Consumers’ Internal Causal Attributions about Problems in Finding a Good Fit and Relation to

Body Esteem

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Background and Significance. Fit is a key component in consumers’ apparel purchase decisions (e.g., Eckman et al., 1990). As reported recently, consumers are likely to evaluate fit not solely based upon a garment’s physical relationship to the body but also on how consumers perceive visual garment fit and function on the body (Shin & Damhorst, 2018). In this study, we conceptualized problems of finding a good fit (PFGF) as a consumer’s generalized perception of fit problems with physical, aesthetic, and functional aspects of clothing. The purposes of this study were twofold: (1) To develop a scale for measuring perceived PFGF and (2) to establish nomological validity through examining PFGF’s effect on body esteem.

According to attribution theory, consumers make inferences as to the causes of problems, a process called locus of causality (Weiner, 2000). Locus of causality refers to whether the consumer believes that causes (e.g., of problems with a service or product) lie with his or her personal disposition (internal) or with situational factors (external) (Vázquez-Caielles et al., 2007). When consumers experience fit problems, they may attribute the problem either to their own body (internal) or to the garment manufacturer or retailer (external). To establish nomological validity for the PFGF scale, we focused on internal causal attribution of fit problems, defined here as the extent to which the individual believes that the cause of fit problems lies in herself. Through the internal causal attribution of fit problems, consumers who have more problems in finding a good fit may be likely to have lower body esteem towards their physical appearance and weight. Thus, a mediating hypothesis was proposed:

Hypothesis: Problems in finding a good fit are negatively related to body esteem (a: physical appearance, b: weight) mediated by internal causal attribution of fit problems.

Method. To develop the scale of PFGF and investigate the effect of PFGF on consumers’ body esteem through their internal attribution process, we followed three steps recommended by Churchill (1979): Step 1-generate scale items through focus group interviews, Step 2-conduct preliminary tests of reliability and validity of the scale, and Step 3-establish nomological validity of the scale, in our case by examining the effects of PFGF on body esteem mediated by internal causal attribution. Four items of internal causal attribution of fit problems (e.g., My fit problems are due to my body shape) were adapted from a previous measure of locus of causality

(Cronbach’s α = .88) (Russell, 1982) and confirmed by two professionals in apparel merchandising. A total of 18 body esteem items (10 for physical appearance, Cronbach’s α = .92 and 8 for weight, Cronbach’s α = .94) by Mendelson et al. (2001) were adapted.

Results. In Step 1, eight focus group interviews among 66 female and male respondents generated a total of 20 items for fit problems in three dimensions (4 items for physical, 8 items for aesthetic, and 8 items for functional dimensions). Items were drafted so that the content of each item clearly reflected one of the three dimensions of PFGF. Face and content validity were confirmed by two experts in the apparel field, judging whether the measurement items appeared to assess the desired constructs and whether the items covered all domains of the construct. The final measure used a 7-point Likert-type scale to indicate varying degrees of agreement with each item or statement (1=strongly disagree, 7=strongly agree).

In Step 2 a total of 336 female and male respondents who were 18 years or older and lived in the United States responded through Amazon Mechanical Turk (AMT). Each participant was paid 25 cents upon survey completion. As a result of a series of confirmatory factor analyses (CFAs) in Mplus, six PFGF items (three items from aesthetic and functional dimension, respectively) were eliminated to reasonably improve the model fit. The model with 14 items and three factors was found to fit the data very well (*χ*2 = 215.56, *df* = 74, *p* < .0001, RMSEA estimate of .08, CFI of .95, TLI of .94, and SRMR of .06). All the factor loadings from the three latent variables to the corresponding indicators were statistically significant at *p* < .0001 and were greater than .50 for each factor. Cronbach’sα values for each PFGF factor ranged from .84 to .94. Discriminant validity was achieved through a *chi*-square difference test: All the two-factor models and a three-factor model had better fit than the one-factor model for all three possible pairs of PFGF dimensions. Across gender groups, CFA was conducted with unconstrained and constrained models to compare *chi*-square values between two gender models. The differences (*χ*2diff = 9.17, *df*diff = 11) were not significant between the two models, indicating no significant differences in factor loadings across gender groups. This indicates that the developed scale can be used across both gender groups. However, body esteem may be gender differentiated (Green & Pritchard, 2003), validating the decision to collect data among only female participants in Step 3.

 In Step 3, to further validate the PFGF scale, data were collected through AMT. A total of 444 responses from female respondents who were 18 years or older and lived in the US were retained. Based on the result of CFA, the model with 14 items and three factors was found to fit the data very well (*χ*2 = 225.99, *df* = 74, *p* < .0001, RMSEA = .07, CFI = .97, TLI = .96, SRMR =.03). Further tests that replicated analyses from Step 2 confirmed the scale’s reliability (Cronbach’s α = .87, .89, and .94 respectively) and discriminant validity. Hypotheses were tested to establish nomological validity of the scale. Cronbach’sα values for body esteem of physical appearance and weight ranged from .88 to .90 and .89 for internal causal attribution. The results of CFA showed that the measurement model fit the data well (*χ*2 = 331.35, *df* = 111, *p* < .0001, RMSEA = .07, CFI = .96, TLI = .95, SRMR =.04). Preacher and Hayes’ (2008) bootstrap procedure was conducted in Mplus to examine the hypothesized relationships. The hypothesized model included the second order factor (i.e., PFGF) of the three sub-dimensions of PFGF and three manifest variables (i.e., internal causal attribution, body esteem-physical appearance, body esteem-weight) created based on average values. The model fit the data well (*χ2*= 309.17, *df* = 111. RMSEA = .06. CFI = .96, TLI = .95, SRMR = .04). The mediation effects of internal causal attribution of fit problems on the relationship between PFGF and body esteem were both significant: Body esteem of physical appearance (b= -.13, SE = 04, *p* < .01) and weight (b= -.17, SE = 04, *p* < .001) was lower when consumers had more fit problems mediated by internal attribution. Thus, Ha and Hb were supported.

Conclusion and Implications. Results of the present study confirm that the new PFGF scale is reliable and has face, content, discriminant and nomological validity. Factor loadings in each dimension of the PFGF scale were not significantly different between gender groups, implying that both female and male consumers had experienced problems finding a good fit in all three dimensions (physical, aesthetic, and functional). The developed scale incorporates three dimensions to capture consumers’ fit problems accurately. The multidimensional scale of perceived PFGF may be useful to designers and product developers by improving fit solutions based on information from customers. The results of consumers’ internal causal attribution process of fit problems supported attribution theory; female consumers’ fit problems were related to decreased body esteem of physical appearance and weight, which was mediated by internal causal attribution. The addition of the adapted internal causal attribution scale revealed the causal processing of fit problems and body esteem that can influence apparel product experience.

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