Eating, Body Satisfaction, Ethnicity, and Women's Relationship with God

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Abstract

The hypotheses of the current study are that (1) black women will be more spiritual and (2) will have more knowledge of the Holy Spirit than white women, and (3) spirituality will be negatively correlated with eating disorder symptomatology and body dissatisfaction. (4) African American women will have lower body dissatisfaction and (5) less eating disorder symptomatology than Caucasian women. It is predicted that (6) ethnicity will have more influence on eating disorder symptomatology and spirituality than current and ideal weight. (7) Current weight will have more influence on body dissatisfaction than ethnicity or ideal weight. Finally, (8) the ideal weight of black women will be higher than that of white women. Participants included 95 African American and Caucasian female college students. All the hypotheses were supported. Prospective research can discern whether racial differences in spirituality have causal influence on healthier body image held by many black women.

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Introduction

Previous studies have shown that eating disorders and body dissatisfaction are generally less prevalent among African American women than Caucasian women (Powell, 1995; Wilfley et al., 1996). However, eating disorders and body dissatisfaction are increasing in both populations (Thompson & Kenya, 2003); therefore, it is imperative to develop an intervention that affords women a healthier lifestyle.

Protective factors for black women include a healthier standard of beauty within the black culture, such as media portrayals of larger black women and acceptance of larger women by black men and family members (Schooler, Ward, Merriwether & Caruthers, 2004). It has been shown that African American women have a cultural tolerance for fatness (Wolfe, 2000), however discrepancies between their current weight and ideal weight have still been observed (Smith et al., 1997).

Davis, Clark, Gary and Cooper (2005) found that African American women want to lose weight but other factors hinder them from doing so (e.g., low SES, societal norms, lack of physical activity). They also found that weight loss methods involving psychological approaches were not as satisfactory for African American women as they were for Caucasian women. African American women preferred a more spiritual approach than Caucasian women with regard to their weight and emotional concerns. Davis and colleagues (2005) suggest that cultural beliefs about food, cultural settings, and spiritual principles be used as weight loss/weight acceptance interventions specifically for African American women.
A spiritual relationship with God has been an essential foundation for many black women (Robinson, 1996; Southern, 1996; Mimms, 2004). Musgrave, Allen and Allen (2002) and Williams (1993) discuss the reason that women of color, particularly black women, are characterized as being more spiritual than their white counterparts and why they tend to seek God for guidance in every aspect of life including health. They highlight the black feminist perspective on African American women’s spirituality which notes that black women’s strong sense of spirituality stems from oppression during slavery. These authors note that during the slavery era, blacks were better able to trust religious leaders and institutions in their community and rely heavily on God to help with their personal sustenance. Blacks were also better able to identify with Christ since He too suffered from oppression. God is seen as a deliverer to the black community (Eugene, 1995) and continues to be seen by many today.

One of the foundational bases of having a relationship with God derives from accepting Jesus as Lord and Savior and allowing the Holy Spirit to aid in times of difficulty. Black women have used the Holy Spirit, one of the most important aspects of the Holy Trinity (i.e., The Father, The Son, The Holy Spirit), to enable them to be at peace in their minds through various trials and tribulations (Eugene, 1995).

Specifically, Musgrave and colleagues (2002) found that women’s spirituality had a significantly positive influence on their health outcomes. They are able to feel more “at peace” when they are diagnosed with terminal illnesses, such as AIDS and some cancers. People who have health threats have reported higher levels of spiritual well being and spirituality (Musgrave et al., 2002).
Some researchers have discovered that traumatic stressors can create a “spiritual challenge” (El-Khoury et al., 2004; Herman, 1992). El-Khoury and colleagues (2004) found that African American participants in their battered women study were more likely to use prayer as a coping strategy than Caucasian women did. They were also more likely than Caucasian women to find prayer helpful. Additionally, Caucasian women were more likely than African American women to use traditional mental health services, whereas African American women more often found refuge in the church or clergy.

Further, it has been shown that, in general, spirituality has been associated with having a positive effect on life satisfaction (Samuel-Hodge et al., 2000) and health promoting attitudes. Indeed, research has shown that spirituality helps increase people’s resilience in the face of stressors and may serve as a protective factor against the development of psychiatric illnesses such as eating disorders (Wheatley, 2002; Ferch & Ramsey, 2003).

Black women are traditionally very spiritual and rely on their relationship with God to guide them through life (Ball, Armistead & Austin, 2003; Mimms, 2004). Thus, in addition to the fact that blacks have a cultural tolerance for fatness (Wolfe, 2000), spirituality could be another reason that eating disorders, such as anorexia and bulimia nervosa, are less prevalent among black women than white women.

However, recently observed increasing rates of eating disorders in the African American population (Thompson & Kenya, 2003) could be due to upward mobility. Those who lived, worked, and were educated in predominately white environments rather
than predominately black environments, have viewed this upward advancement as having a negative effect on their spiritual growth (Banks-Wallace & Parks, 2001). Therefore, health issues related to poor eating in the African American community could be related to the lack of spiritual replenishment opportunities (Avery, 1990).

In light of these findings, the hypotheses of the current study are that (1) black women will be more spiritual than white women, (2) black women will have more knowledge of the Holy Spirit than white women and (3) spirituality (having a relationship with God) will be negatively correlated with eating disorder symptomatology and body dissatisfaction in both groups of women. It is also predicted that (4) body dissatisfaction will be higher for Caucasian women than African American women and (5) African American women will show less eating disorder symptomatology than Caucasian women. It is further predicted that (6) ethnicity will have more influence on eating disorder symptomatology and spirituality than current and ideal weight and (7) current weight will have more influence on body dissatisfaction than ethnicity or ideal weight. Finally, it is predicted that (8) black and white women will show a desire to lose weight, however, the ideal weight of black women will be higher than the ideal weight of white women.
Methods

Participants:

Participants in this study included 95 African American and Caucasian female college students from an urban university in the southeast who were at least 18 years of age. Participants were enrolled in the study through the undergraduate research subject pool in the Psychology department.

Measures:

Spirituality: Three surveys were used to assess spirituality. The Spiritual Well Being Scale (SWBS; Ellison and Paloutzian, 1982) was used to assess one’s level of personal spirituality. This is a 20-item self-report survey, which consists of a six-point Likert scale ranging from “strongly agree” to “strongly disagree”. The SWBS consists of two dimensions: Existential Well Being (EWB) and Religious Well Being (RWB). EWB measures one’s overall sense of purpose and satisfaction in life. RWB assesses one’s relationship with God. The EWB and RWB scales combine to yield a total SWBS score (Ellison, 1983). The test-retest reliability coefficients of the SWBS have been found to be .86 for the EWB, .96 for the RWB and .93 for the total SWBS. Internal consistency has been shown to be .96 for the RWB, .78 for the EWB, and .89 for the total SWBS (Paloutzian & Ellison, 1982). Internal consistency with the current study sample was found to be .88 for the EWB, .79 for the RWB and .83 for the total SWBS.

The Holy Spirit Questionnaire (HSQ; Ingram and Sandvik, 1994) is a seven item self-report Likert survey which uses a five-point scale ranging from “strongly agree” to
“strongly disagree”. The HSQ assesses attitudes and perceptions toward the Holy Spirit. Since the HSQ is reverse scored, the minimum score of seven indicates the highest agreement with the survey items and the maximum score of 35 indicates the highest level of disagreement. The HSQ has yielded an internal consistency of .85 and a split-half reliability coefficient of .81 (Hurst, 1995). Internal consistency of the current study sample was found to be .74, with a split-half reliability coefficient of .87.

The Spiritual Assessment Inventory (SAI; Hall and Edward, 1996) is a self-report relationally based measure which assesses one’s awareness of God and quality of relationship with God. The SAI uses a five point Likert scale, in which participants’ answers range from “not at all true” to “very true”. The SAI consists of 54 items, seven of which are two-part items. There are six different scales: Awareness (A; 19 items), Realistic Acceptance (RA; seven items), Disappointment (D; seven items), Grandiosity (G; seven items), Instability (I; nine items) and a newly added scale, Impression Management (IM; five items). The score for each scale is the average of answered items. Hall and Edwards (1996) reported good to excellent internal consistency, with alpha coefficients as follows: A, .95; D, .90; RA, .83; G, .73, I, .84, IM, .77.

Eating Disorder Symptomatology: The Eating Attitudes Test (EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982) was used to assess eating disorder symptomatology. The EAT-26 is a screening instrument used to measure the degree to which eating disorder symptoms and related behaviors are present. There are three subscales: Dieting, Bulimia and Food Preoccupation, and Oral Control. Participants answer questions based on a six-point Likert scale (i.e., Always=3, Usually=2, Often=1 Sometimes=0, Rarely=0,
Never=0). Question number 25, “Enjoy trying new rich foods” is the only reverse-scored item. A total score of more than 20 is the typical threshold cut-off where significant eating disorder symptomatology is considered to be present (Garner, Olmsted, Bohr, & Garfinkel, 1982). The current study found the internal consistency of the EAT-26 scale to be as follows: .80 for the oral control subscale, .50 for the diet subscale, .79 for the bulimia and food preoccupation subscale, and .76 for the EAT-26 total scale.

**Body Dissatisfaction:** The nine-item Body Dissatisfaction subscale of the Eating Disorder Inventory-2 (EDI-2; Garner, Olmsted and Polivy, 1983) was used to assess body dissatisfaction. Participants respond to questions on a six-point Likert scale by answering “always”, “usually”, “often”, “sometimes”, “rarely” or “never”. The test-retest reliability after one week for the body dissatisfaction subscale for 70 non-patient undergraduates has ranged from .77 to .96 (Garner, 1991). After a one year interval, the test-retest reliability was .41 to .75 for undergraduate women. The internal consistency for body dissatisfaction has been reported as .90 (Garner & Olmstead, 1984). Internal consistency of the current study sample was found to be .79.

**Procedure**

Self-report surveys were administered after participants read and signed the IRB-approved consent form. It took participants between 30 minutes and one hour to complete the questionnaires. Participants were given an identification number to ensure anonymity. All information was kept confidential. After all of the questionnaires were completed, participants were verbally debriefed and compensated for their time with research credit.
Data Analysis

First, demographic characteristics between African American and Caucasian women were compared using independent sample t-tests and chi square analyses. Second, Pearson product moment correlations were used to examine the relationships among spirituality, eating disorder symptomatology and body dissatisfaction.

Next, multiple regression analyses were conducted in which (1a) spirituality was regressed upon ethnicity and current weight, (1b) body dissatisfaction was regressed upon ethnicity and current weight; (2a) spirituality was regressed upon ethnicity and ideal weight, and (2b) body dissatisfaction was regressed upon ethnicity and current weight.

Then, comparisons of the level of spirituality and body dissatisfaction between the two groups were performed using independent samples t-tests for each of the three measures of spirituality, the measure of eating disorder symptomatology and the measure of body dissatisfaction.

Finally, an independent samples t-test was used to compare the ideal-current weight discrepancy of African American women and Caucasian women.

Results

Descriptive Statistics

The mean age of the African American and Caucasian women was 21 years old (M= 20.53, SD= 5.99, for black women; M= 21.18, SD= 9.57 for white women; t= (93) -.404, p=.687) and they were mostly freshmen (M=1.86, SD= 1.02 for black women; M= 1.68, SD= .93 for white women; t= (93) .896, p=.373). The majority of the
participants had an income below $75,000 (78.4% of African American women and 72.7% of Caucasian women; \(x^2 = 6.47, p = .486\)). The mean weight for black women was 155.69 lb. (SD= 40.83) and significantly higher than for white women (M= 140.05 lb, SD= 23.11; \(t(93) = 2.34, p < .05\)). The mean height for black women was 5 ft 4 ½ in. (SD=.25) and similarly for white women was 5 ft 4 ½ in. (SD=.31; \(t(93) = .124, p = .902\)).

The majority of the participants were Christian (87.4%). There was a trend toward a greater percentage of African American women being Christian (94.1%) than Caucasian women (79.5%; \(x^2 = 7.399, p = .060\)). Ten women identified themselves as agnostic and of those, 9 (20.4%) were Caucasian and 1 (2%) was African American. See Figure 1. The participants who identified themselves as agnostic did not complete any of the spirituality assessments. See Table 1 for a summary of participant descriptive statistics.

Fifteen separate t-tests were conducted to compare black and white women on measures of eating disorder symptomatology, body dissatisfaction, and spirituality (Table 2). As predicted, overall, black women reported fewer eating disorder symptoms and less body dissatisfaction than Caucasian women.

**Eating Disorder Symptomatology**

Black women (M= 6.24, SD = 5.58) had lower EAT-26 total scores than white women [(M=11.11, SD = 10.40 \(t(63) = -2.785, p < .01\)]. The magnitude of the group difference was moderate (\(\eta^2 = .077\)). On the EAT-26 oral control subscale there was not a statistically significant difference between black women (M= 1.96, SD=1.87) and white
women [M=1.91, SD = 2.43; t (93) = .117, p=.91, \( \eta^2 = .000 \)]. By contrast, on the EAT-26 dieting subscale there was a statistically significant difference between black women (M= 3.73, SD= 4.34) and white women [M=7.91, SD = 7.77; t (65) = -3.171, p< .01]. Black women reported less dieting behavior than white women. The magnitude of this difference was moderate (\( \eta^2 = .097 \)). On the EAT-26 bulimia and food preoccupation subscale, there was no statistically significant difference between black women (M= .55, SD= 1.53) and white women [M= 1.34, SD= 2.42; t (70) = -1.872, p=.065, \( \eta^2 = .036 \)].

Finally, black women had significantly lower scores on the EDI-2 body dissatisfaction subscale (M= 6.84, SD= 6.30) than white women [M=11.02, SD= 6.66; t (93) = -3.140, p< .01]. The magnitude of this difference was moderate (\( \eta^2 = .096 \)).

**Spirituality**

The results support the hypothesis that overall, black women were more spiritual than white women and that black women possessed more knowledge of the Holy Spirit. There was no statistically significant difference on the Spiritual Well Being Scale (SWBS) total score between black women (M= 66.94, SD= 6.76) and white women [M= 65.69, SD= 5.67; t (83) = .898, p=.372, \( \eta^2 = .009 \)]. However, there was a statistically significant difference between black women (M= 34.62, SD= 3.42) and white women on the SWBS Existential Well Being subscale [M= 32.69, SD= 3.56; t(83)= 2.512 p< .05]. The magnitude of the difference was moderate (\( \eta^2 = .071 \)). The SWBS Religious Well Being subscale showed no statistically significant difference for black women (M=32.32, SD= 4.28) and white women [M= 33.00, SD= 4.318; t (83) = -.718, p=.48, \( \eta^2 = .006 \)].
There was a statistically significant difference between black women (M=13.68, SD= 4.96) and white women on the Holy Spirit Questionnaire (HSQ) [M= 16.54, SD=5.96; t(83)= -2.409, p<.05]. Since the HSQ is negatively scored, the lower score for black women indicates significantly more knowledge and use of the Holy Spirit than white women. The magnitude of this difference was moderate (eta²= .065).

There was a significant difference between black women (M= 3.89, SD=.772) and white women on the Spirituality Assessment Inventory (SAI) Awareness subscale [M= 3.33, SD= 1.14; t (83) = 2.720, p<.01], with black women reporting significantly more awareness of God’s presence than white women. The magnitude of this difference was moderate (eta²= .082). There was no significant difference between black women (M=3.66, SD= 1.97) and white women on the SAI Realistic Acceptance subscale [M=3.72, SD= 1.34; t (82)= -.162, p=.87, eta² = .000]. There was a statistically significant difference between black women (M=1.78, SD=.822) and white women on the SAI Disappointment subscale [M= 2.34, SD= 1.02; t (83) = -2.819, p<.01). White women reported being more disappointed with God than black women. The magnitude of this difference was moderate (eta²= .087). There was a statistically significant difference between black women (M= 1.95, SD=.567) and white women on the SAI Grandiosity subscale [M= 1.53, SD= .4303; t(83)= 3.723, p<.01]. The results suggest that black women thought they were more effective with God than white women did. The magnitude of the difference was large (eta² = .143). There was no significant difference between black women (M= 2.05, SD=.600) and white women on the SAI Instability subscale [M= 2.09, SD=.764; t(83)= -.274, p=.79, eta² = .001]. Finally, there was a
significant difference between black women (M= 3.34, SD=.900) and white women on the SAI Impression Management subscale [M=2.66, SD=.8226; t(83) = 3.543, p<.01]. These results indicate that black women are significantly more likely than white women to do things like seek God’s guidance for every decision made. The magnitude of this difference was large (eta² = .131).

Current-Ideal weight discrepancy

The study hypothesis was supported, namely that both black and white women desired to lose weight, however black women’s reported ideal weight was still higher than that of white women’s.

An independent-samples t-test was conducted to compare the current weight for African American and Caucasian women. There was a significant 15.64 lb mean difference observed between black and white women’s current weight (t (93)= 2.336, p<.05). Black women were observed to be heavier (M= 155.69 lb, SD=40.83) than white women (M= 140.05, SD= 23.11). The magnitude of this difference was moderate (eta²= .06).

An independent-samples t-test was conducted to compare current-ideal weight discrepancies for African American and Caucasian women. There was a 7.9 lb mean significant difference observed between black and white women’s current-ideal weight discrepancy (t (93)= 2.532, p<.05) with black women having a greater discrepancy between their current and ideal weights than white women. The magnitude of this difference was moderate (eta²= .064). See Table 2 and Figure 2.
The Influence of Current Weight, Ideal weight, and Ethnicity on Eating Disorder Symptomatology

Overall, ethnicity and current weight (CW) influenced eating disorder symptomatology (EDS) more than did self-reported ideal weight (IW), in support of the hypothesis.

Multiple regression analysis revealed that CW and ethnicity together significantly predicted the EAT-26 total score ($F (2, 92) = 5.03$, $p < .05$). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence upon EDS when using the EAT-26 total score as the outcome measure ($B = .317$, $p < .05$).

Using a similar analytic approach with the EAT-26 subscales, the same pattern was found for the Dieting subscale ($F (2, 92) = 6.55$, $p < .01$) with a significant influence observed for ethnicity specifically ($B = .356$, $p < .01$). Ethnicity and CW also significantly predicted Bulimia subscale scores ($F (2, 92) = 3.91$, $p < .05$), with a significant influence observed for ethnicity ($B = .243$, $p < .05$) and CW ($B = .205$, $p < .05$). By contrast, none of these variables significantly predicted oral control subscale scores ($F (2, 92) = .668$, $p = .515$). See Table 3.

Next, the influence of self-reported IW and ethnicity in predicting EDS was examined. See Table 4. Multiple regression analysis revealed that IW and ethnicity together significantly predicted the EAT-26 total score ($F (2, 92) = 4.30$, $p < .05$). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence upon EDS when using the EAT-26 total score ($\beta = .275$, $p < .01$).

Using a similar analytic approach with the EAT-26 subscales, the same pattern was found
for the Dieting subscale \( F (2, 92) = 5.43, p<.05 \), with a significant influence observed for ethnicity specifically \( (\beta = .316, p<.01) \). Ethnicity and IW did not significantly predict bulimia subscale scores \( F (2, 92) = 1.92, p=.15 \), nor did they predict oral control subscale scores \( F (2, 92) = .819, p=.152 \).

**The Influence of Current Weight, Ideal Weight and Ethnicity on Body Dissatisfaction**

CW and ethnicity all had a statistically significant influence on body dissatisfaction (BD). However, CW, as predicted, had the most influence on BD.

Two separate multiple regression analyses were used to predict body dissatisfaction (BD). These analyses revealed that CW and ethnicity significantly predicted BD \( F (2, 92) = 25.01, p<.01 \), with both variables significantly contributing to the prediction (CW: \( \beta = .520, p<.01 \); ethnicity: \( \beta = .428, p<.01 \)). It was also found that IW and ethnicity also significantly predicted BD \( F (2, 92) = 9.42, p<.01 \), with both variables significantly contributing to the prediction (IW: \( \beta = .281, p<.05 \); ethnicity: \( \beta = .381, p<.05 \)). See Table 3.

**The Influence of Current Weight, Ideal Weight, and Ethnicity on Spirituality**

CW, IW and ethnicity considered together all had a significant influence on spirituality. As predicted, ethnicity had the greatest influence on spirituality, followed by IW.
The Influence of CW and Ethnicity upon Spiritual Awareness

The multiple regression analysis revealed that CW and ethnicity significantly predicted Spiritual Awareness Inventory (SAI) awareness (of God) subscale scores (F (2, 82) = 3.70, p<.05). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on spiritual awareness (β= -.292, p<.01), with black women having higher scores than the white women. By contrast, CW and ethnicity did not significantly predict SAI realistic acceptance (F (2, 28) =1.94, p=.151). However, CW and ethnicity did significantly predict SAI disappointment (with God) (F (2, 28) =4.94, p<.01). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on spiritual awareness (β= .327, p<.01), with black women having higher scores than the white women. CW and ethnicity also significantly predicted SAI grandiosity subscale scores (F (2, 82) = 7.40, p<.01). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on grandiosity (β = -.357, p<.01), with black women having higher scores. CW and ethnicity did not significantly predict SAI instability (F (2, 82) = 1.45, p = .241). Finally, CW and ethnicity significantly predicted SAI impression management (F (2, 82) = 6.22, p<.01). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on impression management (β= .366, p<.01), again with black having higher scores than white women.
In summary, ethnicity was a significant predictor of awareness of God, disappointment with God, grandiosity, and impression management. Neither ethnicity nor CW were significant predictors of realistic acceptance and instability.

The Influence of IW and Ethnicity upon Spiritual Awareness

The multiple regression analysis revealed that IW and ethnicity significantly predicted SAI awareness of God (F (2, 82) = 3.94, p<.05). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on awareness ($\beta = -.306$, p<.01) with black women having higher scores than white women. IW and ethnicity also significantly predicted SAI realistic acceptance (F (2, 82) = .319, p=.728). In addition, IW and ethnicity significantly predicted SAI disappointment with God (F (2, 82) = 4.01, p<.05). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on disappointment ($\beta = .306$, p<.01). IW and ethnicity also significantly predicted SAI grandiosity (F (2, 82) = 7.56, p<.01) with black women having higher scores on both scales. When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on grandiosity ($\beta = -.348$, p<.01). By contrast, IW and ethnicity did not significantly predict SAI instability (F (2, 82) = 1.96, p=.148). Finally, IW and ethnicity significantly predicted SAI impression management (F (2, 82) = 6.27, p< .01). When the influence for each variable was examined separately, it was found that ethnicity had a significant influence on impression management ($\beta = -.353$, p<.01), again with black women having higher scores.
In summary, ethnicity was a significant predictor of awareness of God, disappointment, grandiosity and impression management. Neither ethnicity nor IW were significant predictors of realistic acceptance and instability.

**The Influence of CW and Ethnicity on Spiritual Well Being**

The multiple regression analysis revealed that CW and ethnicity did not significantly predict spirituality on the Spiritual Well Being Scale (SWBS) total (F (2, 82) = 1.57, p= .215). CW and ethnicity also did not significantly predict SWBS religious well being (F (2, 82) = 1.13, p = .327). By contrast, CW and ethnicity did significantly predict SWBS existential well being (F (2, 82) = 3.29, p < .05). When the influence of each variable was examined separately, it was found that ethnicity had a significant influence on SWBS religious well being (β = -.240, p<.05), with black women having higher scores than white women.

In summary, ethnicity was a significant predictor of existential well being. However, CW nor ethnicity were significant predictors of spiritual well being or religious well being.

**The Influence of IW and Ethnicity upon Spiritual Well Being**

The multiple regression analysis revealed that IW and ethnicity did not significantly predict spirituality on the SWBS total (F (2, 82) = 1.95, p= .149). IW and ethnicity also did not significantly predict SWBS religious well being (F (2, 82) = 2.09
p = .130). By contrast, IW and ethnicity did significantly predict SWBS existential well being (F (2, 82) = 3.48, p < .05). When the influence of each variable was examined separately, ethnicity had a significant influence on existential well being ($\beta = -.242$, $p<.05$) with black women having higher scores than white women.

In summary, ethnicity was a significant predictor of existential well being. However, neither IW nor ethnicity was significant predictors of spiritual well being or religious well being.

The Influence of Current Weight, Ideal weight, and Ethnicity on Attitudes and Perceptions of the Holy Spirit

The multiple regression analysis revealed that both CW and ethnicity significantly predicted the Holy Spirit Questionnaire (HSQ) total score (F (2, 82) = 4.08, p<.05). When the influence of each variable was examined, ethnicity had a significant influence on the HSQ ($\beta=.162$, p<.01). IW and ethnicity significantly predicted spirituality on the HSQ scale (F (2, 82) =4.74, p<.05). When the influence of each variable was examined, ethnicity had a significant influence on the HSQ ($\beta=.203$, p<.01) with black women having higher scores. See Table 3 and Table 4 for a summary of the influence of weight and ethnicity upon spirituality.
Discussion

The purpose of the present study was to investigate the role of spirituality as a potential explanation for African American women’s lower prevalence of eating disorders and greater body satisfaction when compared to Caucasian women. Specifically, the role of ethnicity in influencing spirituality and current weight in influencing body dissatisfaction were examined. Findings generally suggest support for this model.

Eating Disorder Symptomatology

The current findings were that ethnic background had the most influential impact on spirituality and eating disorder symptomatology, followed by ideal weight. Specifically, black women in this study reported to be more spiritual and had less eating disorder symptomatology compared to white women.

Current weight, in support of the hypothesis, had a greater influence on body dissatisfaction than self-reported ideal weight. One reason current weight may influence body satisfaction is that many people view weight as the determining factor of outward appearance, regardless of body shape (Freedman, Carter, Sbrocco, & Gray, 2004).

A possible explanation for the influence of ethnicity on eating disorder symptoms and specifically, body satisfaction may be that media and society’s portrayals of ideal bodies for the black and white community are very different (Grace, 2002; Schooler, et al., 2004). For Caucasian women, it is widely known that thin is the ideal. There are many movies, model runway shows and TV sitcoms that portray this ideal. Conversely,
black women experience pressure to be a certain size as well. One ideal for black women is the “thick” ideal. Current-ideal weight discrepancies for black women show that they desire to weigh less than their current weight, yet still more than white women. The mean ideal weight observed among the black women in this study would be considered “thick” in the black culture. This may actually result in greater pressure for smaller black women to be heavier. Indeed, several thin black women in the current study had an ideal weight higher than their current weight.

Further, this may serve as a protective factor for some of the larger women on the “thick” ideal spectrum. A black woman who weighs well over 200 pounds could be categorized as falling within the “thick” ideal as well. Although there may not be many movies or runway model shows that portray this fact, there are music videos, some black sitcoms, and the whole hip hop genre that not only portray this reality, but endorse it.

The drive for thinness in Caucasian women has likely resulted in increased cases of anorexia and bulimia (Warren et al., 2005). By contrast, the drive for thickness in African American women may be the result of the small, yet increasing rate binge eating or compulsive overeating (Grace, 2002).

The finding of ethnicity being the second most influential factor, next to current weight, in determining body dissatisfaction was contrary to some previous research. Snooks and Hall (2002) found when examining relationship of body size, body image and self esteem, that there were no ethnic differences among African American, European American and Mexican American middle class women.
In a different study, it was found that body size/weight was a stronger predictor of perceived body size than ethnicity (Mossavar-Rahmani, Pelto, Ferris, & Allen, 1996). Streigel-Moore and colleagues (2004) found that although ideal body size/weight was not related to eating disorder symptomatology, current weight was. Nevertheless, some other researchers have found support for the current study findings, namely that ethnicity appears to be a major determinant of body weight and body satisfaction (Wing, Adams-Campbell, Marcus & Janney, 1993).

**Spirituality** Black women, on average, were shown to be more spiritual than white women. As predicted, black women were also more knowledgeable about the Holy Spirit. The Holy Spirit is a free gift, helping aid, encourager, counselor, comforter, and helper which is given by God after one gives her/his life to Christ simply by confessing with her/his mouth that Jesus is their Lord and Savior (Bible scripture: John 3:16, John 14 and 16). It is possible that the lower prevalence of eating disorder symptoms and body dissatisfaction specifically in black women are due to higher levels of spirituality. Though the thin ideal is widely viewed and much more accepted in society than the thick ideal, black women may combat negative thinking and pressure to be thin by allowing the Holy Spirit to counsel them in everyday life.

Although not addressed in the current study, high self-esteem in black women has been linked to less eating disorder behavior (Grace, 2002). The Holy Sprit may act as a mediator to help build self esteem and self-confidence, regardless of ethnicity, weight, or other background variables. Having a strong spiritual life with God means reading and
following biblical scripture. It also means allowing the Holy Spirit to reveal hidden meanings and call to remembrance scriptures in all times and trials.

Black women were found in this study to be more aware of God’s power working in their life, seek Him for every decision to be made, pray frequently, and have an overall effectual relationship with God. Caucasian women had a slightly more realistic acceptance of God, more disappointment with God, and more instability in their relationship with God than black women. These findings suggest a possible link between having a relationship with God and combating unhealthy or unrealistic sociocultural physical expectancies. Since Caucasian women were found to have a more realistic relationship with God than black women, maybe their outlook on sociocultural expectancies are realistic as well. Perhaps some Caucasian women have accepted that they can not realistically achieve the thin ideal, which may lead to disappointment and instability physically, spiritually and emotionally.

Although the current study findings show that black women have a more effectual relationship with God, it is possible that black women may have more “wishful” thinking than white women in terms of physical expectancies which they may attribute to high hopes of a better physique and health whether they actually ever achieve this or not.

Summary Some black women may have succumbed to the thin ideal phenomenon, as shown by reports of bulimia and bulimic symptoms in African American women (e.g., Grace, 2002). Interestingly, the current study found a trend toward African American women having higher reported oral control behavior.
Although no causal conclusions can be made from a correlational study, one potential implication of these findings is that the increase of body dissatisfaction or other eating disorder symptomatology could be due to a relative lack of spirituality, that is, the constant reminder by the Holy Spirit about how unique and special each and every individual is. Scripture tells us that we are all fearfully and wonderfully made by God and that the only influence that one should take on is the thoughts of what God - not man - possess (Psalm 139:13-18).

**Study Limitations** The primary limitation of the current study was the reliance on relatively brief self report instruments that may not fully grasp the complexities of eating disorder symptoms, such as body dissatisfaction, as well as spirituality, for both groups. Also, the sample size for the study was modest. Finally, no conclusions about causality can be made from a correlational study design.

**Future directions** Future studies should more comprehensively investigate the relationships among self esteem, spirituality and ethnicity. Also, future research could examine the “thick ideal” in African Americans and the thin ideal in Caucasian women in relation to one’s “true self.” Lastly, a spiritually oriented intervention for eating disorder pathology and body dissatisfaction might be considered, where deemed appropriate, for individuals of all ethnic groups.
References


<table>
<thead>
<tr>
<th></th>
<th>Age (yrs) M (SD)</th>
<th>Year in College M (SD)</th>
<th>Income &lt;$75,000 (%)</th>
<th>Religion: Christian vs. Agnostic (%)</th>
<th>Height M (SD)</th>
<th>Weight (lbs) M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black Women</strong></td>
<td>20.5 (5.99)</td>
<td>1.8 (1.02)</td>
<td>78.4</td>
<td>94.1 vs. 2.0</td>
<td>M= 64.5 in. (SD = .25)</td>
<td>M=155.69 lbs (SD= 40.83)</td>
</tr>
<tr>
<td>(n=51)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>White Women</strong></td>
<td>21.8 (9.57)</td>
<td>1.6 (.93)</td>
<td>72.7</td>
<td>79.5 vs. 20.4</td>
<td>M= 64.5 in. (SD= .31)</td>
<td>140.05 lbs (SD= 23.11)</td>
</tr>
<tr>
<td>(n=44)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>
### Table 2. Comparison of black and white women on measures of disordered eating, body dissatisfaction, and spirituality.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Black women (n=51)</th>
<th>White women (n=44)</th>
<th>Eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean [SD]</td>
<td>Mean [SD]</td>
<td></td>
</tr>
<tr>
<td>Disordered Eating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>aEat-26 Oral control subscale</td>
<td>1.96 [1.87]</td>
<td>1.91 [2.43]</td>
<td>.000</td>
</tr>
<tr>
<td>aEat-26 Dieting subscale</td>
<td>3.73 [4.34]</td>
<td>7.91** [7.77]</td>
<td>.097</td>
</tr>
<tr>
<td>aEat-26 Bulimia subscale</td>
<td>0.55 [1.53]</td>
<td>1.34 [2.42]</td>
<td>.036</td>
</tr>
<tr>
<td>aEat-26 Total</td>
<td>6.24 [5.58]</td>
<td>11.11** [10.40]</td>
<td>.077</td>
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<tr>
<td>Body Dissatisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cSWBS (Existential Well Being)</td>
<td>34.62* [4.28]</td>
<td>32.69 [3.56]</td>
<td>.071</td>
</tr>
<tr>
<td>cSWBS (Religious Well Being)</td>
<td>32.32 [4.28]</td>
<td>33.01 [4.32]</td>
<td>.006</td>
</tr>
<tr>
<td>cSWBS Total</td>
<td>66.94 [6.76]</td>
<td>65.69 [5.67]</td>
<td>.096</td>
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<tr>
<td>eSAI Awareness</td>
<td>3.89** [0.772]</td>
<td>3.33 [1.14]</td>
<td>.082</td>
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<tr>
<td>eSAI Realistic Acceptance</td>
<td>3.66 [1.97]</td>
<td>3.72 [1.34]</td>
<td>.000</td>
</tr>
<tr>
<td>SAI Subscale</td>
<td>Mean</td>
<td>SD</td>
<td>p</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------</td>
<td>-------</td>
<td>-----</td>
</tr>
<tr>
<td>Disappointment</td>
<td>1.78</td>
<td>2.34**</td>
<td>.087</td>
</tr>
<tr>
<td></td>
<td>[.822]</td>
<td>[1.02]</td>
<td></td>
</tr>
<tr>
<td>Grandiosity</td>
<td>1.95**</td>
<td>1.53</td>
<td>.143</td>
</tr>
<tr>
<td></td>
<td>[.567]</td>
<td>[.430]</td>
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</tr>
<tr>
<td>Instability</td>
<td>2.05</td>
<td>2.09</td>
<td>.001</td>
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<td></td>
<td>[.600]</td>
<td>[.764]</td>
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<tr>
<td>Impression Management</td>
<td>3.34**</td>
<td>2.66</td>
<td>.131</td>
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<tr>
<td></td>
<td>[.09]</td>
<td>[.823]</td>
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</table>

Note. ** p<.01, *p<.05.

aEAT-26= Eating Attitudes Test-26 item version (Garner, Olmsted, Bohr & Garfinkel, 1982).

bEDI-2= Eating Disorder Inventory-2, Body Dissatisfaction subscale (9 items; Garner, Olmsted & Polivy, 1983).

cSWBS= Spiritual Well Being Scale (20 items; Ellison & Paloutzian, 1982).

dHSQ= Holy Spirit Questionnaire (7 items; Ingram & Sandvik, 1994).

eSAI= Spiritual Assessment Inventory subscale (6 items; Hall and Edward, 1996).
**Table 3.** Hierarchical linear multiple regression analysis to examine the influence of current weight and ethnicity on eating disorder symptomatology, body dissatisfaction and spirituality.

<table>
<thead>
<tr>
<th>predictors</th>
<th>Dependent Variable</th>
<th>Disordered Eating</th>
<th>Body Dissatisfaction</th>
<th>Spirituality</th>
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<tr>
<td></td>
<td>Current Weight Beta</td>
<td>Ethnicity Beta</td>
<td>Current Weight &amp; Ethnicity Δ R²</td>
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<tr>
<td>Current Weight &amp; Ethnicity</td>
<td>aEat-26 Oral control subscale</td>
<td>-.122</td>
<td>-0.04</td>
<td>0.2</td>
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<tr>
<td></td>
<td>aEat-26 Dieting subscale</td>
<td>.151</td>
<td>.356**</td>
<td>12.0**</td>
</tr>
<tr>
<td></td>
<td>aEat-26 Bulimia subscale</td>
<td>.205*</td>
<td>.243*</td>
<td>5.6*</td>
</tr>
<tr>
<td></td>
<td>aEat-26 Total</td>
<td>.128</td>
<td>.317*</td>
<td>9.9*</td>
</tr>
<tr>
<td></td>
<td>bEDI-2 Body Dissatisfaction subscale</td>
<td>.520**</td>
<td>.428**</td>
<td>17.3**</td>
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<tr>
<td></td>
<td>cSWBS (Existential Well Being)</td>
<td>.121</td>
<td>-.240*</td>
<td>5.5*</td>
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<tr>
<td></td>
<td>cSWBS (Religious Well Being)</td>
<td>.147</td>
<td>.11</td>
<td>1.2</td>
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<tr>
<td></td>
<td>cSWBS Total</td>
<td>.169</td>
<td>-.062</td>
<td>0.4</td>
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<td></td>
<td>dHoly Spirit Questionnaire Total</td>
<td>.29</td>
<td>.162**</td>
<td>8.0*</td>
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<td></td>
<td>eSAI Awareness</td>
<td>-.028</td>
<td>-.292**</td>
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<td>p-value</td>
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<tr>
<td>cSAI Realistic Acceptance</td>
<td>0.217</td>
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<td>0.4</td>
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<td>cSAI Disappointment</td>
<td>0.145</td>
<td>3.27**</td>
<td>0.01</td>
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<td>cSAI Grandiosity</td>
<td>0.101</td>
<td>-0.357**</td>
<td>0.05</td>
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<tr>
<td>cSAI Instability</td>
<td>0.187</td>
<td>0.07</td>
<td>0.5</td>
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<tr>
<td>cSAI Impression Management</td>
<td>-0.015</td>
<td>0.366**</td>
<td>0.01</td>
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</table>

Note. ** p<.01, *p<.05.

aEAT-26= Eating Attitudes Test-26 item version (Garner, Olmsted, Bohr & Garfinkel, 1982).
bEDI-2= Eating Disorder Inventory-2, Body Dissatisfaction subscale (9 items; Garner, Olmsted & Polivy, 1983).
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dHSQ= Holy Spirit Questionnaire (7 items; Ingram & Sandvik, 1994).
eSAI= Spiritual Assessment Inventory subscale (6 items; Hall and Edward, 1996).
Table 4. Hierarchical linear multiple regression analysis to examine the influence of ideal weight and ethnicity on eating disorder symptomatology, body dissatisfaction and spirituality.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Ideal Weight Beta</th>
<th>Predictors Ethnicity Beta</th>
<th>Ideal weight &amp; Ethnicity Δ R²</th>
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<tr>
<td><strong>Disordered Eating</strong></td>
<td></td>
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<tr>
<td>aEat-26 Oral control subscale</td>
<td>-.136</td>
<td>-.047</td>
<td>0.2</td>
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<td>aEat-26 Dieting subscale</td>
<td>-.03</td>
<td>.316**</td>
<td>9.3*</td>
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<tr>
<td>aEat-26 Bulimia subscale</td>
<td>.039</td>
<td>.207</td>
<td>4.0</td>
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<td>aEat-26 Total</td>
<td>-.05</td>
<td>.275**</td>
<td>7.1*</td>
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<td><strong>Body Dissatisfaction</strong></td>
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<tr>
<td>bEDI-2 Body dissatisfaction subscale</td>
<td>.281**</td>
<td>.381**</td>
<td>13.6**</td>
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<tr>
<td><strong>Spirituality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cSWBS (Existential Well Being)</td>
<td>.09</td>
<td>-.242*</td>
<td>5.5*</td>
</tr>
<tr>
<td>cSWBS (Religious Well Being)</td>
<td>.213</td>
<td>.134</td>
<td>1.7</td>
</tr>
<tr>
<td>cSWBS Total</td>
<td>.196</td>
<td>-.048</td>
<td>0.2</td>
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<tr>
<td>dHoly Spirit Questionnaire Total</td>
<td>.308</td>
<td>.203**</td>
<td>8.9*</td>
</tr>
<tr>
<td>eSAI Awareness</td>
<td>-.078</td>
<td>-.306**</td>
<td>8.8*</td>
</tr>
<tr>
<td>Scale</td>
<td>EAT-26 Mean</td>
<td>EAT-26 SD</td>
<td>EAT-26 Correlation</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------</td>
<td>-----------</td>
<td>--------------------</td>
</tr>
<tr>
<td>SAI Realistic Acceptance</td>
<td>0.089</td>
<td>0.04</td>
<td>0.1</td>
</tr>
<tr>
<td>SAI Disappointment</td>
<td>0.042</td>
<td>0.306**</td>
<td>8.8*</td>
</tr>
<tr>
<td>SAI Grandiosity</td>
<td>0.116</td>
<td>-0.348**</td>
<td>11.3**</td>
</tr>
<tr>
<td>SAI Instability</td>
<td>-0.015</td>
<td>0.087</td>
<td>0.7</td>
</tr>
<tr>
<td>SAI Impression Management</td>
<td>0.037</td>
<td>-0.353**</td>
<td>11.6**</td>
</tr>
</tbody>
</table>

Note. ** p<.01, *p<.05.

*aEAT-26= Eating Attitudes Test-26 item version (Garner, Olmsted, Bohr & Garfinkel, 1982).

*bEDI-2= Eating Disorder Inventory-2, Body Dissatisfaction subscale (9 items; Garner, Olmsted & Polivy, 1983).

*cSWBS= Spiritual Well Being Scale (20 items; Ellison & Paloutzian, 1982).

*dHSQ= Holy Spirit Questionnaire (7 items; Ingram & Sandvik, 1994).

*eSAI= Spiritual Assessment Inventory subscale (6 items; Hall and Edward, 1996).
Figure Captions

*Figure 1.* Religious affiliations among black and white participants.

*Figure 2.* Current and ideal weight among black and white participants.
Note. CW = current weight, IW = ideal weight.