moment Correlation). Results showed that fear of fatness correlated significantly with all the variables in the study. Specifically, females are more likely than males to report fear of fatness ($r = .37$; $p < .01$), younger persons are more likely than older persons to report fear of fatness ($r = -.29$; $p < .05$), students at the lower levels in the university are more likely to report fear of fatness ($r = -.24$; $p < .05$), single persons are more likely than married persons to report fear of fatness ($r = -.21$; $p < .05$), persons low in CSEs are more likely to report fear of fatness relative to those with high CSEs. Additionally, the higher the fear of fatness of an individual, the lower the psychological well-being ($r = -.39$;

$p < .01$). Psychological well-being also correlated significantly with all the variables in the study.

Table 2. Zero-order correlation showing inter-correlations among variables of study

Variable	Sex	Age	LS	MS	FF	CSEs	RPWB
Sex	-						
Age	.08	-					
Level of Study (LS)	.13	.10	-				
Marital Status (MS)	.06	.18	.06	-			
Fear of Fatness (FF)	.37**	-.29*	-.24*	-.21*	-		
Core Self-Evaluations (CSEs)	.10	.23*	-.18	.22*	-.38**	-	
Psychological Wellbeing (RPWB)	-.28*	-.21*	-.28*	.36**	-.39**	.33**	-

NB: * $p < .05$ level; ** $p < .01$

Sex (Male = 1, Female = 2), Marital Status (Single = 1, Married = 2).

Findings indicated that fear of fatness was very high among the respondents in the present study. Respondents' mean score was 27.14 (SD = 8.32). Results (Table 3) indicated that fear of fatness significantly affected psychological well-being $\{F(1,786) = 14.62; p < .01\}$. Respondents with high fear of fatness were significantly lower on psychological well-being (48.48) than those with low fear of fatness (63.51). The impact of core self-evaluations on psychological well-being was also explored.

Results indicated a significant main influence of CSEs on psychological well-being $\{F(1,786) = 13.09; p < .01\}$, with students low on CSEs reporting significantly lower on psychological well-being (mean = 39.71) than those with high CSEs (mean = 68.43).

Table 3. Two-way (2x2) ANOVA showing the effect of fear of fatness and core self-evaluations (CSEs) on psychological well-being

Source	SS	df	MS	F	p
Fear of Fatness	651.30	1	651.30	14.62	<.01
CSEs	583.18	1	583.18	13.09	<.01
Fear of Fatness x CSEs	478.21	1	478.21	10.74	<.01
Error	35008.78	786	44.54		
Total	51890.00	789			

In order to determine the moderating effect of core self-evaluations, the two levels of fear of fatness (low and high) were plotted against psychological well-being with core self-evaluations as the moderator. As depicted in Fig. 1, psychological well-being rose significantly with increasing CSEs even among the high fear of fatness individuals, who ordinarily had very low psychological well-being. This indicated that core self-evaluations significantly moderated the impact of fear of fatness on psychological well-being.

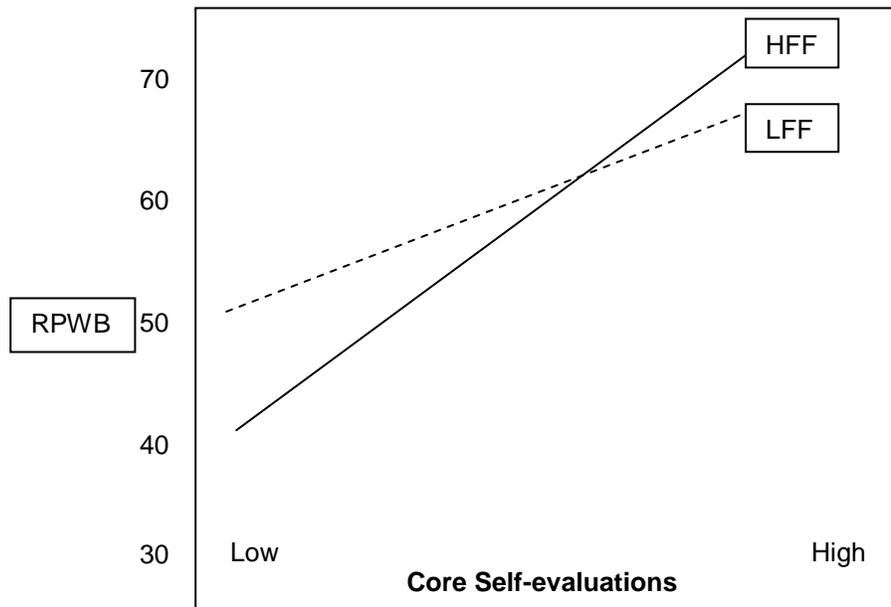


Fig. 1. Fear of fatness (FF) x core self-evaluations (CSEs) on psychological well-being (RPWB) interaction effect. Psychological well-being rose significantly among individuals with high fear of fatness (HFF) who also had high CSEs even more than people with low fear of fatness (LFF) and high CSEs

4. DISCUSSION

In this paper, we examined the effect of fear of fatness on psychological well-being of university students. As hypothesized, we found a significant effect of fear of fatness on psychological well-being. Students who had high fear of fatness (obviously, inconsistent with objective reality as) were significantly lower on psychological well-being compared to their counterparts who had low fear of fatness. Thus, in consistence with previous findings [23,24,27], the results of the present study supports the view that fear of fatness can significantly compromise an individual's psychological well-being.

The impact of personality (core self-evaluations) on the association between fear of fatness and psychological well-being was also examined. We found reasonably significant contribution of core self-evaluations to psychological well-being. Although psychological well-being was significantly lower for individuals with high fear of fatness than for those with low fear of fatness, we found that when core self-evaluations came into the equation, psychological well-being appreciated significantly, especially in individuals with high fear of fatness. Previously reported results that personality can significantly moderate the deleterious impacts of psychological and physical challenges [28,33,35] are supported.

We also found significant association between gender and fear of fatness, with females more likely than males to have fear of fatness. The empirical literature is replete with findings in this direction (e.g. 36-38). Women are more concerned about their physical appearance than men and have been shown to be three times more likely than men to seek weight-loss treatment [37]. Women also perceive greater stigmatization in relation to obesity and are

under greater pressure to be slim compared to men. The salience of maintaining slimness and the fear of becoming fat is particularly pronounced in a country such as Nigeria where the cultural practices are more stringent on women. We also found a significant association between age and fear of fatness. Relatively older students are more likely to report lower levels of fear of fatness than their younger counterparts. This finding is consistent with the assertion that younger persons are usually more preoccupied with body image than older persons [39,40] and that concerns about weight increase is likely to be a major issue among older persons to the extent that such is perceived as capable of precipitating or exacerbating a health problem associated with old age [40].

Finally, level of study was also found to be significantly associated with fear of fatness. We found that the higher the level of study, the lower the fear of fatness. It is possible that the excitement, pressure to impress and to be socially accepted that typically accompany entrance into the university would make the first-year students want to maintain an ideal weight (and have high fear of fatness), compared to "stale students" that are more settled after the excitement of university admission. It is also possible that as students progress in the university, they have more workloads and additional responsibilities which preoccupy them, therefore reducing the time available to think about fatness.

One approach to reduce fear of fatness and enhance psychological well-being among students is for them to be preoccupied with other productive activities. Students should be encouraged to get involved in extra-curricular activities, hobbies, and other happenings around them. When the focus is not perpetually centered on the self, students would feel good and relevant to their social world. This would very likely shift attention away from entertaining fear of fatness or having self-doubts. Another way of mitigating the problem is to organize counselling and psycho-educational programmes for young people with a view to training them on self-acceptance, core self-evaluations (self-esteem, generalized self-efficacy, internal locus of control and emotional stability) and other useful skills to help them develop more realistic perceptions and appreciation of themselves and their social worlds. Such interventions are particularly indicated for females, given the additional societal pressure on them. Given the deleterious physical, psychological and social consequences of fear of fatness, more research is needed to further illuminate the issue.

A major limitation of this study was the fact that BMI or obesity levels of participants were not assessed. This means that the effect of actual body weight (or fat or obesity) was not explored. However, the randomized approach used in sample selection means that such effects (if any) would have been spread uniformly across the groups. The non-experimental nature of the study also means that causality cannot be inferred. Also, participants were drawn from only one university (which does not necessarily typify other universities) in Nigeria. This means that caution should be exercised in generalizing the findings of the study. Nevertheless, these limitations cannot vitiate the important contributions of the study in filling the vacuum in empirical studies on fear of fatness in Nigeria and in highlighting the need for further studies on this important issue.

5. CONCLUSION

We conclude that fear of fatness is prevalent among university students in Nigeria, and there is a very strong, but negative association between fear of fatness and psychological well-being. Although fear of fatness can significantly compromise an individual's psychological well-being, the association can be appreciably moderated by personality (CSEs). It is also our considered view that the issue of fear of fatness has not received adequate research

attention in Nigeria, as manifested in the dearth of empirical studies experiences in the course of the present study.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. World Health Organization. WHO Technical Report Series 894; Obesity: Preventing and managing the global epidemic. [document on Internet]. c2000 [cited 2012 Nov. 05]. Available from: http://whqlibdoc.who.int/trs/WHO_TRS_894.pdf
2. World Health Organization. Preventing chronic diseases: A vital investment. Geneva: World Health Organization; 2005.
3. Idung AU, Abasiubong F, Udoh SB, Ekanem US. Overweight and obesity profiles in Niger Delta Region, Nigeria. *Afr J Prm Health Care Fam Med.* 2014;6(1). Available: <http://dx.doi.org/10.4102/phcfm.v6i1.542>.
4. Ziraba AK, Fotso JC, Ochako R. Overweight and obesity in urban Africa: A problem of the rich or the poor? *BMC Public Health.* 2009;9:465-472.
5. Puepet FH, Zoakah AI, Chuwak EK. Prevalence of overweight and obesity among urban Nigerian adults in Jos. *Highland Medical Research Journal.* 2002;1(1):13-16.
6. Johnson TO. Prevalence of overweight and obesity among adult subjects of an urban African population sample. *Br J Prev Soc Med.* 1970;24(2):105-109.
7. Brown PJ, Sweeney J. The anthropology of overweight, obesity, and the body. *Anthro Notes.* 2009;30(1):6–12.
8. Brewis AA, Wutich A, Falletta-Cowden A, Rodriguez-Soto I. Body norms and fat stigma in global perspective. *Cur Anthr.* 2011;52(2):269-276.
9. Janssen I, Craig WM, Boyce WF, Pickett W. Associations between overweight and obesity with bullying behaviors in school-aged children. *Pediatr.* 2004;113(5):1187–1194.
10. Puhl RM, Heuer CA. The stigma of obesity: A review and update. *Obesity.* 2009;17(5):941–964.
11. Sjo`berg RL, Nilsson KW, Leppert J. Obesity, shame, and depression in school-aged children: a population-based study. *Pediatr.* 2005;116(3):e389–e392.
12. Schwartz MB, Vartanian LR, Nosek BA, Brownell KD. The influence of one's own body weight on implicit and explicit anti-fat bias. *Obesity Res.* 2006;14(3):440–447.
13. Brewis AA, McGarvey ST, Jones J, Swinburn BA. Perceptions of body size in Pacific islanders. *Int J Obesity Rel Met Dis.* 1998;22(2):185–189.
14. Becker AE. *Body, self, and society: The view from Fiji.* Philadelphia: University of Pennsylvania Press; 2004.
15. American Psychiatric Association. *DSM-IV: Diagnostic and statistical manual of mental disorders (4th ed.)*. Washington, DC: Author; 1994.
16. Anderson DA, Williamson DA, Duchmann EG, Gleaves DH, Barbin JM. Development and validation of a multifactorial treatment outcome measure for eating disorders. *Assessment.* 1999;6:7-20.
17. Goldfarb LA, Dykens EM, Gerrard M. The Goldfarb fear of fat scale. *J Pers Ass.* 1985;49:329–332.
18. Gleaves DH, Williamson DA, Eberenz KP, Sebastian SB, Barker SE. Clarifying body-image disturbance: Analysis of a multidimensional model using structural modeling. *J Pers Ass.* 1995;64:478–493.

19. Crandall CS, Schiffhauer KL. Anti-fat Prejudice: Beliefs, Values, and American Culture. *Obesity Res.* 1998;6:458–60.
20. Greenberg BS, Eastin M, Hofshire L, Lachlan K, Brownell KD. Portrayals of overweight and obese individuals on commercial television. *Am J Pub Health.* 2003;93:1342–48.
21. Sujoldic A, De Lucia A. A cross-cultural study of adolescents. *Coll. Antropol.* 2007;31(1):123-130.
22. Carr D, Friedman MA. Is obesity stigmatizing? Body weight, perceived discrimination, and psychological well-being in the United States. *J Health Soc Beh.* 2005;46(3):244-259.
23. Vaidya V. Psychosocial aspects of obesity. *Adv Psychosom Med.* 2006;27:73-85.
24. Gundersen C, Mahatmya D, Garasky S, Lohman B. Linking psychosocial stressors and childhood obesity. *Obes Rev.* 2010;3(10):68-79.
25. Fabricatore AN, Wadden TA. Obesity. *Ann Rev Clin Psy.* 2006;2:357-77.
26. Walker L, Hill AJ. Obesity: The role of child mental health services. *Child Adol Ment Health.* 2009;14(3):114-20.
27. Griffiths LJ, Dezateux C, Hill A. Is obesity associated with emotional and behavioural problems in children? Findings from the millennium Cohort study. *Int J Pediatr Obes.* 2010;30:30-43.
28. Thompson SC. The role of personal control in adaptive functioning. In C.R. Snyder & S.J. Lopez (Eds.), *Handbk Pos Psy.* New York: Oxford University Press; 2001.
29. Taylor SE. *Health Psy (5th Ed).* New York: McGraw-Hill; 2003.
30. Kobasa SC, Maddi SR, Kahn S. Hardiness and health: A prospective inquiry. *J Pers Soc Psy.* 1982;41:168–177.
31. Eysenck HJ. Genetic and environmental contributions to individual differences: The three major dimensions of personality. *J Per.* 1990;58:245 – 261.
32. Robins RW, Tracy JD, Trzesniewski K, Potter J, Gosling SD. Personality Correlates of Self-Esteem. *J Res Pers.* 2001;35:463-482.
33. Judge TA, Thoresen CJ, Pucik V, Welbourne TM. Managerial coping with organizational change: A dispositional perspective. *J App Psy.* 1999;84:107-122.
34. Judge TA, Locke EA, Durham CC. The Dispositional causes of job satisfaction: A core evaluations approach. *Res Org Beh.* 1997;19:151-188.
35. Bono JE, Judge TA. Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *Eur J Pers.* 2003;17:35-518.
36. Gray L, Leyland AH. Overweight status and psychological well-being in adolescent boys and girls: A multilevel analysis. *Eur J Pub Health.* 2008;18(6):616-21.
37. Atlantis E, Baker M. Obesity effects on depression: Systematic review of epidemiological studies. *Int J Obesity.* 2008;32(6):881-91.
38. Chen Y, Jiang Y, Mao Y. Association between obesity and depression in Canadians. *J Wom Health.* 2009;18(10):1687-92.
39. Ma J, Xiao L. Obesity and depression in US women: results from the 2005-2006 national health and nutritional examination survey. *Obesity.* 2010;18(2):347-53.
40. Luppino FS, de Wit LM, Bouvy PF, Stijnen T, Cuijpers P, Penninx BWJH, et al. Overweight, obesity, and depression: A systematic review and meta-analysis of longitudinal studies. *Arch Gen Psyc.* 2010;67(3):220-9.
41. Habermas T. In defence of weight phobia as the central organizing motive in anorexia nervosa: Historical and cultural arguments for a culture-sensitive psychological conception. *Int J Eating Dis.* 1996;19:317-334.
42. Goldfarb LA, Dykens EM, Gerrard M. The Goldfarb fear of fat scale. *J Per Ass.* 1985;49:329-332.

43. Judge TA, Erez A, Bono JE, Thoresen CJ. The core self-evaluations scale: Development of a measure. Gainesville, FL: Warrington College of Business Press; 2003.
44. Abikoye GE. Core self-evaluations and workplace well-being among health workers in selected private hospitals in Ibadan. *Afr J Psy Stud Soc Iss.* 2007;10(2):197-207.
45. Abikoye GE, Sholarin AM. Core-self evaluations and psychological health among caregivers of psychiatric patients in Southwestern Nigeria. *Int J Appl Sc Tech.* 2012;2(6):67:72.
46. Ambwani S, Warren CS, Gleaves DH, Cepeda-Benito A, Fernandez MC. Culture, gender, and assessment of fear of fatness. *Eur J Psychol Ass.* 2007;24(2):81–87.
47. Ryff CD, Keyes, CL. The Structure of Psychological Well-Being Revisited. *J Pers Soc Psychol.* 1995;69(4):719-27.

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