

Peer Victimization and Depressive Symptoms: The Role of Body Dissatisfaction and Self-Esteem

**Jessica S. Benas, MA
Brandon E. Gibb, PhD**

Binghamton University, NY

Research has suggested that different forms of negative cognitions contribute risk to the development of depressive symptoms. What remains unclear is whether there is specificity regarding the relation between childhood experiences and young adults' current cognitions and whether these cognitions each contribute unique risk to depressive symptoms or whether they interact to predict increased depression risk. The primary goal of the current study was to examine the relation between depressive symptoms and young adults' histories of negative childhood events (e.g., weight-related teasing) and whether certain types of negative cognitions (e.g., body dissatisfaction) mediate this relation. Supporting our specificity hypothesis, low self-esteem mediated the link between general peer verbal victimization during childhood and current depressive symptoms, and body dissatisfaction mediated the link between weight-related teasing during childhood and current depressive symptoms. In addition, supporting the interactive nature of forms of cognitive vulnerability, low levels of self-esteem, combined with high levels of body dissatisfaction, were associated with the highest levels of depressive symptoms.

Keywords: verbal victimization; teasing; depression; self-esteem; body dissatisfaction

According to Beck's theory of depression (e.g., Clark, Beck, & Alford, 1999), negative views of one's self contribute to both the development and the maintenance of depression. Building from this, cognitive-interpersonal models of depression (e.g., Hammen, 1992) emphasize the interplay between these cognitive variables and individuals' interpersonal relations. These theories focus primarily on the role of negative interpersonal events in activating pre-existing event-congruent schema that then contribute to depression. In this way, they focus on the role of negative self-schema in moderating the link between negative interpersonal events and depressive symptoms. Although there is considerable research supporting these theories (for reviews, see Clark et al., 1999; Gibb & Coles, 2005; Hammen, 1999), there is also evidence that negative interpersonal events may contribute to the development of these negative self-views.

Theorists (e.g., Cole, 1991; Cole, Jacquez, & Maschman, 2001; Rose & Abramson, 1992) have suggested that one's self-views develop, in part, based on the messages received from others, which become internalized and increasingly stable with age. Supporting this hypothesis, there is evidence that changes in children's negative thoughts about themselves are predicted

by negative evaluations from peers and that these negative self-evaluations mediate the link between peer messages and the development of depression (Cole, Martin, & Powers, 1997; Cole et al., 2001). More generally, studies have found that experiences of verbal victimization predict changes in children's depressive cognitions and that these cognitions mediate the link between verbal victimization and the development of both symptoms and diagnoses of depression (e.g., Gibb & Alloy, 2006; Gibb et al., 2001). Emphasizing the importance of studying messages children receive from their peers, there is evidence that verbal victimization from peers is significantly related to young adults' depressive cognitions even when the influence of emotional maltreatment from their parents is statistically controlled (Gibb, Abramson, & Alloy, 2004). What remains unclear from this research, however, is whether there is any specificity in terms of the messages received from peers and the types of cognitions that form. It is possible that general verbal victimization from peers is related to young adults' global views of themselves (i.e., self-esteem), whereas more specific messages from peers is related to the presence of content-specific negative cognitions about oneself. In the current study, we tested this specificity hypothesis by examining the relation between general verbal victimization and a specific form of verbal victimization, specifically weight-related teasing, during childhood and young adults' current levels of self-esteem and body dissatisfaction.

Previous studies have suggested that reports of weight-related teasing are related to later body image disturbances (Gleason, Alexander, & Somers, 2000; Grilo, Wilfley, Brownell, & Rodin, 1994; Thompson, Coovett, Richards, Johnson, & Cattarin, 1995) and that the frequency of teasing experienced in childhood significantly predicts poorer body image later in life (Gleason et al., 2000). Further, the relation between body dissatisfaction and depressive symptoms has been demonstrated among females (Fabian & Thompson, 1989; Stice, Killen, Hayward, & Taylor, 1998) as well as males (Marcotte, Fortin, Potvin, & Papillon, 2002; Olivardia, Pope, Borowiecki, & Cohane, 2004). Being teased about appearance and weight may contribute to body dissatisfaction because the individual is being teased about specific aspects of his or her body that he or she cannot easily change, leaving him or her with a specific focus of dissatisfaction rather than an overall sense of low self-worth.

It is possible that the more general forms of teasing represented by verbal victimization would be related to general negative views of oneself (e.g., self-esteem more generally). Researchers have suggested that general teasing contributes to depression because teasing makes a person think that they are flawed in some way, therefore making them feel ineffective and intrinsically flawed (Ledley et al., 2006). Previous studies have supported the link between verbal peer victimization and levels of self-esteem among adolescents (Matsui, Kakuyama, Tsuzuki, & Onglatco, 1996). In addition, low self-esteem has been found to predict the development of depressive symptoms both alone (Southall & Roberts, 2002) and in interaction with other forms of cognitive vulnerability to depression (e.g., Abela, 2002; Abela & Payne, 2003; Metalsky, Joiner, Hardin, & Abramson, 1993; Southall & Roberts, 2002).

Our primary goal in this study, therefore, was to examine potential specificity in terms of the relations between childhood experiences and young adults' current cognitions. Although there is evidence that both verbal victimization and weight/size teasing in childhood are related to depressive symptom levels in young adulthood, we hypothesized that they would have unique cognitive mediators. Specifically, we hypothesized that low self-esteem would mediate the link between general peer verbal victimization and depressive symptoms and that body dissatisfaction would mediate the link between weight-related teasing and depressive symptoms. Further, we hypothesized that general verbal victimization would be more strongly related to low-self esteem than body dissatisfaction and that weight-related teasing would be more strongly related to body dissatisfaction than low self-esteem. We also examined whether there were any gender differences for any of the variables as well as whether participants' gender moderated any of the relations in the hypothesized mediational model.

A secondary goal of this study was to examine the unique versus interactive effects of low self-esteem and body dissatisfaction on current depressive symptoms. Although there is evidence that a variety of negative cognitions (e.g., general low self-esteem and body satisfaction) contribute risk for depression, what remains largely unstudied is whether these different forms of cognitive vulnerability have unique versus interactive effects on depressive symptoms. Based on previous findings suggesting that low self-esteem interacts with other forms of negative cognitions to predict increased risk for depression (e.g., Abela, 2002; Abela & Payne, 2003), we hypothesized that low self-esteem and body dissatisfaction, as well as their interaction, would be significantly related to higher levels of depressive symptoms.

METHOD

Participants

Participants in this study were 203 undergraduates recruited from introductory psychology classes. Sixty-four percent of participants were female and the mean age was 19.07 years ($SD = 1.32$). The racial/ethnic background of the participants was as follows: 53.7% White, 3.9% African American, 27.6% Asian, 8.9% Hispanic, and 5.4% from other racial/ethnic groups.

Measures

Peer Victimization/Weight-Related Teasing. The Life Experiences Questionnaire (LEQ; Gibb et al., 2001) assessed participants' history of emotional, sexual, and physical maltreatment as well as emotional and physical neglect from a variety of sources. The emotional abuse subscale, which assessed humiliation, rejection, extortion, and teasing, was used in this study. To be consistent with the other measure of verbal victimization included in this study, we focused specifically on victimization from peers and romantic partners (LEQ-VV). Scores were calculated by summing the number of verbal victimization experiences endorsed as having occurred before age 15. The LEQ emotional abuse subscale has demonstrated good internal consistency and is related to depressive cognitions and diagnoses (Gibb, Alloy, Abramson, & Marx, 2003; Gibb et al., 2001). In addition, the LEQ-VV subscale has demonstrated a strong relationship with individuals' cognitive vulnerability to depression (Gibb et al., 2004). In the current study, the LEQ-VV subscale demonstrated good internal consistency ($\alpha = .83$).

The Physical Appearance Related Teasing Scale (PARTS; Thompson, Fabian, Moulton, Dunn, & Altabe, 1991) assessed the frequency of teasing about participants' appearance. Each of the items on the PARTS is rated on a 5-point Likert-type scale with response options ranging from never (1) to frequently (5). The PARTS consists of two subscales: weight/size teasing (W/ST) and general appearance teasing (GAT). Both subscales exhibit high internal consistency, retest reliability, and convergent validity with measures of depression and body image dissatisfaction (Thompson et al., 1991). For the purposes of this study, only the W/ST subscale was used ($\alpha = .93$).

Self-Esteem. The Rosenberg Self Esteem Scale (RSES; Rosenberg, 1965) assessed global self-esteem with each item rated on a 4-point scale with responses ranging from "strongly agree" to "strongly disagree." Higher scores indicate more self-esteem. The RSES has shown strong reliability and validity in a number of studies (see, e.g., Vohs et al., 2001) and demonstrated excellent internal consistency in this study ($\alpha = .92$).

Body Dissatisfaction. The Body Shape Questionnaire (BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987) assessed symptoms of body dissatisfaction such as distressing preoccupation with weight or shape, embarrassment in public situations, avoidance of exposure of body due to self consciousness, and excessive feelings of fatness. Responses were on a 6-point Likert-type scale

(1 = “never,” 6 = “always”) to questions such as “Have you felt ashamed of your body?” Higher scores on the BSQ indicate more body dissatisfaction. The BSQ has good concurrent validity with other eating measures and satisfactory discriminant validity (Cooper et al., 1987) and has good 3-week retest reliability (Rosen, Jones, Ramirez, & Waxman, 1996). The BSQ demonstrated excellent internal consistency in this study ($\alpha = .98$).

Depressive Symptoms. The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) assessed the severity of depressive symptoms experienced in the past 2 weeks. The BDI-II has demonstrated good reliability and validity in both clinical and nonclinical samples (Beck et al., 1996). In this study, the BDI-II demonstrated good internal consistency ($\alpha = .90$).

Procedure

Participants completed the questionnaire packets in large groups. The packets were administered in counterbalanced order to control for any order or fatigue effects, and preliminary analyses revealed that there were no significant order effects among any of the variables included in the study. Participants received course credit for their participation.

RESULTS

Preliminary analyses revealed significant skew among many of the variables. These variables were transformed (e.g., square root, log 10, inverse) to satisfy assumptions of normality prior to further analysis. Next, given the presence of some missing data, the pattern of missingness was examined to determine whether the use of data imputation methods for estimating missing values was justified (cf. Schafer & Graham, 2002). Little’s Missing Completely at Random test (MCAR; Little & Rubin, 1987), for which the null hypothesis is that the data are missing at random, was nonsignificant, $\chi^2(5) = 3.38, p = .64$, supporting the estimation of missing values. Therefore, maximum likelihood estimates of missing data were created and used in all subsequent analyses (see Schafer & Graham, 2002).

Before testing our mediation model, multiple regression analyses were used to test our hypothesis that low self-esteem and body dissatisfaction, as well as their interaction, would be significantly related to elevated depressive symptom levels. Consistent with the suggestions of Aiken and West (1991), the self-esteem and body dissatisfaction scores were mean-centered prior to creating their interaction to reduce multicollinearity. Using depressive symptoms as the criterion variable, self-esteem and body dissatisfaction were entered in the first step of a hierarchical regression, and both were significant ($t[200] = -8.06, p < .001, \beta = -.49$, and $t[200] = 3.88, p < .001, \beta = .23$, respectively). The self-esteem \times body dissatisfaction interaction was then entered in the second step of the regression and was also significantly related to depressive symptoms, $t(199) = -2.08, p < .05, \beta = -.12$. Plotting the interaction, we found that the highest levels of depressive symptoms were observed among individuals exhibiting high body dissatisfaction combined with low self-esteem.

Next, t tests were conducted to determine if there were any gender differences among the study variables. The only significant gender difference was that women reported significantly more body dissatisfaction than men, $t(201) = 6.88, p < .001, r_{\text{effect size}} = .44$. Correlations among the study variables, as well as their means and standard deviations, are presented in Table 1. To facilitate comparisons with other studies, the means and standard deviations presented are those obtained using the untransformed variables. As can be seen in the table, all the variables were significantly intercorrelated.

To test our primary hypothesis, we examined a mediation models using path analysis in AMOS 5 (Arbuckle, 2003). Following the suggestions of Shrout and Bolger (2002), nonparametric bootstrapping was used to provide parameter estimates for the mediation models. This procedure is

TABLE 1. CORRELATIONS AND DESCRIPTIVE STATISTICS FOR STUDY VARIABLES

	1	2	3	4	5
1. LEQ: VV	—				
2. PARTS: W/ST	.32**	—			
3. SES	-.30**	-.30**	—		
4. BSQ	.18*	.49**	-.38**	—	
5. BDI-II	.27**	.27**	-.58**	.42**	—
Mean	2.57	16.81	30.80	10.05	
SD	3.27	7.47	5.97	8.15	

Note. LEQ: VV = Life Experiences Questionnaire: Emotional Abuse by Peers or Romantic Partner Subscale; PARTS: W/ST = Physical Appearance Related Teasing Scale: Weight/Size Teasing Subscale; SES = Rosenberg's Self-Esteem Scale; BSQ = Body Shape Questionnaire; BDI-II = Beck Depression Inventory-II.

* $p < .05$. ** $p < .01$.

recommended for models including indirect effects, which may violate assumptions of normality (Shrout & Bolger, 2002). Consistent with the recommendations of Efron and Tibshirani (1986), 1,000 bootstrap samples were used in this study. Specifically, in testing our primary hypothesis, we examined whether there were specific mediational pathways through which self-esteem and body dissatisfaction were related to depressive symptoms. We hypothesized that low self-esteem would mediate the link between general peer verbal victimization and depressive symptoms and that body dissatisfaction would mediate the link between weight-related teasing specifically and depressive symptoms. Consistent with the results of the regression analyses reported here, the self-esteem \times body dissatisfaction interaction was also included in the mediation model as a predictor of depressive symptoms. Direct paths were added from the peer victimization and weight-related teasing variables to the interaction, which effectively partials out their effects from the interaction term. Nested model comparisons were used to compare a full mediation model to a partial mediation model, with the latter including direct pathways from both general verbal victimization and weight-related teasing to depressive symptoms. The full mediation model provided a good fit to the data, $\chi^2(2, N = 203) = 3.03$, CFI = 1.0, RMSEA = .05, SRMR = .02. In addition, the full mediation model did not provide a significantly worse fit to the data than the partial mediation model, $\chi^2(2, N = 203) = 3.03$, $p = .22$, supporting the superiority of the more parsimonious full mediation model. As can be seen in Figure 1, the only nonsignificant path in this model was the one linking peer victimization to body dissatisfaction.¹

Next, we tested the hypothesis that general verbal victimization would be more strongly related to low self-esteem than body dissatisfaction and that weight-related teasing would be more strongly related to body dissatisfaction than low self-esteem. Supporting this hypothesis, the path linking peer victimization to self-esteem ($\beta = -.22$) was significantly stronger than the path linking peer victimization to body dissatisfaction ($\beta = .03$), $z = 3.22$, $p < .001$. Also consistent with our hypothesis, the path linking weight-related teasing to body dissatisfaction ($\beta = .48$) was significantly stronger than the path linking weight-related teasing to self-esteem ($\beta = -.23$), $z = 3.56$, $p < .001$.

Lastly, we examined whether participant's gender moderated any of the relations in the path analytic model. Specifically, using a nested model comparison, we compared a model in which the paths were allowed to vary freely among men and women to a model in which the paths were constrained to be equal for both sexes. The constrained model provided a significantly worse fit to the data than the unconstrained model, $\chi^2(12) = 34.46$, $p = .001$. An examination of the results,

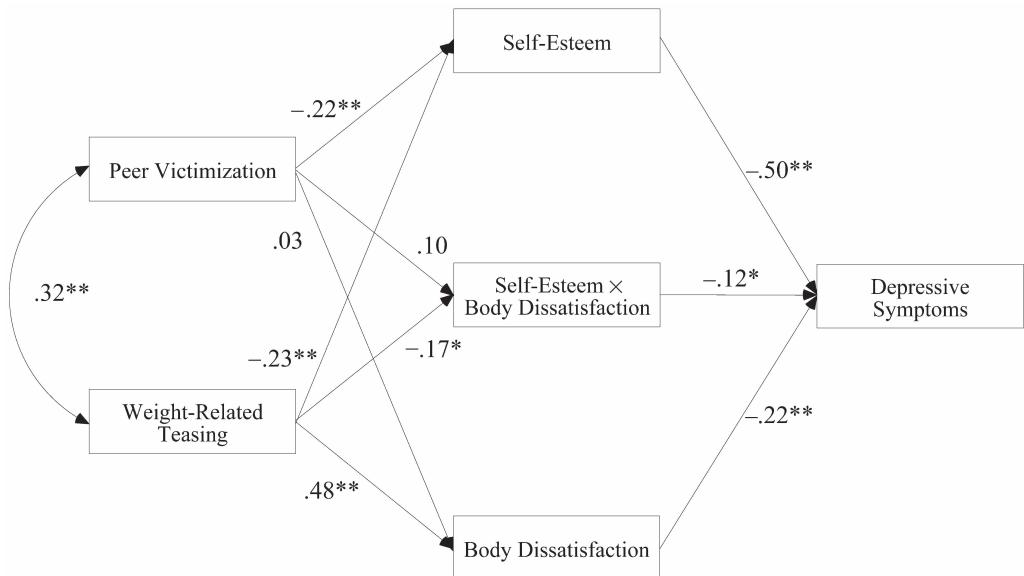


FIGURE 1. Supported mediation model, with estimates.

* $p < .05$. ** $p < .01$.

however, revealed that the only parameter differing significantly was the correlation between self-esteem and the interaction term. Specifically, the correlation was significantly stronger for men, $r = -.52$, $p < .01$, than for women, $r = .18$, $p = .25$ ($z = 4.41$, $p < .001$). Therefore, none of the primary paths of interest in our model differed significantly for men versus women.

DISCUSSION

Our primary goals were to (a) test a model in which self-esteem and body dissatisfaction were hypothesized to mediate the relations between both general verbal victimization and weight-related teasing and participants' current depressive symptoms, (b) evaluate the specificity of the mediational pathways, and (c) examine the unique versus interactive relations of these cognitive vulnerabilities with young adults' current depressive symptoms. We found support for each of our hypotheses. Specifically, we found that low self-esteem fully mediated the link between general peer verbal victimization and depressive symptoms and that body dissatisfaction fully mediated the link between weight-related teasing specifically and depressive symptoms. Further, general verbal victimization was more strongly related to low-self esteem than body dissatisfaction, and weight-related teasing was more strongly related to body dissatisfaction than low self-esteem. None of the these results differed on the basis of gender. Supporting our third hypothesis, low self-esteem and body dissatisfaction did interact to predict depressive symptoms such that individuals with the highest levels of depressive symptoms exhibited high body dissatisfaction combined with low self-esteem.

Our results extend a growing body of research that suggests that cognitive vulnerabilities to depression such as low self-esteem predict the development of depressive symptoms both alone (Southall & Roberts, 2002) and in interaction with other forms of cognitive vulnerability (e.g., Abela, 2002; Abela & Payne, 2003; Metalsky et al., 1993; Southall & Roberts, 2002). Specifically, our findings suggest that body dissatisfaction and low self-esteem have unique as well as

interactive relations with young adults' depressive symptoms. Further, although women were more likely than men to experience body dissatisfaction, the results indicated no difference between the genders in terms of the mediational pathways. In addition, although different types of verbal victimization may contribute to depressive symptoms (i.e., equifinality), our results suggest that specific mediational pathways may exist for the different types of verbal victimization. That is, the specific content of victimization (whether general teasing or weight-related teasing) may confer vulnerability to specific types of negative cognitions, all of which increase risk for depressive symptoms.

The results from the current study provides further support for theories suggesting that negative interpersonal relations may contribute to the development of a cognitive vulnerability to depression (e.g., Haines, Metalsky, Cardamone, & Joiner, 1999; Hammen, 1999; Rose & Abramson, 1992) and suggest that these developmental models may be useful in understanding the development of a variety of depressive cognitions. In addition, the results provide further support for previous findings that peer victimization puts an individual at risk for developing depressive symptoms if they attribute the victimization to some flaw in themselves (Haines et al., 1999). The current results are also consistent with previous findings that verbal victimization in childhood is related to depressive symptoms in adulthood (Gibb et al., 2004; Olweus, 1993; Roth, Coles, & Heimberg, 2002) and suggest one potential mechanism through which this may occur. Specifically, although based on cross-sectional data, the current results are consistent with the hypothesis that specific types of peer verbal victimization may contribute to the development of depressive symptoms through the formation of negative cognitions specific to the type of teasing experienced.

In addition to the potential theoretical implications of these results, there are also potential clinical implications. First, they add to the growing body of research suggesting that different forms of cognitive vulnerability to depression may interact to increase one's risk. As such, they suggest not only that therapists conduct a thorough assessment of patients' depressive cognitions but also that reducing cognitive distortions in one area (e.g., body dissatisfaction) may help to buffer against the negative effects of other depressogenic cognitions (e.g., general low self-esteem). Second, the current results suggest the potential for further refinements in early intervention and prevention efforts. Specifically, it may be useful to tailor specific prevention strategies to the specific content of the victimization children are experiencing.

This study exhibited a number of limitations that should be noted. First, the study was cross sectional, and therefore no causal conclusions can be drawn. Prospective studies that begin in childhood are needed to determine if verbal victimization and weight-related teasing actually contribute to the development of low self-esteem and body dissatisfaction, respectively, as well as determining the potential time line for the development of these negative cognitions. A second limitation is that all the measures in the study were based on participants' self-report and therefore were susceptible to recall or response biases. That is, those who were currently depressed may remember more instances of victimization as a child and report more negative cognitions. This said, however, research has suggested that adults' recall of specific childhood experiences is reasonably accurate (for a review, see Brewin, Andrews, & Gotlib, 1993). In addition, our sample consisted of undergraduate students, making it unclear whether our results will generalize to those with clinical diagnoses. Giving us some confidence in the generalizability of the current results to more impaired samples, studies have supported the hypotheses that depressive cognitions do mediate the link between a history of childhood emotional maltreatment and diagnosed episodes of depression in adulthood (Gibb et al., 2001). Finally, given our reliance on participants' self-reports in assessing each construct, future studies would benefit from multiple forms of assessment (e.g., multiple informants regarding victimization, self-report and computer-based tasks to assess negative cognitions, and self-report and interviewer-based measures to assess depressive symptoms).

Although conclusions from this study must remain tentative pending replication with longitudinal studies, the current results are consistent with the hypothesis that the specific content of verbal victimization experienced may make an individual more likely to develop one form of negative cognition over another. It is possible that individuals internalize the messages they receive, making them more vulnerable to develop cognitions consistent with the focus of teasing experienced. Further, these types of negative cognitions may work in an interactive fashion in contributing to depressive symptoms. Thus, although both body dissatisfaction and low self-esteem uniquely increase risk for depressive symptoms, individuals who possess both forms of cognitive vulnerability might be at particularly high risk. Therefore, experiencing a broad range of teasing (from general teasing to teasing about specific attributes) may contribute to various forms of cognitive vulnerability that interact in a multiplicative fashion to contribute ever greater risk for the development of depression later in life. Future studies should continue to explore both the equifinality of contributors to depression as well as evidence of specificity along these developmental paths.

NOTE

1. For ease of presentation, error terms have been omitted from the figure. However, in testing the mediation model, error terms were included for all endogenous variables, and the error terms for the three mediating variables were allowed to correlate.

REFERENCES

Abela, J. R. Z. (2002). Depressive mood reactions to failure in the achievement domain: A test of the integration of the hopelessness and self-esteem theories of depression. *Cognitive Therapy and Research*, 26, 531–552.

Abela, J. R. Z., & Payne, A. V. L. (2003). A test of the integration of the hopelessness and self-esteem theories of depression in schoolchildren. *Cognitive Therapy and Research*, 27, 519–535.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Arbuckle, J. L. (2003). Amos 5 [Computer software]. Chicago: Smallwaters.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck Depression Inventory manual* (2nd ed.). San Antonio, TX: The Psychological Corporation.

Brewin, C. R., Andrews, B., & Gotlib, I. H. (1993). Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin*, 113, 82–98.

Clark, D. A., Beck, A. T., & Alford, B. A. (1999). *Scientific foundations of cognitive theory and therapy of depression*. New York: Wiley.

Cole, D. A. (1991). Change in self-perceived competence as a function of peer and teacher evaluation. *Developmental Psychology*, 27, 682–688.

Cole, D. A., Jacquez, F. M., & Maschman, T. L. (2001). Social origins of depressive cognitions: A longitudinal study of self-perceived competence in children. *Cognitive Therapy and Research*, 25, 377–395.

Cole, D. A., Martin, J. M., & Powers, B. (1997). A competency-based model of child depression: A longitudinal study of peer, parent, teacher, and self-evaluations. *Journal of Child Psychology and Psychiatry*, 38, 505–514.

Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the Body Shape Questionnaire. *International Journal of Eating Disorders*, 6, 485–494.

Efron, B., & Tibshirani, R. (1986). Bootstrap methods for standard errors, confidence intervals, and other measures of statistical accuracy. *Statistical Science*, 1, 54–77.

Fabian, L. J., & Thompson, J. K. (1989). Body image and eating disturbance in young females. *International Journal of Eating Disorders*, 8, 63–74.

Gibb, B. E., Abramson, L. Y., & Alloy, L. B. (2004). Emotional maltreatment from parents, verbal peer victimization, and cognitive vulnerability to depression. *Cognitive Therapy and Research*, 28, 1–21.

Gibb, B. E., & Alloy, L. B. (2006). A prospective test of the hopelessness theory of depression in children. *Journal of Clinical Child and Adolescent Psychology*, 35, 264–274.

Gibb, B. E., Alloy, L. B., Abramson, L. Y., & Marx, B. P. (2003). Childhood maltreatment and maltreatment-specific inferences: A test of Rose and Abramson's (1992) extension of the hopelessness theory. *Cognition and Emotion*, 17, 917–931.

Gibb, B. E., Alloy, L. B., Abramson, L. Y., Rose, D. T., Whitehouse, W. G., Donovan, P., et al. (2001). History of childhood maltreatment, negative cognitive styles, and episodes of depression in adulthood. *Cognitive Therapy and Research*, 25, 425–446.

Gibb, B. E., & Coles, M. E. (2005). Cognitive vulnerability-stress models of psychopathology: A developmental perspective. In B. L. Hankin & J. R. Z. Abela (Eds.), *Development of psychopathology: A vulnerability-stress perspective* (pp. 104–135). Thousand Oaks, CA: Sage.

Gleason, J. H., Alexander, A. M., & Somers, C. L. (2000). Later adolescents' reactions to three types of childhood teasing: Relations with self-esteem and body image. *Social Behaviors and Personality*, 28, 471–480.

Grilo, C. M., Wilfley, D. E., Brownell, K. D., & Rodin, J. (1994). Teasing, body image, and self-esteem in a clinical sample of obese women. *Addictive Behaviors*, 19, 443–450.

Haines, B. A., Metalsky, G. I., Cardamone, A. L., & Joiner, T. (1999). Interpersonal and cognitive pathways into the origins of attributional style: A developmental perspective. In T. Joiner & J. C. Coyne (Eds.). *The interactional nature of depression: Advances in interpersonal approaches* (pp. 65–92). Washington, DC: American Psychological Association.

Hammen, C. (1992). Cognitive, life stress, and interpersonal approaches to a developmental psychopathology model of depression. *Development and Psychopathology*, 4, 189–206.

Hammen, C. (1999). The emergence of an interpersonal approach to depression. In T. Joiner & J. C. Coyne (Eds.), *The interactional nature of depression: Advances in interpersonal approaches* (pp. 21–35). Washington, DC: American Psychological Association.

Ledley, D. R., Storch, E. A., Coles, M. E., Heimberg, R. G., Moser, J., & Bravata, E. A. (2006). The relationship between childhood teasing and later interpersonal functioning. *Journal of Psychopathology and Behavioral Assessment*, 28, 33–40.

Little, R. J. A., & Rubin, D. B. (1987). *Statistical analysis with missing data*. New York: Wiley.

Marcotte, D., Fortin, L., Potvin, P., & Papillon, M. (2002). Gender differences in depressive symptoms during adolescence: Role of gender-typed characteristics, self-esteem, body image, stressful life events, and pubertal status. *Journal of Emotional and Behavioral Disorders*, 10, 29–42.

Matsui, T., Kakuyama, T., Tsuzuki, Y., & Onglatco, M. (1996). Long-term outcomes of early victimization by peers among Japanese male university students: model of a vicious cycle. *Psychological Reports*, 79, 711–720.

Metalsky, G. I., Joiner, T. E., Hardin, T. S., & Abramson, L. Y. (1993). Depressive reactions to failure in a naturalistic setting: A test of the hopelessness and self-esteem theories of depression. *Journal of Abnormal Psychology*, 102, 101–109.

Olivardia, R., Pope, H. G., Borowiecki, J. J., & Cohane, G. H. (2004). Biceps and body image: The relationship between muscularity and self-esteem, depression, and eating disorder symptoms. *Psychology of Men and Masculinity*, 5, 112–120.

Olweus, D. (1993). Bully/victim problems among schoolchildren: Long-term consequences and an effective intervention program. In S. Hodgins (Ed.), *Mental disorder and crime* (pp. 317–349). Thousand Oaks, CA: Sage.

Rose, D. T., & Abramson, L. Y. (1992). Developmental predictors of depressive cognitive style: Research and theory. In D. Cicchetti & S. L. Toth (Eds.), *Rochester symposium on developmental psychopathology* (Vol. 4, pp. 323–349). Rochester, NY: University of Rochester Press.

Rosen, J. C., Jones, A., Ramirez, E., & Waxman, S. (1996). Body Shape Questionnaire: Studies of validity and reliability. *International Journal of Eating Disorders*, 20, 315–319.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Roth, D. A., Coles, M. E., & Heimberg, R. G. (2002). The relationship between memories for childhood teasing and anxiety and depression in adulthood. *Anxiety Disorders*, 16, 149–164.

Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7, 147–177.

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422–445.

Southall, D., & Roberts, J. E. (2002). Attributional style and self-esteem in vulnerability to adolescent depressive symptoms following life stress: A 14-week prospective study. *Cognitive Therapy and Research*, 26, 563–579.

Stice, E., Killen, J. D., Hayward, C., & Taylor, C. B. (1998). Support for the continuity hypothesis of bulimic pathology. *Journal of Consulting and Clinical Psychology*, 66, 784–790.

Thompson, J. K., Coovert, M. D., Richards, K. J., Johnson, S., & Cattarin, J. (1995). Development of body image, eating disturbance, and general psychological functioning in female adolescents: Covariance structure modeling and longitudinal investigations. *International Journal of Eating Disorders*, 18, 221–236.

Thompson, J. K., Fabian, L. J., Moulton, D. O., Dunn, M. E., & Altabe, M. N. (1991). Development and validation of the Physical Appearance Related Teasing Scale. *Journal of Personality Assessment*, 56, 513–521.

Vohs, K. D., Voelz, Z. R., Pettit, J. W., Bardone, A. M., Katz, J., Abramson, L. Y., et al. (2001). Perfectionism, body dissatisfaction, and self-esteem: An interactive model of bulimic symptom development. *Journal of Social and Clinical Psychology*, 20, 476–497.

Acknowledgments. An earlier version of this paper was presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Chicago, 2006. This project was supported in part by National Institute of Child Health and Human Development grant HD048664 awarded to the second author.

Correspondence regarding this article should be directed to Jessica S. Benas, MA, Department of Psychology, P.O. Box 6000, Binghamton, NY 13902. E-mail: jessica.benas@binghamton.edu

Copyright of *Journal of Cognitive Psychotherapy* is the property of Springer Publishing Company, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.