Development and Validation of a Measure of Attitudes toward Fluffy Women

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ABSTRACT

Background: There is an absence of research on the newly evolved term “fluffy” which describes body image and personality features among women. Research on “fluffiness” among Caribbean peoples has been limited by the lack of valid and reliable measures of the concept.

Objective: This project addresses this problem by exploring the internal consistency reliability and the concurrent and discriminant validity of the Attitudes toward Fluffy Women Scale (ATFW) using a mixture of past and present students from The University of the West Indies (UWI), Mona, and the University of Technology (UTech), Kingston.

Method: Past or present students from The UWI, Mona, and UTech, Kingston, were recruited for the study through the use of convenience sampling. A total of 80 students (38 males, 47.5%; 42 females, 52.5%) participated in the study.

Results: Overall, the ATFW was found to have an acceptable degree of internal consistency reliability ($\alpha = 0.90$). The scale also had reasonably good concurrent validity as evidenced by moderate correlations with scores on the Attitudes Toward Obese Persons Scale ($r = -0.42$) and acceptable discriminant validity as demonstrated through low correlations with a Bogardus Social Distance Scale designed to assess prejudice toward people living with the human immunodeficiency virus [HIV] ($r = 0.29$). This pattern of scores suggests that the majority of the stable variance underlying the ATFW assesses the “fluffy” concept (17.6%) while a smaller degree of the variability (8%) measures a conceptually similar but distinct concept.

Conclusion: The Attitudes toward Fluffy Women scale was found to be a reliable and valid scale for assessing the attitudes of young adults toward fluffy women.

Keywords: Attitude, fluffy women, obesity, women

Desarrollo y Validación de una Escala de Actitudes Hacia Mujeres Obesas

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RESUMEN

Antecedentes: Hay una ausencia de investigación del término inglés “fluffy”¹ de reciente aparición, usado para describir la imagen corporal y características de personalidad entre las mujeres con sobrepeso. La investigación de la condición de “fluffiness” entre los pueblos del Caribe ha sido limitada por la falta de medidas válidas y confiables del concepto.

Objetivo: Este proyecto aborda este problema mediante la exploración de la confiabilidad de la consistencia interna y la validez concurrente y discriminante de la escala ATFW de las actitudes hacia las mujeres “fluffy” (Attitudes toward Fluffy Women Scale), que utiliza estudiantes pasados y presentes de la Universidad de West Indies (UWI), Mona, y la Universidad Tecnológica (UTech), Kingston.

Método: Estudiantes pasados y presentes de UWI, Mona y UTech, Kingston, fueron reclutados para el estudio através de un muestreo de conveniencia. Un total de 80 estudiantes (38 varones, 47.5%; 42 hembras, 52.5%) participaron en el estudio.

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¹ Nota del Traductor: Adjetivo de inglés informal para describir una persona con sobrepeso. En este contexto es sinónimo de “gorda”, “obesa”, “corpulenta”. También puede significar “graciosa”, “linda”, “adorable”.

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Resultados: En general, se halló que la escala ATFW posee un grado aceptable de confiabilidad de consistencia interna ($\alpha = 0.90$). La escala también tuvo una validez concurrente razonablemente buena, según lo evidenciado por las correlaciones moderadas con las puntuaciones de la Escala de Actitudes hacia las Personas Obesas ($r = -0.42$), así como una validez discriminante aceptable, como quedó demostrado por las bajas correlaciones con la Escala Bogardus de Distancia Social, diseñada para evaluar el prejuicio hacia personas que viven con el virus de la inmunodeficiencia humana [VIH] ($r = 0.29$). Este patrón de puntuaciones sugiere que por lo general la varianza estable que subyace la ATFW evalúa el concepto “fluffy” (17.6%), mientras que un grado menor de variabilidad (8%) mide un concepto conceptualmente similar pero distinto.

Conclusión: Se halló que la escala ATFW de las actitudes hacia las mujeres gordas (“fluffy”) es fiable y válida para evaluar las actitudes de los adultos jóvenes hacia las mujeres calificadas de “fluffy”.

Palabras claves: Actitud, mujeres “fluffy”, obesidad, mujeres

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INTRODUCTION

The term “fluffy” has recently become a popular adjective used to describe the physical make-up and attitude of women of a particular body type in Jamaican society. Fluffy women are big bodied women who medically would be considered to be overweight, placing them at elevated risk of certain health conditions. The attitudes that others hold regarding fluffiness may serve either to encourage or discourage these women from losing weight. As such, the development of a scale of attitudes toward fluffy women is important to research on the factors which may lead fluffy women to either maintain their weight or lose weight to improve their health status.

As “fluffiness” is a concept that has not been explored in depth, the term fluffy is defined and the various dimensions of the construct elaborated. Following this, the concepts of attitudes and attitudes toward fluffy women are developed. Using these definitions and the conceptual network which comprises them, a scale to assess young adults’ attitudes toward fluffy women was developed.

The construct of fluffiness

The term fluffy was coined by popular master of ceremony “Miss Kitty” (Khadine Hylton), a term she uses endearingly to describe herself. The Merriam Webster dictionary defines fluffy as being soft, airy or light. The term, however, is normally used in describing inanimate objects or animals. In Jamaica on the other hand, the word fluffy gained a new meaning when it became associated with women of a particular body size, specifically women who have above average body sizes.

The term fluffy has become associated with thick, big-boned, full bodied or plus sized individuals. However, being fluffy is not just about physical appearance; a woman described as fluffy must have high self-efficacy and self-confidence to match her size. The word often associated with fluffiness is “diva”, and in order to be eligible as being a “fluffy diva”, one must be full bodied with an extremely high case of self confidence.

As specified above, the term fluffy carries with it certain criteria and connotations. Being fluffy is largely associated with how one carries oneself, one’s attitudes as well as how attractive and appealing one presents oneself as being. The term is gender specific as only plus sized females are referred to as fluffy. In addition to being gender specific, fluffiness is also age specific as plus sized or thick elderly females are not referred to as fluffy.

Being fluffy is not the same as being fat or obese. People often are not able to differentiate between fluffy persons and fat persons. The line distinguishing the constructs is very thin. However, there are some unique features of being fluffy that are not shared with being overweight, obese or fat. In differentiating fluffy from fat, fluffy from overweight and fluffy from obese, there are key features attached to the concept that add to its distinctness; these features are personality, figure and body fat/weight distribution.

The term fat is associated with having a large amount of excess flesh. Obesity, on the other hand, is defined as an excessive accumulation of body fat (1), normally associated with a body mass index (BMI) of 30 or greater. However, being overweight is being over the standard weight ascribed for one’s typical height. Contrary to popular beliefs, being overweight is not synonymous with being fat; the concept of being overweight is subjective to a person-specific situation, whereas being fat is constant as all fat people are automatically overweight. While the constructs of fluffy, fat, overweight and obese share some features, personality is the key feature which distinguishes being fluffy from being overweight, obese or fat.

The foundation for developing any concept of fluffy is that the body mass of the subject must be above the normal body mass stipulated by the BMI and agreed upon by society. The “big” body mass is considered to have the common associated feature of softness, so even when used in the traditional sense, large size and softness are used as baseline defining features of fluffy. Apart from defining fluffy as fat

or plump, common features attached to the description of the term are personality and a curvaceous figure. The difference in perception of the concept often depends on the characteristics and background of the participants, that is, demographics, educational status, and socio-economic status of the individuals. People who are less well educated, and of lower socio-economic class are more likely to perceive a plus size woman as being fluffy rather than obese; however, individuals who have attained higher levels of education and higher socio-economic class are more sensitive to issues of body size and health. Consequently, these individuals may see a plus size woman as being attractive but issues of weight, poor health and dietary habits negate their positive appraisal.

The meaning behind the term fluffy can vary from what an individual perceives as a curvaceous individual to morbidly obese, but this is affected by the subculture the individual is involved in. In regards to developing the concept of fluffy, through observing the body sizes of individuals who are called fluffy and how people react to it, especially people who are significant to the observer, one discovers what fluffy is and whether it is a positive or negative term.

The concept of attitudes toward fluffy women

In order to explore the construct of attitudes toward fluffy women, we must first describe the psychological construct of attitudes. Perloff (2) defines an attitude as “a learned, global evaluation of an object (person, place or issue) that influences thought and action”. From this definition, one can see that an attitude is closely related to a thought, in that one’s attitude influences the thoughts associated and attributed to the thing of interest. However, it is also clear that an attitude is not a thought and jointly, that thoughts are secondary in relation to the influential process of an attitude.

In bringing the two aspects of the construct together and forming a proper definition of “attitudes toward fluffy women”, one would conceptualize the construct as a learned global evaluation of women with excess body fat and a curvaceous shape, emitting high levels of confidence and acceptance of self. The development of the five facets of the construct is derived from this definition. These facets are: stereotypical attitudes about fluffy women, stigmatizing attitudes toward fluffy women, attractiveness attitudes, lifestyle attitudes and personality attitudes.

The stereotypical facet of the construct includes basic views that people believe are true of fat people and as a result assume that they would hold for fluffy women. These views incorporate overeating aspects and a general dissatisfaction with self and weight. The stigmatizing facet encompasses basic characteristics used to describe people with excessive weight as well as restrictions that they believe these individuals should be limited to. The attractiveness aspect incorporates attitudes geared toward assessing how men view fluffy women, the physical attractiveness of fluffy women and the appropriateness of certain attire. Lifestyle attitudes

as the name describes, focus on the general view of a sedentary lifestyle associated with these women. It entails views on what fluffy women should and should not eat as well as how much exercise one believes they should engage in. Lastly, the personality aspect incorporates the different personality traits associated with fluffy women as well as typical attitudes about their overall confidence. In terms of personality, fluffy women can be described as being bubbly, effervescent, extroverted, sociable, confident, charismatic, socially bold, loud, and like to be the centre of attention.

In the process of defining and describing a concept, one does not merely state what the term means; the concept is thoroughly explained in relation to other terms both similar and different from it. Being that an attitude encompasses both positive and negative feelings to a concept, attitudes toward fluffy women should incorporate both positive and negative attitudes. With this said, a construct that is similar to this but conceptually distinct from fluffy women would be prejudice toward people living with HIV. Prejudice more often than not entails negative attitudes or judgments toward something. Fluffy women by their nature are above average in size, perhaps even being substantially overweight or obese. Women who are overweight or obese may often be evaluated negatively and subjected to prejudice. Overweight /obesity and living with HIV are both physical conditions that are relatively fixed and difficult to change. However, prejudice toward people living with HIV is not the same as prejudice toward obese women or attitudes toward fluffy women.

SUBJECTS AND METHOD

Eighty participants (38 males, 47.5%; 42 females, 52.5%) were recruited for the study through the use of convenience sampling. To participate in the study, participants must have been or currently are attending The University of the West Indies (UWI) or University of Technology (UTech), Jamaica. The questionnaires were emailed to 120 potential participants, of which 80 participants responded.

Measures

Attitudes Toward Obese Persons Scale (ATOP): Attitudes Toward Obese Persons scale (3) was used to establish the concurrent validity of the Attitudes toward Fluffy Women Scale (ATFW). The ATOP is a 20-item Likert-type rating scale that assesses attitudes and perceptions about obese people. The responses on this scale range from strongly disagree [1] to strongly agree [6], whereby higher scores reflect more positive attitudes toward obese people. The scale is known to have acceptable reliability ranging from 0.80 to 0.84 and was validated in adult populations (3). The reliability for this measure using the current sample was found to be 0.77.

Bogardus Social Distance Scale (BSD): The Bogardus Social Distance scale (4) was used to establish the discriminant validity of the ATFW scale. The BSD is a one-item measure

with seven rank ordered response options that are used to assess prejudice toward HIV infected people. The BSD assesses prejudice through the use of measuring comfort by means of distance displayed toward the HIV group. The scale ranged from 1 representing 'comfortable with having someone with the HIV virus as close kin by marriage' to the extreme of 7 representing "I'd exclude someone with the HIV virus from my country". Choosing 1 symbolized no prejudice and total comfort with persons from the HIV group while choosing 7 symbolized a high case of prejudice and showing discomfort with persons from the HIV group. High scores indicate a desire for greater social distance. The reliability of the scale, assessed by means of Cronbach's alpha, was 0.90. Angermeyer *et al* (5) demonstrated the validity of the measure by correlations of it to perceptions of dangerousness and the prognosis of the condition.

Development of the ATFW

A series of steps were taken in order to develop items on the Attitudes toward Fluffy Women Scale. These steps included deriving a proper definition of the construct. This was done by talking to colleagues and experts in the field about what the term fluffy meant to them. It required asking members of the general public who they thought a fluffy person was and why. This was done in order to get a holistic view of the term fluffy. The second step was to form a proper nomological network, in order to get a true understanding of the construct. This included breaking up the construct and assessing it according to "what are attitudes" as well as "what and who is a fluffy woman". After this was done and a basic understanding of the construct and term fluffy was conceptualized, this led to the derivation of the various facets that make up the construct. When this was successfully done, a total of 70 items that stem from and relate to the various facets were created.

Two rounds of think-aloud interviews encompassing five people each were conducted in order to assess the representativeness of the questions as well as to generate feedback on the structure of the items. After conducting the think-aloud interviews, 10 items were deleted from the pool of items and the remaining 60 were reconstructed and reworded in order to fully reflect the various facets. An example of the change in the structure can be seen in the evolution from "Fluffy people are lazy" to "Fluffy women are lazy" as well as in the change from "I would prefer a normal weight person rather than a fluffy person" to "I would prefer to have a normal weight person as a romantic partner than a fluffy woman". Also, rewording of items included a change from "Fluffy women have no will power" to "When it comes to food, fluffy women have no will power" as well as from "Fluffy people have no pride because they allow themselves to get to that weight" to "Fluffy women do not care about their weight".

The process of pilot testing allowed for the formatting, elimination and creation of items on the scale. Items such as:

"Fluffy women should eat more vegetables", "I would, if I were a male, date a fluffy woman", "Fluffy workers can be just as successful as other workers" and "Normal weight women are hypocritical toward fluffy women" are examples of items that were removed from the scale.

Procedure

Potential participants were e-mailed a brief synopsis of the study. Those participants who agreed to take part in the project were e-mailed a package of measures to complete and e-mail back to the researchers. This package of measures contained the 60-item draft version of Attitudes toward Fluffy Women Scale, the Attitudes Toward Obese Persons Scale, and the Bogardus Social Distance Scale. Data obtained from the questionnaires were entered into SPSS version 17 and analysed using simple correlations and item analysis techniques.

RESULTS

A four-stage approach was used to construct and to establish the reliability and validity of the ATFW. First, item analysis was conducted to identify the 20 best items from the initial pool of 60 draft items. Second, the internal consistency reliability of the ATFW was examined using Cronbach's coefficient alpha (6). Third, a principal components analysis of the 20-item scale was conducted. Following this, the concurrent and discriminant validity of the ATFW was examined using Pearson's product moment correlations.

Development of the ATFW

In order to create a reliable 20-item scale, an item analysis was conducted on the 60 draft items (Table 1) using the SPSS Reliability programme. The 20 best items were selected for final inclusion in the scale based on an inspection of alpha if deleted statistics output from the Reliability procedure. The procedure was run several times, dropping a series of poorer quality items with each pass of the programme until 20 final items remained. Initially, those items with the highest alpha if deleted were dropped from the scale and the Reliability procedure re-run. Items 4, 6, 8–10, 12, 17, 22, 23, 28, 30, 32, 33, 41, 44, 46, 48–51 from the draft version of the questionnaire were kept (Table 2), producing a measure with a coefficient alpha of 0.90.

An estimation of the internal consistency of the concurrent validity measure (Attitudes toward Obese Persons Scale) for the present sample was also calculated and found to be 0.77. It was not possible to estimate the internal consistency reliability for the Bogardus Social Distance Scale as it consisted of only one item.

Principal components analysis

To explore the construct validity of the measure, a series of principal component analyses were conducted. Attitudes toward fluffy women was said to consist of five major dimensions: stereotypical attitudes about fluffy women,

Table 1: Item if deleted statistics for the 60-draft items on the Attitudes toward Fluffy Women Scale

Item number and label	Cronbach's alpha if item deleted
1. Slim women are healthier than fluffy women	0.925
2. Fluffy women exercise less than normal weight women	0.925
3. Fluffy women play sports regularly	0.926
4. Fluffy women are lazy	0.924
5. Fluffy women eat a lot of fatty foods	0.925
6. Fluffy women are greedy	0.924
7. Fluffy women have little ambition	0.925
8. Fluffy women are untidy	0.925
9. Most fluffy women resent normal weight women	0.924
10. Fluffy women are more emotional than normal weight women	0.924
11. Fluffy women are just as healthy as normal weight women	0.925
12. Fluffy women are less physically active than slim women	0.924
13. Fluffy women should enter Miss Jamaica pageants	0.926
14. Fluffy women are not likely to win beauty pageants	0.925
15. I would prefer to have a normal weight person as a romantic partner than a fluffy person	0.925
16. Fluffy women should pay more attention to their caloric intake than normal weight women	0.925
17. One of the worst things that could happen to a female would be for her to become fluffy	0.923
18. Generally, people look down on fluffy women	0.925
19. Men love fluffy women	0.926
20. Most slim men would not want to marry a fluffy woman	0.925
21. Fluffy women are just as sexually attractive as normal weight women	0.924
22. Fluffy women look disgusting in two-piece bathing suits	0.924
23. Slim women are more physically attractive than fluffy women	0.924
24. Fluffy women are shapely	0.926
25. Fluffy women look disgusting in clothes that are too tight for their size	0.925
26. Jamaican men prefer fluffy women over slim women	0.925
27. Fluffy women have unique personalities that make up for their appearance	0.928
28. Fluffy women should ensure they look appropriate before leaving the house	0.925
29. Fluffy women are as happy as slim women	0.925
30. Fluffy women are comfortable with their appearance	0.924
31. Fluffy women are sociable	0.927
32. Fluffy women should not wear revealing clothes	0.924
33. Fluffy women should wear baggy clothes	0.924
34. Jumping in carnival should be restricted to slim women only	0.925
35. Fluffy women should not be allowed to purchase bikinis	0.924
36. Fluffy women boast a lot	0.925
37. Fluffy women have low self-esteem	0.926
38. Fluffy women need to exercise more than slim women to be at the same level of fitness	0.924
39. Fluffy women should go to the gym regularly	0.924
40. Fluffy women should not enter beauty contests	0.925
41. When it comes to food, fluffy women have no willpower	0.923
42. Fluffy women are proud of their weight	0.926
43. Fluffy women only have themselves to blame for their weight	0.926
44. Fluffy women have poor self-control	0.924
45. Fluffy women overeat	0.924
46. Fluffy women like food too much	0.924
47. Fluffy women should not eat fast food	0.925
48. It is necessary that fluffy women diet and exercise regularly	0.925
49. Fluffy women eat more fried foods and junk than slim women	0.924
50. Fluffy women pretend to be confident but really are not	0.923
51. Slim women care more about themselves than fluffy women	0.924
52. Fluffy women don't care about their weight	0.928
53. Fluffy women are loud	0.926
54. Most fluffy women feel that they are just as good as other women	0.926
55. Fluffy women are too self-absorbed	0.926
56. Fluffy women are more confident about themselves than slim women	0.927
57. Most fluffy women are dissatisfied with themselves	0.925
58. Fluffy women are more self-conscious than slim women	0.926
59. Fluffy women are insecure	0.924
60. Fluffy women draw attention to themselves	0.925

Table 2: Item analysis of the reduced set of 20 items of the Attitudes toward Fluffy Women Scale

Item number and label	Cronbach's alpha if item deleted
4. Fluffy women are lazy	0.894
6. Fluffy women are greedy	0.892
8. Fluffy women are untidy	0.897
9. Most fluffy women resent normal weight women	0.897
10. Fluffy women are more emotional than normal weight women	0.897
12. Fluffy women are less physically active than slim women	0.897
17. One of the worst things that could happen to a female would be for her to become fluffy	0.892
22. Fluffy women look disgusting in two-piece bathing suits	0.896
23. Slim women are more physically attractive than fluffy women	0.896
28. Fluffy women should ensure they look appropriate before leaving the house	0.897
30. Fluffy women are comfortable with their appearance	0.897
32. Fluffy women should not wear revealing clothes	0.895
33. Fluffy women should wear baggy clothes	0.897
41. When it comes to food, fluffy women have no willpower	0.892
44. Fluffy women have poor self-control	0.894
46. Fluffy women like food too much	0.895
48. It is necessary that fluffy women diet and exercise regularly	0.897
49. Fluffy women eat more fried foods and junk than slim women	0.897
50. Fluffy women pretend to be confident but really are not	0.893
51. Slim women care more about themselves than fluffy women	0.895

stigmatizing attitudes toward fluffy women, attractiveness attitudes, lifestyle attitudes and personality attitudes. Consistent with this framework, five, four and three component solutions were explored. Several criteria were used to judge the adequacy of the various solutions – Eigenvalues greater than one, the total percentage of variance accounted for, scree plots, and the meaningfulness of the components. The five-factor solution had the best combination of criteria in that it accounted for 62.6% of the total variance, contained components that largely fit with the underlying construct, the plot of scree values levelled off after five components, and each of the components were meaningful and generally fit with hypothesized dimensions. The first component accounted for 34.5% of the total variability and consisted of items which related to lifestyle factors. For example, “Fluffy women have poor self-control” or “Fluffy women like food too much”. The second component accounted for 8.9% of the total variability and reflected low self-esteem. Included in this component were items such as “Most fluffy women resent normal weight women” or “Fluffy women pretend to be confident but really are not”. The third component accounted for 6.8% of the total variability and appeared to represent perceptions of attractiveness. Items making up this component included “Slim women are more physically attractive than fluffy women” and “One of the worst things that could happen to a female would be for her to become fluffy”. The

fourth component accounted for 6.1% of the total variability in scores and was labelled appearance. This component consisted of items such as “Fluffy women should not wear revealing clothes” and “Fluffy women look disgusting in two-piece bathing suits”. The fifth component accounted for 5.7% of the total variance and was labelled negative stereotypes. Items making up this component included “Fluffy women are untidy” and “Fluffy women are more emotional than normal weight women”.

Validity of the ATFW

Overall, results of the validity analyses suggest that the ATFW has an acceptable degree of concurrent and discriminant validity (Table 3). Scores on the ATFW moderately correlated with scores on the Attitudes Toward Obese Persons Scale ($r = -0.425$; Table 4). The negative correlation is as a result of a difference in the scoring of the scales such that higher scores on the ATFW were indicative of negative attitudes whilst higher scores on the Attitudes Toward Obese People scale were indicative of more positive attitudes toward obese people. The discriminant validity of the scale was acceptable given a low correlation with the Bogardus Social Distance Scale ($r = 0.293$). This was expected, since the discriminant measure assessed prejudice toward people living with HIV, a construct similar to but distinct from attitudes toward fluffy women.

Table 3: Rotated factor loading matrix from the principal components analysis of the Attitudes toward Fluffy Women Scale

Item	Component				
	1	2	3	4	5
Fluffy women like food too much	0.814				
Fluffy women have poor self-control	0.812				
When it comes to food, Fluffy women have no willpower	0.710				
Fluffy women are lazy	0.626				
Fluffy women eat more fried foods and junk than slim women	0.577				
Fluffy women are greedy	0.544				
Most fluffy women resent normal weight women		0.681			
Fluffy women are comfortable with their appearance		0.681			
Fluffy women pretend to be confident but really are not		0.671			
Slim women care more about themselves than fluffy women		0.664			
Slim women are more physically attractive than fluffy women			0.693		
Fluffy women are less physically active than slim women			0.687		
One of the worst things that could happen to a female would be for her to become fluffy			0.501		
It is necessary that fluffy women diet and exercise regularly				0.793	
Fluffy women should not wear revealing clothes				0.625	
Fluffy women look disgusting in two-piece bathing suits				0.614	
Fluffy women should ensure they look appropriate before leaving the house				0.584	
Fluffy women should wear baggy clothes					0.687
Fluffy women are untidy					0.673
Fluffy women are more emotional than normal weight women					0.512

Table 4: Estimation of the concurrent and discriminant validity of the Attitudes toward Fluffy Women scale (ATFW)

	ATFW	ATOP	BSD
ATFW	1.00		
ATOP	-0.42**	1.00	
BSD	0.29**	-0.22*	1.00

**Correlation is significant at the 0.01 level (two-tailed); *Correlation is significant at the 0.05 level (two-tailed).

ATOP = Attitude Toward Obese Persons Scale; BSD = Bogardus Social Distance Scale

DISCUSSION

The Attitude towards Fluffy Women Scale was found to have an acceptable level of concurrent and discriminant validity in this population of respondents, as well as an acceptable level of internal consistency reliability. A principal components analysis of the measure found that five clear components representing the five key dimensions of attitudes toward fluffy women underlie the measure, suggesting that the ATFW has factorial validity. Finally, the ATFW had a moderate positive correlation with the Attitudes Toward Obese People Scale but a smaller correlation with a measure of prejudice toward people living with HIV, suggesting the measure has concurrent and discriminant validity.

Fluffiness is an important new construct that has been recently developed. Despite the negative consequences to one's health of being overweight, fluffy women are considered to be physically attractive. As such, there are two opposing effects of this. Firstly, women who genuinely need to lose weight are able to label themselves as being fluffy, thereby avoiding the pressure to shed weight or to be com-

pliant with weight reduction programmes. This occurrence is of great concern as research shows that women in the Caribbean, specifically in Trinidad and Tobago, have made an association between overweight/obesity and wealth and to some extent happiness (7). As a result of this association, fluffy, overweight and obese women in these islands are more at risk than imagined. Similarly, in a study examining preferences for large body sizes among Afro-Caribbean in a Barbadian and Dominican sample, it was found that Dominican women were more accepting of a larger size body as the ideal in comparison to Barbadian women (8). These studies highlight the need to understand the attitudes, preferences and associations related to body size among women before intervening. Although Tull *et al* (8) have concluded that it is unlikely that body size preference poses a barrier to intervention efforts to reduce the prevalence of overweight in Afro-Caribbean women, it could still be a contributing factor for other Afro-Caribbean women from other territories. Secondly, in the past, being overweight has led to negative effects such as a loss of self-esteem, prejudice and negative stereotypes. Labelling oneself as being fluffy provides some women with a mechanism to preserve their self-esteem and psychological well-being. The development of a valid and reliable instrument to assess attitudes toward fluffiness allows researchers to quantify two important social forces: the social pressure that may be placed on fluffy women to reduce their weight and the social desirability of being fluffy. Future research may use the scale to investigate both of these social forces.

The scale which was developed was multidimensional, allowing future researchers to examine not only general attitudes to fluffiness, but more specific aspects of the con-

struct. Having a multidimensional measure of fluffiness allows for a more comprehensive assessment of the construct. Indeed, portions of the scale may be useful in future research. For example, researchers may combine the questions related to perceived physical attractiveness to create a measure of the perceived physical attractiveness of fluffy women. Such a measure may then be used to assess social class differences in men's perceptions of the attractiveness of fluffy women.

Limitations

The current research focussed on the development and validation of a measure of attitudes toward fluffy women and was not structured to examine important differences in social perceptions. As such, the study collected little data on the possible factors which may influence the social perception of fluffy women. However, the measure may provide a mechanism to explore some of these differences.

Future researchers may wish to explore if attitudes toward fluffy women differ by social class. It has been suggested that men who are experiencing stress find overweight women to be more attractive than men who are not experiencing stress (9). Low socio-economic circumstances place many men under higher levels of stress than men from the middle or upper social classes. As such, it is possible that men from lower social classes may prefer women who are overweight over normal sized women. The Attitudes toward Fluffy Women Scale provides a mechanism to test these possible differences.

Future research may also use the ATFW to explore gender differences in perceptions of overweight women. It is possible that in the Jamaican social context, males may have more positive perceptions and attitudes toward fluffy women than females. Many Jamaican males prefer women who "have some meat on their bones". Women who are "mauger" (meagre) or excessively skinny are perceived as being less desirable as a partner. Women, who in other cultures may be perceived as being plump or slightly fat, are desirable to some Jamaican males. Further, women tend to be more analytic and critical in their evaluations of the physical appearance of other women. As such, it is possible that Jamaican males may have more positive perceptions of fluffy women than Jamaican females.

Similarly, the marital status of women may affect perceptions of attractiveness. Among some Jamaicans, it is expected that unmarried women may be slim, but after marriage they are expected to gain weight as an expression of their satisfaction with their marriage. Women who do not gain weight after marriage are seen as being unhappy in their marriage. Given this, the ATFW may provide a mechanism to assess differences in perceived attractiveness between married and single women.

An important final limitation of the current project is the use of university students as a sample. While university students often represent a wide range of ages and genders, this population is still not representative of the Jamaican populace.

Despite these limitations, the current study provides some preliminary evidence for the concurrent and discriminant validity of the ATFW.

CONCLUSION

The Attitudes toward Fluffy Women Scale was found to be a reliable and valid scale for assessing the attitudes of young adults toward fluffy women.

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