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Journal of Behavioral Health

available at www.scopemed.org



Original Research

Does perceived social support play a role in body image satisfaction among college students?

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Received: March 07, 2012

Accepted: May 01, 2012

Published Online: May 14, 2012

DOI: 10.5455/jbh.20120501101051

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Key words:

Health Education, Body Image Satisfaction,
Social Support, University Students

Abstract

Background: Low body image satisfaction poses serious health issues to university students. The primary purpose of this study was to examine whether body image satisfaction differed significantly among university students based social support. Analyses were also conducted to determine if body image satisfaction differed significantly based on sex, grade and relationship status.

Methods: In 2011, a sample of 465 students (93% response rate) from randomly selected general education courses at a Midwestern University completed a valid and reliable survey regarding body image satisfaction and social support.

Results: More than half (53.8%) of university students reported having a low level of body image satisfaction. Results indicated that body image satisfaction significantly differed based on level of social support. Students who reported high levels of social support had significantly higher levels of body image satisfaction than did their counterparts. More specifically, students who felt they could talk to a family member about things that are important to them had significantly higher levels of body image satisfaction. In addition, students who felt loved by a family member, at least one friend, or by their mother had significantly higher levels of body image satisfaction. Body image satisfaction did not differ based on sex, grade or relationship status.

Conclusions: Body image satisfaction is significantly associated with social support from family members and friends. These results should be considered when developing and implementing body image promotion efforts for university students. Findings can assist campus health educators and prevention specialists to more thoroughly understand the importance of including family and peer support in prevention programs

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INTRODUCTION

Body image satisfaction involves a complex mental picture that individuals hold of their self-appearance which encompasses their general perceptions, emotions, attitudes, thoughts, and behaviors [1]. Unfortunately, poor body image has increasingly become a prevalent problem among males and females in the U.S.[2] Research indicates that females are typically more concerned about their body image than are males [3,4]. However males also have various body image concerns regarding muscularity and their body shape [5,6]. According to Davis and colleagues, concerns regarding body image differ between sexes

based on societal and media influences that encourage females to prefer thinness and males to prefer muscularity [5]. Nevertheless, despite such differences, both females and males tend to report low body image satisfaction as early as eight years of age [7].

Among many university students, body image is especially low [2,8,9]. Low body image satisfaction among male and female students is associated with various negative health-related consequences [10]. Numerous social and psychological problems have been shown to be associated with low body image satisfaction [11,12]. Some of the psychosocial

concerns of low body image include eating disorders [13], impaired sexual functioning [8], increased engagement in risky sexual behaviors [14], low levels of life satisfaction [15], lower quality of life [16], decreased self-esteem, depression [17], social anxiety [1], and troubles in interpersonal relationships [18].

Body image is a socially constructed concept that is heavily influenced by social experiences and social support received by loved ones [7]. Social support from family and friends tends to serve as a protective factor against low body image satisfaction [11,19,20,21]. Individuals who report poor family connectedness are at elevated risk for extremely low body image satisfaction, unhealthy weight-control behaviors, and depressive symptoms [22]. Family members can negatively influence body image by criticizing their loved ones' physical appearances and overall weight [23]. Not surprisingly, adolescents and young adults who report frequent conflict and lack of closeness to their mothers or fathers are more likely to have weight concerns [24]. Specifically, females who are criticized by those emotionally close to them are at higher risk for poor body image, internalizing the cultural ideal thinness, developing negative eating behaviors, and ultimately lower self-esteem [25]. Both males and females who feel high pressure from family and peers to be thin tend to have lower body image satisfaction, suggesting that family and peers can negatively influence body image [26].

Among adolescents and young adults, perceived pressure from peers to be thin and in shape has a stronger association with decreased body image satisfaction than perceived pressure from family [27]. A study conducted by Stice, Presnell, & Spangler reported that peers have more significant influences than family members in predicting negative eating behaviors, such as binge eating [28]. In addition, lower social support and perceived peer intimacy can be predictive of poor body image [19]. Interestingly, individuals' body image regarding their appearances and behaviors may also reflect their peers' body image appearances and behaviors [28]. Some individuals have more difficulty and experience social anxiety in meeting new people and forming relationships if they have poor body image, perceived body differences or disfigurements [1].

Research indicates that body image is highly important in the development of interpersonal relationships [28], as well as in regular involvement in healthy behavior [7]. Individuals with low body image satisfaction may be motivated to exercise and eat healthy but may be inhibited due to low self-confidence and the fear that they will not be accepted by others [7]. While research has demonstrated the link between social support from family/peers and body image satisfaction among

adolescents [11,21], gaps in the literature exist regarding the relationship between college students' body image satisfaction and their perceived social support [29]. Therefore, the primary purpose of the present study was to examine the impact of perceived social support on body image satisfaction. Analyses were also conducted to determine whether body image satisfaction differed based on sex, grade and relationship status. Specifically, the following research questions were examined:

- 1) What percent of university students have high levels of body image satisfaction?
- 2) What percent of university students have high levels of social support?
- 3) Does body image satisfaction among university students differ based on social support, sex, grade and relationship status?

METHODS

Participants

Upon approval from the institutional review board, general education courses were randomly selected and a sample size of 465 university students at a Midwestern university completed a survey assessing body image satisfaction and perceived social support (93% response rate) in May of 2011. Participants completed the survey voluntarily and no incentives were offered. Survey responses were kept confidential and anonymous.

Instrumentation

After a comprehensive review of literature, a survey instrument was developed which included the following three sections: body image satisfaction, social support, and demographic information. The Body Image Satisfaction Subscale (16 items) requested participants to rate how satisfied they were with their overall body appearance and different body parts via a 4-point scale (1 = not satisfied at all; 4 = extremely satisfied). An additional item asked participants to rate their overall weight via a five-point Likert-type scale (1= very underweight; 5= very overweight). The Social Support Subscale (12 items) required students to rate how emotionally close, how loved and how comfortable they felt in talking about important issues with their friends and family members via a five-point scale (1= strongly agree; 5= strongly disagree). The final section of the survey assessed demographic characteristics including participants' sex, grade level and relationship status.

Face and content validity of the survey were established by distributing the survey to a panel of experts (n = 5). Experts reviewed the survey and

offered comments and recommended modifications. All suggested revisions were subsequently incorporated into the final instrument. Stability reliability was established by distributing the survey to a sample of college students ($n = 25$) on two separate occasions, seven days apart. Pearson correlation coefficients were computed for parametric items and yielded coefficients $>.84$. Kendall's tau-b coefficients were computed for nonparametric items and yielded coefficients $>.86$. Cronbach alphas were computed to assess internal consistency reliability for each of the parametric subscales, resulting in alphas $>.80$.

Procedures

After Institutional Review Board approval, general education courses from the university list of undergraduate course offerings were randomly selected. Instructors of the selected courses were emailed the survey and a cover letter explaining the purpose of the study and requesting permission to administer the survey in their course. After permission was granted, the primary investigator distributed surveys to students in the classrooms. Students were informed of the study purpose, voluntary nature of the survey and assured that all responses would be kept anonymous and confidential. After survey completion, students placed the surveys in a manila envelope.

Data Analysis

All data were analyzed using the Statistical Package for Social Sciences (SPSS) software package. Descriptive statistics (frequencies, means and standard deviations) were calculated to describe demographic characteristics, body image satisfaction and social support. Logistic regression was performed to examine if body image satisfaction differed significantly based on sex, grade level, and relationship status. A multivariate analysis of variance (MANOVA) was conducted to determine whether body image satisfaction significantly predicted specific social support variables. Univariate *F*-tests were subsequently performed to determine specific items in the social support subscale that differed significantly based on level of body image satisfaction. An alpha level of significance was set at the .05 level.

RESULTS

Demographics

A total of 465 students completed surveys (93% response rate). Two-thirds of participants (64.9%) were female and one-third (35.1%) were male (Table 1). Mean age was 21.62 years ($SD = 3.408$). Grade level included freshmen (16.8%), sophomores (19.0%), juniors (21.6%), seniors (39.9%) and graduate students (2.8%). Half of participants (49.1%) reported that they

were single and in a steady relationship, while slightly less than half (43.3%) were single and not in a steady relationship. A small percent of participants were engaged (4.3%) or married (3.3%).

Table 1. Demographic and Background Characteristics of Students

| Characteristic | <i>n</i> | % |
|---------------------------------------|----------|-------|
| Sex | | |
| Female | 300 | 64.9% |
| Male | 162 | 35.1% |
| Grade Level | | |
| Freshman | 77 | 16.8% |
| Sophomore | 87 | 19.0% |
| Junior | 99 | 21.6% |
| Senior | 183 | 39.9% |
| Graduate Student | 13 | 2.8% |
| Relationship Status | | |
| Single & Not in a steady relationship | 199 | 43.3% |
| Single & in a steady relationship | 226 | 49.1% |
| Engaged | 20 | 4.3% |
| Married | 15 | 3.3% |

Notes: *N* = 465; Percents refer to valid percents; Missing values excluded.

Body Image Satisfaction

Regarding body image, participants reported that they were most satisfied with their hair ($M = 3.30$, $SD = .701$), height ($M = 3.28$, $SD = .763$) and face ($M = 3.20$, $SD = .616$). Participants were least satisfied with their stomach ($M = 2.43$, $SD = .929$), waistline ($M = 2.65$, $SD = .975$) and thighs ($M = 2.71$, $SD = .908$). An overall body image satisfaction score was computed by summing all individual items. This score was subsequently dichotomized into two categories: low level and high level based on the median split (low = 24 to 47; high = 48 to 64). This dichotomization resulted in 53.8% of participants with a low level of body image satisfaction and 46.2% with a high level of body image satisfaction. Logistic regression analyses revealed that body image satisfaction did not differ significantly based on sex, grade level or relationship status.

Regarding self-reported weight, most participants described their overall weight as just about the right weight (62.6%) while a small percentage viewed themselves as being very underweight (1.1%) or slightly underweight (10.1%). A larger percentage reported that they were slightly overweight (21.1%) or very overweight (4.5%).

Table 2. Students' Perceived Social Support from Important Others

| Item | M | SD |
|---|------|-------|
| I feel loved by my.... | | |
| Mother | 4.74 | 0.587 |
| Friend | 4.72 | 0.616 |
| Family member | 4.69 | 0.642 |
| Father | 4.53 | 0.936 |
| I feel emotionally close to my.... | | |
| Friend | 4.56 | 0.720 |
| Mother | 4.34 | 0.883 |
| Family member | 4.15 | 0.956 |
| Father | 3.78 | 1.152 |
| I talk to my... | | |
| Friend about things that are important to me | 4.54 | 0.685 |
| Mother about things that are important to me | 4.26 | 0.934 |
| Family member about things that are important to me | 3.92 | 1.063 |
| Father about things that are important to me | 3.72 | 1.240 |

Notes: N = 465; Means based on a 5-point Likert-type scale (1 = Strongly Agree; 5 = Strongly Disagree). Missing values excluded.

Social Support

Concerning social support, students reported feeling most loved by their mother ($M = 4.74, SD = 0.587$) and friend ($M = 4.72; SD = 0.616$), followed by their family member ($M = 4.69, SD = 0.616$) and father ($M = 4.53, SD = 0.936$) (Table 2). Students indicated feeling most emotionally close to their friends ($M = 4.56, SD = 0.720$), followed by their mothers ($M = 4.34, SD = 0.883$), family members ($M = 4.15, SD = 0.956$), and fathers ($M = 3.78, SD = 1.152$). Students reported feeling most comfortable talking to their friends ($M = 4.54, SD = 0.685$) and mothers ($M = 4.26, SD = 1.240$), followed by their family members ($M = 3.92, SD = 1.063$), and fathers ($M = 3.72, SD = 1.240$).

Body Image Satisfaction and Social Support

A MANOVA was conducted to determine whether perceived social support differed significantly based on body image satisfaction. Results indicated a significant difference based on body image satisfaction, $F(12, 449) = 2.607, p = .002$. Subsequent univariate F -tests were conducted and revealed four specific social support items that differed significantly based on body image satisfaction (Table 3). Students with high levels of body image satisfaction were significantly more likely than students with low levels of body image satisfaction to talk to a family member about things that are important to them ($p = .001$), feel loved by a family member ($p = .003$), feel loved by at least one friend ($p = .032$), and to feel loved by their mothers ($p = .033$).

COMMENT

Consistent with previous research, the present study

found that low body image satisfaction is a prevailing issue among college students [1,9]. Interestingly however, the present study did not find body image satisfaction to differ based on sex, grade or relationship status. Conversely, Forrest and Stuhldreher found that 65% of female college students and more than 30% of male college students reported low body image satisfaction [9]. Other studies have shown that college females perceive their actual build to be heavier than the ideal build [3]. Such findings are alarming since various health risks are associated with low body image satisfaction among college students [10].

The present study also found body image satisfaction to be significantly associated with perceived social support. Those who felt socially and emotionally supported from their mothers, family members and friends were most likely to report high levels of body image satisfaction. Specifically, students with a high level of body image satisfaction were more likely than their counterparts to talk to family members about things that are important to them and to feel loved by their mother or another family member

These results lend support to those of previous studies which indicate that social support and interpersonal relationships plays an important role in body image satisfaction [18,28,30]. For instance, Ackard and colleagues reported that individuals with high body image were more likely than individuals with low body image to have positive relationships and overall satisfying relationships [30]. Based on such findings, it appears that social support and perceptions of one's body image are intrinsically intertwined.

Table 3. Students' Perceived Social Support based on Body Image Satisfaction

| Item | Body Image Satisfaction | | F | p |
|---|-------------------------|----------------------|--------|------|
| | Low Level M (SD) | High Level M (SD) | | |
| I feel loved by my mother | 4.69 (0.671) | 4.80 (0.454) | 4.581 | .033 |
| I feel loved by another family member | 4.61 (0.738) | 4.79 (0.483) | 8.694 | .003 |
| I feel loved by at least one friend | 4.61 (0.738) | 4.79 (0.438) | 4.606 | .032 |
| I talk to another family member about things that are important to me | 3.77 (1.107) | 4.11 (0.977) | 11.834 | .001 |

Notes: N = 465

Table displays significant univariate F-tests conducted after MANOVA was found to be significant. Only significant findings from univariate F-tests are displayed. Means based on a 5-point Likert-type scale (1 = Strongly Agree; 5 = Strongly Disagree).

Students in the present study who felt emotionally close and loved by their mothers were more likely to report a high level of body image satisfaction than students who did not feel emotionally close or loved by their mothers. Sanftner and colleagues revealed similar findings in showing that male and female university students who did not feel emotionally close to their mothers were at elevated risk for weight concerns [18]. In addition to the critical impact that parents have on their children related to emotional closeness, parents also serve as an important channel for conveying sociocultural ideals and attitudes about body image to both females and males [6]. Individuals that suffer from low body image satisfaction and involvement in disordered eating tend to feel less accepted and less close to their parents [31]. Research has shown that perceived emotional closeness to important others and increased parent-child time spent together to be protective against involvement in unhealthy and risky behaviors [32,33]. Thus, parents can play a key role in the prevention of mental health problems among youth. The importance of ongoing communication between parents and their children has been well established [34]. Health educators should therefore encourage parents to consistently communicate with their children and to remain regularly involved in parent-child activities. Clear and continuous messages displaying to children that they are important, supported and loved by their parents is critical to the emotional health of adolescents and college-aged individuals.

Regarding peer influence, findings from the current study indicated that high body image satisfaction was directly correlated with high levels of social support from peers. Jones and colleagues similarly reported a significant association between body image and peer influences [23]. These findings are concerning since an estimated one-third of male students and one-half of

female students who are criticized about their weight report low body image satisfaction up to five years later [35]. Feeling loved and supported by friends serves as a protective factor against body image dissatisfaction. Since adolescents and young adults are likely to adopt the attitudes, values and behaviors of their peers, individuals' perceived level of intimacy and concern from peers appear to be critical factors in one's overall feelings related to body image [28].

Interestingly, students with high body image satisfaction did not differ significantly from students with low body image satisfaction regarding level of emotional closeness to their fathers. Instead, this study indicated that mothers played a more pronounced role with respect to this topical area. Gaps currently exist in the literature concerning the impact of social support from fathers and its impact on students' body image satisfaction. Research is needed to more thoroughly understand the effect of paternal social support on body image among college students.

Limitations

The limitations of this study should be noted. First, responses were obtained through a self-reported survey which may have resulted in some students offering socially desirable responses. Second, the sample was delimited to college students in a Midwestern university and therefore results may not necessarily generalize to students in other geographical locations. Third, body image satisfaction is subjective in nature and may or may not correlate with the actual body sizes of participants. Therefore quantitative measurements including weight and height were omitted from this study. Finally, since the study was cross-sectional in nature, cause-and-effect relationships could not be determined.

Conclusions

Social support from parents, family members, and peers are important factors involved in college students' body image satisfaction and should therefore be considered when designing campus programs or interventions to address body image. To enhance the likelihood for success, campus health educators should seek to include family and peer support in prevention programs. Future research is clearly warranted on the relationship between body image satisfaction and social support. Case-control program evaluations are needed to identify effective programs that increase students' body image satisfaction. Findings from such studies should be shared and disseminated with the professional community as well as campus health educators nationwide. In addition, studies are needed to examine the impact of father-child emotional closeness on students' body image satisfaction. Future studies should also examine the potential impact of mental health status on perceived body image satisfaction. Findings from these studies can in turn be used to develop research-based interventions

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