

# The Fat Acceptance Scale: Development and Initial Validation

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The fat acceptance movement arose to combat the widespread stigmatization of fatness and fat people through personal liberation and political activism. Support for the movement and its underlying ideology has grown rapidly over the past three decades; however, a self-report measure of fat acceptance with strong psychometric properties has not yet been developed. The current studies aimed to develop the Fat Acceptance Scale (FAS), a measure of fat-accepting beliefs, attitudes, and behaviors that was designed to be appropriate for use with people of all sizes. In Study 1, exploratory factor analysis ( $n = 266$ ) and confirmatory factor analysis ( $n = 267$ ) supported a three-factor solution assessing fat activism, health beliefs related to weight, and interpersonal respect for fat individuals. In Study 2 ( $N = 291$ ), FAS scores predicted reactions to fictitious fat women after controlling for an established measure of antifat attitudes. Data from a subsample of 47 participants indicated moderate-to-high stability of the FAS over 4 weeks. In Study 3 ( $N = 156$ ), health service psychology doctoral students' FAS scores predicted their reactions to a fictional fat psychotherapy client after controlling for antifat attitudes. Taken together, results provided preliminary evidence for the validity and reliability of FAS scores and suggest that the FAS may be a valuable tool for researchers, clinicians, and advocates interested in fat acceptance.

closely intertwined with the feminist movement, and it has often explicitly focused on the cultural devaluation of fat women. Feminism and fat acceptance are united by a focus on the “othered” body, which is seen as “irreconcilable with personhood” and is subjected to widespread discrimination and violence (Farrell, 2021, p. 47). Moreover, since the beginning of the fat acceptance movement, many of its supporters have striven to take an intersectional approach to fat liberation. They have called attention to the ways that sizeism and other forms of oppression operate conjointly and highlighted fat people of color, fat disabled individuals, fat poor individuals, and fat queer and trans-individuals as frequent targets of sizeist discrimination (van Amsterdam, 2013). For instance, fat study scholars have argued that the stigmatization of fatness in Western cultures may have arisen to mark Black bodies as deviant and to justify the subordination of Black people in the African slave trade (Strings, 2015).

Most fundamentally, supporters of the modern fat acceptance movement believe that people of all sizes possess equal inherent dignity, reject the notion that fat people should try to lose weight, and challenge common weight-related stereotypes (Cooper, 2008). Fat-accepting individuals also argue that implicit and explicit fat stigma is unjust and pervasive in Western societies, causing significant harm to the health of fat individuals (Bacon & Aphramor, 2011). They contend that sizeist discrimination must be challenged in both interpersonal contexts and the larger political system (Cooper, 2010). For example, fat acceptance advocates have argued that nondiscrimination laws should include body size as a protected class (National Association to Advance Fat Acceptance, 2016).

Many fat acceptance advocates also reject the notion that fatness is inherently unhealthy. Instead, they argue that fatness represents natural variation in body size that has been inappropriately pathologized by the mainstream medical establishment. Relatedly, many activists contend that body weight is primarily driven by biological and genetic factors, rather than diet and exercise. Contradicting sizeist stereotypes, they suggest that many fat people enjoy good physical health, eat healthy diets, and enjoy physical activity. They also point to research documenting the high failure rate and negative health impacts of dieting (Bacon & Aphramor, 2011). However, other advocates have resisted this line of reasoning, arguing that the question of how weight and health are related is irrelevant—fat people possess inherent dignity, whether fatness confers health risk or not (Morris, 2019). They also point out the systemic inequities that may make weight control difficult, particularly for marginalized populations, including poorer access to medical care, nutritious food, and leisure time (Calogero et al., 2019).

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ranges were discarded (Boateng et al., 2018). After discarding items, more items were developed by the first author, reviewed by the second author, and further reviewed by three doctoral students in

described above. Based on these findings, we retained these 26 items in the final version of the FAS.

**Confirmatory Factor Analysis.** We conducted a CFA with the second subsample to examine the degree to which the proposed factor structure would fit data from a different sample. In this model, the retained 26 items were constrained to load only onto the latent factor on which they had the highest factor loading in the EFA, and the three latent factors were allowed to correlate. Robust fit statistics were evaluated using Hu and Bentler (1999) guidelines: CFI > .95, SRMR < .08, and RMSEA < .06. Fit statistics were as follows: CFI = .94, SRMR = .05, RMSEA = .05, and RMSEA 90% CI [.04, .06], indicating relatively good fit. Standardized factor loadings are presented in Table 1. All factor loadings were significant at the  $p < .05$  level. This model is conceptually and statistically equivalent to a second-order factor model, suggesting that it is appropriate to average the three FAS subscales to produce a total score (Bollen, 1989).

**Descriptive and Internal Reliability.** We computed subscale scores by averaging scores on the items for each subscale, reverse scoring as needed. A total FAS score was computed by averaging scores on the three subscales. Means, standard deviations, and McDonald's omegas for the EFA and CFA subsamples are

presented in Table 2. Coefficient omegas were acceptable for research purposes, ranging from .81 to .94. Subscale distributions were relatively normal in the full sample (skewness, kurtosis): Fat Activism (−.45, −.02), Health Beliefs (.31, .31), Interpersonal Respect (−.74, .20), and FAS total score (−.05, 0.65).

examine the incremental validity of the FAS as compared to the Fat Phobia Scale (Bacon et al., 2001) using three vignettes about fictional fat women. The test–retest reliability of the FAS over a 4-week period was also investigated.

## **Method**

The sample included 291 undergraduate students at the same university, of whom 75.3% identified as women, 24.4% as men, and .3% as another gender identity. Regarding race, 52.9% identified as White, 19.9% as Asian, 13.1% as Black, 9.6% as multiracial, 3.1% as Hispanic or Latino, and 1.4% as another racial identity. Regarding sexual orientation, 86.9% of participants identified as heterosexual and 13.1% identifi

( $n = 115$ ; 39.5% of the original sample) received an email asking them to complete the FAS again. Forty-eight (16.5%) of the original participants participated at Time 2. Most participants received course credit for completing the retest measure (some participants no longer needed credit). Participants who completed the Time 2 survey did not differ from nonparticipants in terms of demographic characteristics or antifat attitudes (measured at Time 1). However, students who participated at Time 2 scored significantly higher than nonparticipants on the Fat Activism subscale at Time 1,  $t(284) = 2.60, p < .05$ .

Data were cleaned using the same process described in Study 1. At Time 1, nine responses were removed for discontinuing the survey before completing the first measure and 17 responses were removed due to failed attention checks. At Time 2, 19 responses were removed for early discontinuation and one response was removed due to failed attention checks. At Time 1, .9% of data points were missing. At Time 2, 2.1% of data points were missing. Little's MCAR Test revealed that data from both timepoints were missing completely at random.

In addition to the FAS, participants completed the following measures at Time 1.

**Antifat Attitudes.** Participants completed the Fat Phobia Scale-Revised (Bacon et al., 2001). The measure consists of 14 semantic differential pairs (e.g., lazy ... industrious), which are rated on a 5-point scale. Participants are asked to choose the option which best describes their "feelings towards fat or obese people." High scores indicate a high degree of antifat attitudes. Scores

demonstrated acceptable reliability with adults recruited from body image and weight loss groups, health organizations, and college courses ( $\alpha = .87$ ; Bacon et al., 2001). In the same study, scores on the measure decreased following participation in a treatment program designed to improve body image. In the present study, McDonald's  $\Omega = .88$  at Time 1.

**Affinity.** As a measure of participants' liking for their assigned vignette's target, participants completed the affinity measure described by Moreland and Beach (1992). This measure comprises three items, which were edited slightly to apply to the vignettes (e.g., "To what extent would you enjoy spending time with [name]?"). Items are rated on a scale from 1 to 100; higher scores indicate a higher degree of affinity. In previous research with college students, scores on the measure were associated with previous exposure to a target, demonstrating construct validity. In the present study, McDonald's  $\Omega = .93, .93, \text{ and } .89$  for the three vignettes.

**Respect.** Participants also completed Wojciszke et al. (2009) measure of respect about their vignette's target. The measure comprises three items (e.g., "[name] could serve as an example to others."), which are rated on a scale from 1 (definitely disagree) to 5 (definitely agree). Higher scores indicate a higher degree of respect. Scores demonstrated acceptable reliability in a sample of Polish adults ( $\alpha = .84$ ) and were associated with a measure of capability (Wojciszke et al., 2009). In the present study, McDonald's  $\Omega = .85, .86, \text{ and } .71$ .

**Sympathy.** Participants also completed Haegerich and Bottoms (2000) measure of sympathy regarding the vignette. The measure comprises three items (e.g., "I feel sorry for [name]"), which participants rate from 1 to 100 on an agreement scale. Higher scores indicate a higher degree of sympathy for the target. College students' scores on the measure have demonstrated acceptable reliability (Cronbach's  $\alpha = .91$ ) and were related to a fictional defendant's characteristics in a vignette. In the present study, McDonald's  $\Omega = .73, .80, \text{ and } .81$ .

## Results

Descriptive statistics, McDonald's omegas, and test-retest coefficients for the FAS are available in Table 2. Coefficient omegas for the FAS subscales and the FAS total score ranged from .80 to .92, indicating an acceptable degree of internal consistency. Four-week test-retest correlation coefficients were .91 (Fat Activism), .87

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4-week period. Correlations among study variables are available in Table 5.

To examine the FAS's incremental validity over and above the



Participants completed the approximately 20-min survey through Qualtrics. The order of the survey elements was designed to disguise the primary focus of the study until after participants had completed the main clinical task. Participants first completed an online consent

**Intervention Approach.** Participants rated their likelihood of engaging in interventions aimed at changing five aspects of the Sarah's situation: her environment, her thoughts and feelings, her interactions, her behaviors, and her lifestyle habits. Each approach was rated on a scale from 1 (extremely unlikely) to 6 (extremely likely)

( $\beta = -.32$ ,  $SE = .13$ ,  $p = .01$ ). Next, the indirect effect of Health Beliefs on tasks through the three mediators was examined. It was significant and positive (combined indirect effect:  $\beta = .34$ ,  $SE = .11$ ,  $p = .001$ ). These findings imply competitive mediation. Similar analyses were conducted to probe the negative effect of Health Beliefs on bond scores. Again, results indicated competitive mediation. Health Beliefs exhibited a significant negative direct effect on bond scores ( $\beta = -.32$ ,  $SE = .13$ ,  $p = .01$ ) and a significant positive indirect effect on bond scores (combined indirect effect:  $\beta = .34$ ,  $SE = .11$ ,  $p = .001$ ).

### **D i s c u s s i o n**

The three studies presented above describe the development,

The test–retest correlations estimated in Study 2 suggest that FAS scores are moderately to highly stable over a 4-week period. However, the participants who elected to complete the retest survey scored significantly higher than noncompleters on Fat Activism at baseline. These participants' active engagement in fat activism may indicate more fully developed (and, therefore, more stable) attitudes about fatness. As a result, our estimates of temporal stability may have been artificially infl

## **Limitations**

Although these studies provide preliminary support for the FAS's reliability and validity, a number of limitations should be noted. First, the initial development of the FAS was completed with undergraduate students, most of whom were young adults with relatively low BMIs. It is possible that the factor structure and psychometric properties of the FAS would differ in other populations. In particular, these sample characteristics may account for the lack of items related to political action in the final measure. Given



- Slay-Westbrook, S. (2016). *Respect-focused therapy: Honoring clients through the therapeutic relationship and process*. Taylor & Francis; <https://doi.org/10.4324/9781315695303>
- Startup, M., Jackson, M. C., & Bendix, S. (2002). The concurrent validity of the Global Assessment of Functioning (GAF). *British Journal of Clinical Psychology*, 41(4), 417–422. <https://doi.org/10.1348/014466502760387533>
- Striley, K. M., & Hutchens, S. (2020). Liberation from thinness culture: Motivations for joining fat acceptance movements. *Fat Studies*, 9(3), 296–308. <https://doi.org/10.1080/21604851.2020.1723280>
- Strings, S. (2015). Obese Black women as “social dead weight”: Reinventing the “diseased Black woman”. *Signs: Journal of Women in Culture and Society*, 41(1), 107–130. <https://doi.org/10.1086/681773>
- Tzioumis, K. (2018). Demographic aspects of first names. *Scientific Data*, 5(1), Article 180025. <https://doi.org/10.1038/sdata.2018.25>
- van Amsterdam, N. (2013). Big fat inequalities, thin privilege: An intersectional perspective on ‘body size’. *European Journal of Women’s Studies*, 20(2), 155–169. <https://doi.org/10.1177/1350506812456461>