

BODY DISSATISFACTION CORRELATES WITH INTER-PEER COMPETITIVENESS, NOT MEDIA EXPOSURE: A BRIEF REPORT

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Although scholars and professional organizations regularly lament the influence of media on women's body dissatisfaction, research evidence to support such concerns remains inconsistent. In 2011, Ferguson, Winegard, and Winegard proposed a Catalyst Model of women's body dissatisfaction which provided a diathesis-stress perspective on such phenomenon. The Catalyst Model argued that women's body dissatisfaction was influenced by peer competition with other proximal women rather than distal depictions of women in the media. This hypothesis was tested in this study, with a sample of 218 young Mexican American women. Body dissatisfaction was predicted primarily by larger body mass index (BMI), depressive symptoms and feelings of inferiority in comparison to other women. Exposure to thin-ideal images on television did not correlate with body dissatisfaction. Life satisfaction among young women was related to depression levels, perceptions of parental affection and body dissatisfaction, but not to exposure to thin-ideal images on television. Results supported the Catalyst Model.

Fairly common in women (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999), body dissatisfaction refers to a negative self-evaluation of one's own appearance and the desire to be more physically attractive (Cash & Pruzinsky, 2002). The issue of body dissatisfaction has been identified by the American Psychiatric Association (APA; 2007) as an important issue facing teen girls and women, especially since body dissatisfaction is a potential risk factor for eating disorders

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(Kluck, 2010; Mora-Giral, Raich-Escursell, Segues, Torras-Claraso, & Huon, 2004; Shaw, Stice, & Springer, 2004), and is often associated with symptoms of mood disorders (Kim & Kim, 2009; Kostanski & Gullone, 1998). Also, body dissatisfaction has been associated with decreased life satisfaction (Stokes & Frederick-Recascino, 2003). This has prompted much attention to the causes of body dissatisfaction, and most scholars agree that body dissatisfaction may result from a complex interaction of social and genetic factors (Keel & Klump, 2003; Kluck, 2010; Klump, McGue, & Iacono, 2000). Two potential influences on female body dissatisfaction are that of peers and that of the media, both of which some scholars have argued may be strong promoters of the thin-ideal. Recently Ferguson, Winegard, and Winegard (2011) proposed a Catalyst Model for body dissatisfaction, which prioritizes the influence of peer effects over those of media. The current study considers these two influences from the perspective of the Catalyst Model. The relationship between body dissatisfaction and life satisfaction also will be explored.

METHOD

PARTICIPANTS

Participants in the current study included 218 female university students between the ages of 14 and 34 ($M = 21.80$, $SD = 3.88$) including a small number of teenage girls taking courses for college credit. The majority of young women were Mexican American (95.2%) and the majority were born in the United States (90.0%) with the remainder born in Mexico. These demographics reflect the Hispanic-majority population of the local population (approximately 95% Mexican American), and represent convenience sampling rather than a theoretic reason for sampling Mexican Americans. However we do note that the majority of previous research on body dissatisfaction has been conducted with Caucasian majority samples; thus the current Mexican American majority sample extends previous research into a relatively neglected ethnic group.

PREDICTOR MATERIALS

Body Mass Index. As part of the demographic information recorded, women were asked to report on their height and weight (eye

color and hair color were also asked to make these questions a little less obvious). This was used to calculate body mass index (BMI) for each woman using the formula (weight in lbs \times 703)/(height in inches²). Although BMI is not as precise as other approaches to measuring body fat composition, it presents a useful estimate of women's actual body mass relative to the thin-ideal.

Depression. Depression in the current sample was measured using the Zung depression inventory, a 20-item Likert-type scale which assesses depressive symptoms (Zung, 1965). The Zung is commonly used and well validated. Coefficient alpha with the current sample was .70. Depression was used here given the Catalyst Model's inclusion of stress and depressed mood as a factor in increased body dissatisfaction.

Verbal Abuse. The degree to which individuals were exposed to verbal abuse at the hands of their parents was assessed using the verbal abuse subscale of the Family Conflict Scale (FCS; Ferguson et al., 2008). This scale consists of 9 true-false items measuring exposure to harsh or insulting verbal statements by parents. Examples include "One or both of my parents often told me that they hated me" and "One or both of my parents often told me that I was ugly." Past research has found this to be a valid measure of verbal abuse exposure (Ferguson et al., 2008). Coefficient alpha with the current sample was .77. It is included here to examine family influences on body dissatisfaction.

Perceptions of Parental Affection. To examine the degree to which a woman's perception of her parents' love and affection for their influenced body dissatisfaction, the parental affection subscale of the FCS was also included. Items on this 5-item true-false scale include "My parents or caregivers were comfortable in expressing their love for me" and "My parents or caregivers acted kindly toward me." Coefficient alpha with the current sample was .80.

Media Exposure. A measure of media exposure commonly used in previous literature (Ferguson et al., 2008) was used with the current study. Participants were asked to name their three favorite television shows and to rate the attractiveness of the female actresses in those shows. This approach has been widely used in media effects literature (e.g., Anderson & Dill, 2000; Coyne, Stockdale, Nelson, & Fraser, 2011; Ferguson et al., 2008; Hennessy, Bleakley, Fishbein, & Jordan, 2009) and has been found to be a valid approach to measur-

ing content exposure. This approach allows for sampling of a wider variety of shows, particularly given the explosion of shows on cable and satellite television, and also provides a phenomenological approach. By contrast, media variables based on established lists of popular shows may easily miss edgier shows or on-line content, and may be of limited validity in a highly volatile media environment. However, research has demonstrated that participant ratings correlate very highly with content analysis of shows in validity studies, establishing the validity of this approach (Coyne et al., 2011; Hennessy et al., 2009). Media exposure was calculated by multiplying time watched by ratings of actresses and summing across the three shows. Coefficient alpha for this measure in the current study was .65.

Female Competition. Feelings of inferiority in response to other women was measured using the Female Competition Stress Test (FCST; Salmon, Crawford, & Walters, 2008). This twenty-six item Likert-type scale measures feelings of low status or dominance in relation to other females. Item examples include "I am anxious about my appearance as compared to other women" and "I feel weak or timid in relation to the other women." This measure was included to assess general feelings of inferiority and how these contrast with body image dissatisfaction. Higher scores reflect feelings of inferiority compared to other women. Coefficient alpha for the present sample was .91.

OUTCOME MATERIALS

Body Image Dissatisfaction. The Body Esteem Scale for Adolescents and Adults (BESAA; Mendelson, Mendelson, & White, 2001) is a 21-item Likert-type scale designed to assess body satisfaction. This scale has been well validated in previous research and is often used in body image research. With the current sample, coefficient alpha was .90

Satisfaction with Life Scale. The Satisfaction with Life Scale (SLS; Diener, Emmons, Larsen, & Griffin, 1985) is a 5-item Likert scale measure which is designed to briefly assess overall satisfaction with life. It is included here to measure the overall impact of body dissatisfaction on life satisfaction among women, with other variables controlled. Coefficient alpha with the present sample is .86.

TABLE 1. Correlations Between Predictor and Outcome Variables

	Age	BMI	Depres- sion	Verbal	Love	TV	BD	Comp	SLS
Age	1.00	.25*	.10	-.01	.20*	.02	.17	-.07	-.15
BMI		1.00	.20*	.14	-.11	.07	.42*	.04	-.11
Depression			1.00	.22*	-.20*	-.16	.53*	.53*	-.58*
Verbal				1.00	-.58*	-.03	.22	.26	-.32*
Love					1.00	.00	-.16	-.19	.35*
TV						1.00	.10	.16	-.17
BD							1.00	.58*	-.52*
Comp								1.00	-.50*
SLS									1.00

Note. Verbal = verbal abuse; Love = Parental affection, Friends = Peer influences; Enemy = Enemy influences; BD = body dissatisfaction; Comp = female competition (inferiority to other women).

* $p < .0014$

DATA ANALYSIS

Main data-analytic strategies detailed the use of hierarchical multiple regression equations informed by the evolutionary Catalyst Model of body image. With that in mind, the order of data points reflects a proximal (internal) to distal (external) arrangement. Age and BMI were entered on the first step of the regression equations. Depression was entered on the second step, verbal abuse and parental affection on the third step, female competition on the fourth step, and television influence on the fifth. Out of concern that television influences may be artificially lowered by placement on the furthest step, the regressions were then reversed with television influences on the first step, to examine whether ordering effects are important.

RESULTS

Bivariate correlations between predictor and outcome variables are presented in Table 1. A Šidák correction (Abdi, 2007) to control for Type I error due to multiple comparisons was employed with an adjusted alpha of .0014. In regards to the regression equations, col-

TABLE 2. Multiple Regression Results for Body Image Dissatisfaction Outcome

Predictor Variable	β	t-test	Significance
Age	-.03	0.58	.56
BMI	.42 (.31, .52)	7.71	.001*
$R^2 = .24$	$F(2, 165) = 27.01^*$ ($p = .001$)		
Depression	.19 (.06, .31)	3.12	.002*
$R^2 = .42$	$F(3, 164) = 42.05^*$ ($p = .001$)	$\Delta R^2 = .19$	$F(1, 164) = 54.59$ ($p = .001$)
Verbal Abuse	.02	0.28	.78
Parental Affection	.03	0.39	.70
$R^2 = .43$	$F(5, 162) = 25.71^*$ ($p = .001$)	$\Delta R^2 = .01$	$F(2, 62) = 1.11$ ($p = .33$)
Female Competition	.47 (.36, .57)	7.72	.001*
$R^2 = .58$	$F(6, 161) = 39.94^*$ ($p = .001$)	$\Delta R^2 = .16$	$F(1, 161) = 62.34$ ($p = .001$)
Television Exposure	-.05	-0.90	.37
$R^2 = .58$	$F(7, 160) = 34.31^*$ ($p = .001$)	$\Delta R^2 = .00$	$F(1, 357) = 0.80$ ($p = .37$)

Note. Numbers in parentheses represent 95% confidence interval for standardized regression coefficients. Confidence intervals included only for significant results. Adjusted R^2 is reported for each step in the hierarchical models. *denotes statistical significance.

linearity diagnostics indicated absence of multicollinearity with the lowest tolerance at .40 and highest VIF at 2.49.

The first regression examines the impact of predictor variables on body dissatisfaction. The model for body dissatisfaction was significant, $R = .78$, $Adjusted R^2 = .58$, $F(7, 160) = 34.31$, $p < .001$. Of the predictor variables entered, perceived competition with and inferiority to other women was the strongest predictor of body dissatisfaction ($\beta = .47$) followed by BMI ($\beta = .42$) and depressive symptoms ($\beta = .19$). Exposure to thin-ideals on television was not predictive of body dissatisfaction, whether entered early or later in the regression model. Age and parental factors were also not predictive of body dissatisfaction. These results are presented in Table 2. Reversing the position of television effects did not influence the outcome of the regression substantially.

In order to examine the unique impact of body dissatisfaction on life satisfaction with other factors controlled, a second regression

TABLE 3. Multiple Regression Results for Life Satisfaction

Predictor Variable	β	t-test	Significance
Age	.13	1.72	.09
BMI	-.11	-1.78	.08
$R^2 = .02$	$F(2, 163) = 2.94$ ($p = .06$)		
Depression	-.30 (-.18, -.42)	4.08	.001*
$R^2 = .30$	$F(1, 162) = 24.95^*$ ($p = .001$)		$\Delta R^2 = .28$ $F(1, 162) = 66.59$ ($p = .001$)
Verbal Abuse	-.02	-0.28	.78
Parental Affection	.17 (.04, .30)	2.19	.03*
$R^2 = .34$	$F(5, 160) = 18.31^*$ ($p = .001$)		$\Delta R^2 = .05$ $F(2, 160) = 6.04$ ($p = .003$)
Female Competition	-.14	-1.72	.09
$R^2 = .40$	$F(6, 159) = 19.16^*$ ($p = .001$)		$\Delta R^2 = .06$ $F(1, 159) = 15.24$ ($p = .001$)
Television Exposure	.07	1.08	.28
$R^2 = .40$	$F(7, 158) = 16.70^*$ ($p = .001$)		$\Delta R^2 = .01$ $F(1, 158) = 1.55$ ($p = .22$)
Body Dissatisfaction	-.28 (-.15, -.40)	2.97	.003*
$R^2 = .43$	$F(8, 157) = 16.45^*$ ($p = .001$)		$\Delta R^2 = .03$ $F(1, 57) = 8.81$ ($p = .002$)

Note. *denotes statistical significance. Numbers in parentheses represent 95% confidence interval for standardized regression coefficients. Confidence intervals included only for significant results. Adjusted R^2 is reported for each step in the hierarchical models.

equation was run. In this case, body dissatisfaction was entered on a final sixth step, once the other factors had been controlled as in the first regression equation. Results for the model were significant, $R = .68$, $Adjusted R^2 = .43$, $F(8, 157) = 16.44$, $p < .001$. Body dissatisfaction was a significant predictor of reduced life satisfaction in women ($\beta = -.28$) even with other factors controlled. Other significant predictors of life satisfaction included depression ($\beta = -.30$) and a perception of having been loved by one's parents ($\beta = .17$). Television exposure to thin-ideals was not predictive of life satisfaction. These results are presented in Table 3. Reversing the position of television effects did not influence the outcome of the regression substantially.

DISCUSSION

In accordance with the Catalyst Model (Ferguson, Winegard, & Winegard, 2011) it was hypothesized that peer influences on body dissatisfaction would be significant, but that television influences would be minimal. The Catalyst Model predictions were supported by results with the current sample. Exposure to thin TV models was not a strong influence on body dissatisfaction, but the influence of peers was. In fact, peer competition was a stronger predictor of body dissatisfaction than BMI and symptoms of depression.

Current results also supported previous work linking body dissatisfaction with decreased life satisfaction. In fact, body dissatisfaction proved to be the strongest predictor of life satisfaction of the variables considered, even beyond depression. This adds to the notion that disturbances in body image may be strongly related to overall satisfaction and well-being. Consistent with the Catalyst Model, young women may put particular value on appearance, given the degree to which appearance tends to influence mating success for women (Buss, 1989). Thus satisfaction with appearance may be considered by young women as a primary indicator of success. Although the position of many scholars appears, to us, to imply such body concerns are irrational and unhealthy, they may in fact reflect a reasoned appraisal of mating success and inter-female competition.

The current study sought to examine the relative influence of peer and media effects on body dissatisfaction in a sample of young Mexican American woman. Research on body dissatisfaction and media/peer effects with Hispanics has hitherto been limited. Thus, the current study extends knowledge in this area to a previously underrepresented ethnicity. We acknowledge the possibility that media and peer effects may differ for Mexican American women compared to other ethnicities. However at present we are unaware of any theoretical arguments for ethnic differences in social influences, nor could we posit any ourselves. We believe it important for future research to continue work with ethnic minorities, who continue to be relatively underrepresented in this research field.

In conclusion, our results suggest that, for the majority of women, media influences on body dissatisfaction are minimal (see also

Roberts & Good, 2010). However peer influences represent a significant factor impacting body dissatisfaction. Body dissatisfaction as a consequence of societal and media thin-ideals has often been presented as something done to women. Our results suggest that the relationship between body dissatisfaction, society, media, peers, mating behavior, and the psychology of young women may be far more complex than often presented.

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