The measurement and impact of childhood teasing in a sample of young adults

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Abstract

This study examined the psychometric properties of the Teasing Questionnaire—Revised (TQ-R) and the relationships among recalled childhood teasing and current psychosocial distress in 414 undergraduate students. Participants were administered the TQ-R, Beck Depression Inventory-II, State-Trait Anxiety Inventory—Trait Version, Brief Fear of Negative Evaluation Scale, and UCLA Loneliness Scale. Confirmatory factor analysis supported a five-factor model assessing teasing related to performance, academic issues, social behavior, family background, and appearance. Internal consistency of the TQ-R and its factors was acceptable, and intercorrelations among subscales were moderate, suggesting that the factors measure related but conceptually distinct teasing experiences. Defining Pearson product–moment correlations with a magnitude of greater than .25 as conceptually meaningful, we found that the TQ-R Total score was meaningfully related to depressive symptoms, anxiety, fear of negative evaluation, and loneliness. Being teased in the Performance and Social domains as a child was moderately related to current psychopathology. Implications of these findings for clinical practice and future research are discussed. © 2003 Elsevier Inc. All rights reserved.

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There has been increased interest in recent years regarding the potentially harmful effects of childhood teasing on later psychological functioning (McCabe, Antony, Summerfeldt, Liss, & Swinson, in press; Roth, Coles, & Heimberg, 2002). Experiences during childhood play a significant role in the development of beliefs about oneself and the world, and being teased as a child might be one such experience that can contribute to later problems with anxiety and depression (see Roth, Fresco, & Heimberg, in press; Roth & Heimberg, in press). Identifying a link between childhood teasing and later anxiety and depression will help inform investigators in devising prevention and intervention strategies aimed at helping children and adolescents at the time they are teased. In addition, having a comprehensive understanding about negative childhood experiences that may have shaped patients' pathological beliefs will assist in addressing dysfunctional cognitions that contribute to distress and impairment.

Previous research has examined both immediate and long-term consequences of being teased. Studies examining the experience of teasing in children have shown that higher levels of peer victimization (including verbal teasing) are related to higher levels of social anxiety (Craig, 1998; Storch, Nock, Masia-Warner, & Barlas, 2003b; Walter & Inderbitzen, 1998) and lower levels of social acceptance and social competence (Callaghan & Joseph, 1995; Neary & Joseph, 1994). Victims of bullying also tend to score higher on measures of depression (Callaghan & Joseph, 1995; Craig, 1998; Neary & Joseph, 1994; Slee, 1995; Storch, Nock, et al., 2003b) and lower on measures of global self-worth (Callaghan & Joseph, 1995; Neary & Joseph, 1994) than do children who are not victims of bullying.

In terms of the potential long-term effects of teasing, most of the research comes from the field of eating disorders. A number of studies have demonstrated that being teased during childhood is positively related to both body dissatisfaction and eating disturbance in adulthood (e.g., Grilo, Wilfley, Brownell, & Rodin, 1994; Rieves & Cash, 1996; Schwartz, Phares, Tantleff-Dunn, & Thompson, 1999; Thompson, 1996). Recalled childhood teasing has also been related to later difficulties with depression (Fabian & Thompson, 1989; Matsui, Kakuyama, Tsuzuki, & Onglatco, 1996; Olweus, 1993a, 1994; Roth et al., 2002) and anxiety (Roth et al., 2002). Further, the relationship between childhood teasing and anxiety problems in adulthood seems to be stronger among patients with social anxiety than those with other anxiety disorders (McCabe et al., in press). In McCabe et al.'s (in press) study, patients in an anxiety disorders clinic were asked whether or not they had ever been bullied or severely teased. Eighty-five percent of participants with social anxiety disorder endorsed this question, a significantly higher percentage than patients who had panic disorder (25%) or obsessive–compulsive disorder (56%).

The current study had two main purposes. First, we sought to develop a multifactorial measure of recalled childhood teasing. There is a dearth of appropriate measures to assess memories for childhood teasing in samples of adults, and existing measures of recalled teasing experiences focus almost exclusively on teasing related to physical appearance (e.g., Thompson, Fabian, Moulton, Dunn, & Altabe, 1991). This exclusive focus on teasing about appearance is inconsistent

with existing data suggesting that children are teased about multiple domains including appearance, academic ability, and interpersonal relatedness (e.g., Kowalski, 2000). In a previous paper, we reported on the development of a Teasing Questionnaire (TQ; Roth et al., 2002), designed to assess memory for teasing across a number of different domains. However, exploratory factor analysis suggested that the TQ was best explained as a unifactorial measure. Therefore, in the current study we sought to develop a multifactor measure by adding new items to the original TQ. This Revised Teasing Questionnaire (TQ-R) was then administered to a large sample of undergraduate students in order to examine its factor structure.

The second main goal of the current study was to explore the degree to which being teased in particular domains was related to specific kinds of psychological distress later in life. For example, is childhood teasing in particular domains preferentially associated with depression or anxiety in adulthood?

Finally, a subsidiary goal of the current study was to learn more about the nature of childhood teasing. About kinds of things do young adults remember having been teased? Such knowledge might be very beneficial in terms of designing intervention and prevention programs for children and adolescents at the time that teasing occurs by identifying individuals who are negatively impacted by teasing.

1. Method

1.1. Participants and procedures

Participants were students in psychology classes at the University of Florida and Louisiana State University. At Louisiana State University, students in all psychology classes were given the opportunity to participate in research studies as a means of earning extra credit. Students who signed up for the study were asked to complete a questionnaire battery during 1-h administration periods held throughout the semester for groups of approximately thirty students. At the University of Florida, arrangements were made with professors for group administration of the questionnaires during scheduled class time. Participation was voluntary and students received extra credit for their involvement. A research assistant was present at each administration to provide instructions. Participants were allowed as much time as they needed to complete the instruments.

Questionnaire packets were completed by 414 students: 227 at the University of Florida and 187 at Louisiana State University. No differences were found in the gender and ethnic distribution of the two institutions. Participants from Louisiana State University ($M = 20.84$, S.D. $= 2.91$) were significantly older than those from the University of Florida ($M = 20.26$, S.D. $= 2.19$; $F(1, 413) = 5.27$, $P < .05$). However, comparison of the means suggests that the two samples were not meaningfully different in age. For the full sample, the mean age of participants was 20.52 (S.D. $= 2.55$) and the majority were female (73.2%) and

single (93.5%). The sample included students from all years of college: 17.1% were in their first year, 27.3% were sophomores, 27.3% were juniors, 24.2% were seniors, and 4.1% were fifth year or beyond. Participants' ethnicity was as follows: 77.1% were White, 8.5% were African American, 7.7% were Hispanic, and 4.1% were Asian. One participant (0.2% of the sample) reported that she was Native American and 1.7% reported that they were of another racial background besides those listed.

1.2. Measures

1.2.1. Teasing Questionnaire—Revised (TQ-R; see Table 1 for list of items)

This 35-item scale was designed by the authors to measure memories for teasing during childhood. The scale included the 20 items from the original TQ, as well as 15 new items generated to create domains of teasing. Responses were made on a 5-point Likert-type scale (0: "I was never teased about this," 1: "I was rarely teased about this," 2: "I was sometimes teased about this," 3: "I was often teased about this," and 4: "I was always teased about this").

TQ-R items were generated by carefully reviewing the existing literature to identify topics about which children are commonly teased (e.g., "I was teased about my height," "I was teased about particular aspects of my appearance such as the way that I dressed, wearing glasses, the color of my hair, etc."). Colleagues with expertise in anxiety and depression were also asked to report topics that their patients recalled having been teased about or that they themselves might have been teased about as children. This proved to be very beneficial, with these professionals gleaning items from characteristics associated with people who are anxious or depressed (e.g., "I was teased because I wasn't good at initiating and maintaining conversations with other kids," "I was teased because I wasn't a very cheerful kid") and from other experiences that their patients or they themselves had (e.g., "I was teased because I excelled at school," "I was teased for being a tomboy or a feminine boy"). Visual inspection of the TQ-R revealed that items assessed five relatively unique constructs, namely teasing about performance, academic characteristics, social behavior, family background, and appearance.

1.2.2. Brief Fear of Negative Evaluation Scale (B-FNE; Leary, 1983)

The B-FNE is a 12-item self-report measure based on Watson and Friend's 30-item Fear of Negative Evaluation scale (1969). Fear of negative evaluation is a core component of social anxiety. In non-clinical populations, the B-FNE has been found to be highly correlated with Watson and Friend's FNE scale ($r = .96$; Leary, 1983), thus supporting the convergent validity of the measure. In the present study, Cronbach's alpha was .91.

1.2.3. Beck Depression Inventory—II (BDI-II; Beck, Steer, & Brown, 1996)

The BDI-II is a 21-item self-report assessment of symptoms of depression during the past week (e.g., difficulties with sleep, irritability, anhedonia, etc.). The

BDI-II has been shown to exhibit good internal consistency in non-psychiatric and psychiatric samples ($\alpha = .81$ and $.86$, respectively) and good concurrent validity with other measures of depression (Beck et al., 1996; Whisman, Perez, & Ramel, 2000). In the present study, Cronbach's alpha was .90.

1.2.4. State-Trait Anxiety Inventory—Trait Version (STAI-T; Spielberger, 1983)

The STAI-T is a 20-item scale that measures the general tendency to experience anxiety and to view stressful situations as threatening. Bieling, Antony, and Swinson (1998) found that the STAI-T has two distinct factors, one assessing anxiety (STAI-A) and one assessing depression (STAI-D). The measure has good reliability and validity (Bieling et al., 1998; Spielberger, 1983, 1989). Given the high correlation between the BDI-II and STAI-D ($r = .76$), the STAI-D was excluded from analyses. Cronbach's alpha in the present study for the STAI-A was .82.

1.2.5. UCLA Loneliness Scale (Version 3; Russell & Cutrona, 1988)

The UCLA Loneliness Scale is a 20-item self-report questionnaire designed to assess loneliness, conceptualized as the discrepancy between desired and actual levels of social contact. The internal consistency of this measure is high across various populations, including college students, nurses, teachers, and the elderly ($\alpha = .89–.94$; Russell & Cutrona, 1988). Additionally, this scale has demonstrated favorable validity properties including a stable factor structure and modest correlations with self-reports of time spent alone (Russell & Cutrona, 1988). In the present study, Cronbach's alpha was .94.

2. Results

2.1. Confirmatory factor analysis of the Teasing Questionnaire—Revised

Because the TQ-R was designed to measure teasing across five conceptually derived domains, confirmatory factor analysis, using AMOS 4.01 (Arbuckle, 1999) with maximum likelihood estimation, was used to test this model. Five latent variables representing domains of teasing were specified: Performance, Academics, Social Behavior, Family Background, and Appearance. Each latent variable was specified with the TQ-R items designed to assess teasing in that domain, and each of the latent variables was allowed to correlate.[1] This original model provided a poor fit to the data ($\chi^2(550) = 2259.2$, $P = .00$, $\chi^2/df = 4.11$) root mean square error of approximation (RMSEA) = .09, standardized root

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[1] In the original model, the latent variables were specified as follows: Performance = Items 1, 21, 28; Academics = Items 2, 5, 12, 17, 23, 29; Social Behavior = Items 3, 4, 6, 11, 16, 18, 20, 22, 25; Family Background = Items 7, 8, 35; and Appearance = Items 9, 10, 13, 14, 15, 19, 24, 26, 27, 30, 31, 32, 33, 34.

mean squared residual (SRMR) = .08, comparative fit index (CFI) = .60 (cf. Hu & Bentler, 1999).[2] As a first step in modifying the hypothesized model, factor loadings (standardized regression weights) of individual items were examined. This revealed six items with factor loadings ≤.30, which were subsequently eliminated.[3] The revised model produced a better fit to the data ($\chi^2(367) = 1128.9$, $P = .00$, $\chi^2/df = 3.08$, RMSEA = .07, SRMR = .07, CFI = .77) but still left room for improvement. Examination of the modification indices suggested that the error terms for the "weight" and "fat" items be allowed to correlate, and then subsequently that the error terms for the "tall" and "height" items be allowed to correlate. Given the intuitive nature of the suggested modifications, they were implemented. This revised model (see Fig. 1) produced a good fit to the data ($\chi^2(365) = 833.7$, $P = .00$, $\chi^2/df = 2.28$, RMSEA = .06, SRMR = .06, CFI = .86).

Pearson product–moment correlations were conducted to examine the inter-correlations among subscales (see Table 1). These analyses were conducted for the overall sample and separately for men and women. The Performance, Academic, Social Behavior, Family, and Appearance subscales were found to be moderately related in the overall sample. The intercorrelations amongst sub-scales were comparable for men (range: .05–.62) and women (range: .24–.63). This further suggests that the TQ-R subscales assess related, but conceptually unique dimensions of teasing.

2.2. Reliability

To provide an estimate of the internal consistency of the TQ-R, Cronbach's alpha (Cronbach, 1951) was computed for each subscale, as well as the entire measure. Cronbach's alpha for the Performance (3 items), Academic (6 items), Social Behavior (7 items), Family (3 items), and Appearance (8 items) factors were .58, .84, .70, .48, and .78, respectively. Alpha's within the .50 range are generally considered acceptable for scales with a small number of items and when scale items are only moderately related (Streiner, 2003). Cronbach's alpha for the TQ-R total score was .87.

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[2] Values of χ^2/df (Wheaton, Muthen, Alwin, & Summers, 1977) are used to account for the influence of large sample size on the significance level of χ^2 values. χ^2/df values <5 are indicative of reasonable fit, and values of ≤3 are indicative of good fit (Marsh & Hocevar, 1985; Wheaton et al., 1977). The RMSEA is a measure of residual variability not accounted for by the model. Values ≤.05 indicate a close fit of the model to the data and values up to .08 indicate reasonable fit (Browne & Cudeck, 1993).The SRMR is an absolute fit index that assesses how well an a priori model reproduces the sample data. SRMR values ≤.08 are indicative of good fit (Hu & Bentler, 1999). The CFI is an incremental fit index that assesses the relative fit of a proposed model to a baseline model, typically the independence model. CFI values lie between 0 and 1, with larger values indicating better fit.

[3] The items dropped (and their standardized regression weights) were as follows: Item 4: "chatty" (.17), Item 6: "trouble-maker" (.29), Item 19: "matured late" (.20), Item 26: "short" (.12), Item 32: "skinny" (.19), and Item 33: "tomboy" (.27).
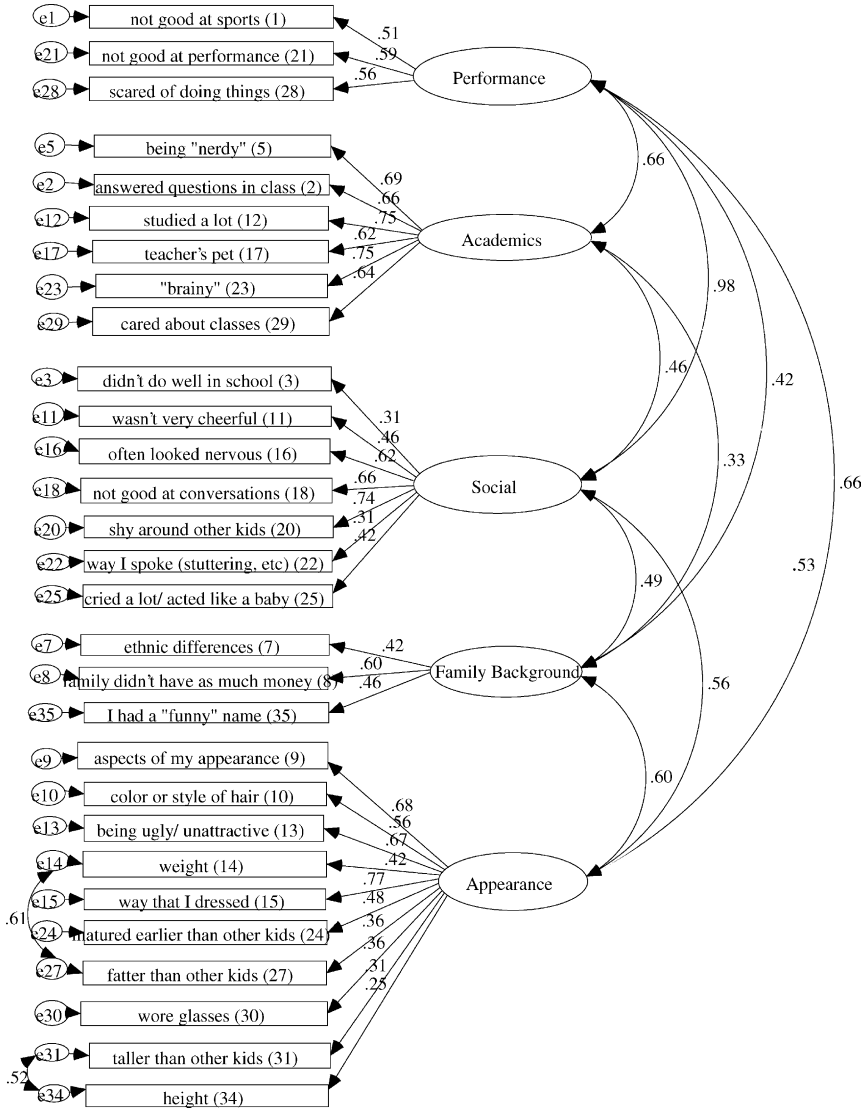
Fig. 1. Factor structure and item loadings of the teasing questionnaire—revised.

2.3. Relationships among recalled childhood teasing and symptoms of anxiety and depression

Pearson product–moment correlations were computed between recalled teasing and symptoms of anxiety and depression. Prior to conducting analyses, a correlation coefficient of .25 or greater was defined as "meaningful." This a priori

Table 1
Descriptive statistics and Pearson product–moment correlations among the TQ-R and measures of anxiety and depression

	1	2	3	4	5	6	7	8	9	10
1. TQ-R Total	15.52 (12.16)									
2. Performance	.71**	0.49 (0.60)								
3. Academics	.74**	.46**	0.75 (0.75)							
4. Social	.73**	.63**	.34**	0.38 (0.47)						
5. Family	.50**	.23**	.18**	.34**	0.53 (0.71)					
6. Appearance	.81**	.43**	.42**	.43**	.35**	0.66 (0.63)				
7. BDI	.30**	.19**	.15*	.30**	.14*	.26**	11.00 (8.23)			
8. STAI-A	.30**	.22**	.16*	.27**	.16*	.25**	.69**	13.48 (4.02)		
9. FNE	.29**	.30**	.19**	.22**	.06	.25**	.35**	.48**	35.69 (10.02)	
10. Loneliness	.28**	.20**	.18**	.27**	.15*	.20**	.59**	.50**	.33	39.65 (10.89)

Note. Gender was coded with male = 1, female = 2. Means (and standard deviations) are presented on the matrix diagonal. The figures for the TQ-R factors represent scale item average scores to account for the unequal number of items across scales.

*$P < .01$ level (two tailed).

**$P < .001$ level (two tailed).

level of significance was based on the fact that our relatively large sample makes the traditional level of significance an overly liberal criterion and that Cohen (1977) defines correlations of this magnitude as being of medium effect size. Further, to minimize the chances of making a Type I error, a Bonferonni correction was used and P-values of less than .002 (.05/24) were considered significant.

With only one exception, correlations between TQ-R subscales and dependent variables were statistically significant and positive (see Table 1). Using our .25 criterion, the TQ-R Total score was meaningfully related to all four domains of psychopathology measured (depressive symptoms, anxiety, fear of negative evaluation, and loneliness). Examining specific domains of teasing, the Performance factor was significantly and meaningfully related to fear of negative evaluation, the Social factor was related to depressive symptoms, anxiety, and loneliness, and the Appearance factor was significantly and meaningfully related to depressive symptoms, anxiety, and fear of negative evaluation. Correlations between the Academics and Family factors with the measures of psychopathology were all less than .25.

Correlational analyses were also conducted separately by gender. For both men and women, the TQ-R Total score was again correlated significantly and meaningfully with all four domains of psychopathology (depressive symptoms, anxiety, fear of negative evaluation, and loneliness). Correlations of specific domains of teasing and measures of psychopathology for men and women separately were similar to those found in the full sample.[4]

3. Discussion

Results from the present investigation extend previous research on teasing in several important ways. Specifically, findings provide initial psychometric support for an adult measure of recalled childhood teasing that assesses multiple domains of peer maltreatment. Further, these results help document important linkages between recalled childhood teasing and psychological adjustment in young adulthood.

A primary goal of this study was to examine the factor structure and psychometric properties of the TQ-R. Confirmatory factor analysis supported a hypothesized five-factor model consisting of teasing related to performance, academic issues, social behavior, family background, and appearance. Overall, the TQ-R psychometric properties are promising with acceptable internal consistency, and moderate intercorrelations among factors. Further, the pattern of correlations with adjustment variables provides support for the convergent validity of the measure. Together, these data provide initial support for the reliability and validity of the TQ-R. It will be important, however, for research to further investigate the psychometric properties of the TQ-R. Studies should

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[4] Further details of these analyses are available from the first author upon request.

examine, for example, the stability of this measure over short and long intervals. Similarly, obtaining convergent reports of childhood teasing from parents will aid in providing more conclusive psychometric support.

In line with previous studies (McCabe et al., in press; Roth et al., 2002), recalling frequent teasing in childhood was found in the current study to be related to higher levels of depression, anxiety, fear of negative evaluation, and loneliness later in life. A unique contribution of the current study was the ability to examine the relationship between specific domains of teasing and later psychological distress. The domains most strongly related to later psychological distress were the Performance and Social domains. Being teased in the Performance domain (e.g., being bad at sports, being embarrassed to do things in front of other people, etc.) was uniquely related to later fear of negative evaluation. This finding represents quite a logical connection between childhood experiences and a later form of psychosocial distress. Being teased in the Social domain (e.g., being teased about being shy, looking nervous, not being cheerful, etc.) was related to later difficulties with depression, anxiety, and loneliness.

It is interesting to consider why being teased in the Social domain seems to have broader consequences later in life than being teased in the Performance domain. One factor contributing to this pattern might be that items in the Social domain capture teasing experiences related to the child's personality or who he or she *is*. This is in contrast to the other domains of teasing that capture teasing experienced related to how children look or what they do (as is the case with the Performance domain). Being teased about the core of their personality might have more lasting effects on victims of teasing. It is also interesting to note that some researchers have suggested that children who behave in a shy and anxious way are targets for teasing (Olweus, 1993a; Storch, 2002). While some children respond to teasing with laughter or a clever retort, anxious children may respond by withdrawing or crying which can actually encourage further teasing.

The experience of frequent, recurrent teasing (particularly when it is self-relevant) can certainly contribute to development of maladaptive patterns of cognition that can in turn contribute to later psychological distress (Grills & Ollendick, 2002; Storch, Nock, et al., 2003b). Being teased about the type of things captured by the Social domain might lead children to believe that they are different or flawed in some way. Furthermore, when children are unable to stop teasing, they might come to believe that they are ineffective and have little control over their social lives. Later in life, these experiences might contribute to feelings of inadequacy, anxiety, and loneliness.

This fits nicely with the finding that ''corrective experiences'' during childhood and adolescence can buffer against later distress associated with childhood teasing. Specifically, research has suggested that supportive parental (Flouri & Buchanan, 2002) and peer relationships (Storch, Masia-Warner, & Brassard, in press, 2003a) protect against distress related to bullying. Such protection may be related to receiving advice, tangible assistance, and moral or emotional support from significant relationships that reduces the frequency of teasing and/or

minimizes the negative psychological impact. Taken together, these data suggest that frequently teased children may need help to reframe negative self-attributions, developing their relational skills, and changing maladaptive behaviors that invite teasing (Crick & Bigbee, 1998).

It is also interesting to consider why some domains of teasing did not seem strongly related to later psychological distress. It was surprising that being teased about appearance was not more strongly related to later psychological distress. It is possible that the kind of distress measured in this study did not tap into the problems typically experienced by people who were teased about their looks as children. Existing studies have found that appearance-related teasing is most strongly associated with later difficulties with eating and body image (e.g., Grilo et al., 1994; Rieves & Cash, 1996; Schwartz et al., 1999; Thompson, 1996), neither of which were assessed in the current study. In future studies using the TQ-R, the relationship between the Appearance domain and later eating and body image concerns should definitely be explored.

The Academic and Family domains were also relatively unrelated to any type of later distress. It is possible that these domains might actually serve as some sort of protective factor against later psychosocial distress. This is most likely in the academic domain in which items are characteristic of excelling at school. It is possible that being teased about doing well at school is not particularly troubling for children who are academically inclined. Being teased about family matters was also not strongly related to any later distress. Given the weakness of this factor, drawing strong conclusions about it would be premature.

These findings should be viewed against some methodological limitations. First, it is certainly possible that the relationship between the Social factor and later psychological distress reflect the stability of depression and anxiety. The characteristics captured in the Social domain clearly map on to the characteristics of anxiety and depression. In other words, participants might have exhibited these characteristics in childhood, and continue to exhibit these characteristics as young adults, independent of childhood teasing. Second, while some researchers have found retrospective recall to be a relatively accurate method of assessment of childhood experiences (Masia et al., 2003), others have called this methodology into question (Offer, Kaiz, Howard, & Bennett, 2000). It is certainly possible that individuals who are currently distressed may have recalled their childhood experiences in an overly negative manner (Lochman & Doge, 1994). In future studies, it would be beneficial to collect reports pertaining to levels of childhood teasing from other individuals (e.g., parents, siblings) in order to provide convergent validity for self-reports of recalled teasing and address the issue of shared method variance. Furthermore, longitudinal studies that employ similar corroborative methodologies will aid in illuminating the temporal relationship between childhood personality characteristics, childhood psychopathology, and teasing experiences. Finally, it is important to acknowledge that the moderate relations between adjustment variables may be partially suggestive of a larger construct of general psychological distress.

Bearing in mind these potential limitations, the present findings have potentially important clinical implications. Knowing that teasing during childhood might negatively impact individuals later in life can inform prevention and intervention efforts (Carney & Merrell, 2001; Olweus, 1993b) and certainly can lend strong support to their use. Such efforts could not only ward off the immediate impact of teasing, but also help build resiliency that is important during psychosocial development. This might be particularly true for anxious, withdrawn children who, as already noted, are most likely to be the targets of teasing and probably less likely than more outgoing children to go to adults for help when they are teased. Their inability to stop the teasing, either through their own devices or with the help of adults might make them feel ineffective in coping with the social world. Existing prevention programs (e.g., see Northwest Regional Educational Laboratory Report, 2001) emphasize the importance of helping all children—both victims and perpetrators of teasing—to learn assertiveness and conflict resolution skills. In the case of the shy, withdrawn children who are targets of teasing, such lessons may be useful in a multitude of ways. In the short term, children might become more comfortable going to others for help when they are teased and most importantly, might learn to react to teasing in such a way that precludes further teasing. Seeing the positive effects of such efforts might help children to feel more effective and more able to navigate the social world. Furthermore, good interpersonal skills might help children to develop new friendships, a protective factor against peer victimization (Olweus, 1993a). In the long term, feelings of self-efficacy and strong interpersonal relationships most certainly protect against later difficulties with anxiety and depression.

References

Arbuckle, J. L. (1999). *Amos 4.0* [Computer software]. Chicago, IL: SmallWaters.

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

Bieling, P. J., Antony, M. M., & Swinson, R. P. (1998). The State-Trait Anxiety Inventory, Trait Version: structure and content re-examined. *Behaviour Research and Therapy*, *36*, 777–788.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In: K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136–162). Thousand Oaks, CA: Sage.

Callaghan, S., & Joseph, S. (1995). Self-concept and peer victimization among schoolchildren. *Personality and Individual Differences*, *18*, 161–163.

Carney, A. G., & Merrell, K. W. (2001). Bullying in schools: perspective on understanding and preventing an international problem. *School Psychology International*, *22*, 364–382.

Cohen, J. (1977). *Statistical power analysis for the behavioral sciences*. New York: Academic Press.

Craig, W. M. (1998). The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. *Personality and Individual Differences*, *24*, 123–130.

Crick, N. R., & Bigbee, M. A. (1998). Relational and overt forms of peer victimization: A multi-informant approach. *Journal of Consulting and Clinical Psychology*, *66*, 337–347.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297–334.

Flouri, E., & Buchanan, A. (2002). Life satisfaction in teenage boys: the moderating role of father involvement and bullying. *Aggressive Behavior*, *28*, 126–133.

Grills, A. E., & Ollendick, T. H. (2002). Peer victimization, global self-worth, and anxiety in middle school children. *Journal of Clinical Child and Adolescent Psychology*, *31*, 59–68.

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.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55.

Kowalski, R. M. (2000). ''I was only kidding!'': victims' and perpetrators' perceptions of teasing. *Personality and Social Psychology Bulletin*, *26*, 231–241.

Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin*, *9*, 371–375.

Lochman, J. E., & Doge, K. A. (1994). Social-cognitive processes of severly violent, moderately aggressive, and nonaggressive boys. *Journal of Consulting & Clinical Psychology*, *62*, 366–374.

Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: first- and higher order factor models and their invariance across groups. *Psychological Bulletin*, *97*, 562–582.

Masia, C. L., Storch, E. A., Dent, H., Adams, P., Verdeli, H., Davies, M., & Weissman, M. M. (2003). Recall of childhood psychopathology: over ten years later. *Journal of the American Academy of Child and Adolescent Psychiatry*, *42*, 6–12.

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

McCabe, R. E., Antony, M. M., Summerfeldt, L. J., Liss, A., & Swinson, R. P. (in press). A preliminary examination of the relationship between anxiety disorders in adults and self-reported teasing or bullying experience. *Cognitive Behaviour Therapy*.

Neary, A., & Joseph, S. (1994). Peer victimization and its relationship to self-concept and depression among schoolgirls. *Personality and Individual Differences*, *16*, 183–186.

Northwest Regional Educational Laboratory (NWREL). (2001, December). *Schoolwide prevention of bullying*. Retrieved, April 22, 2003, from ERIC/CASS Virtual Library, Bullying in Schools, http://www.ericcass.uncg.edu/virtuallib/bullying/1070.html.

Offer, D., Kaiz, M., Howard, K. I., & Bennett, E. S. (2000). The altering of reported experiences. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*, 735–742.

Olweus, D. (1993a). *Bullying at school: what we know and what we can do*. Cambridge, MA: Blackwell Publishers.

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

Olweus, D. (1994). Bullying at school: long-term outcomes for the victims and an effective school-based intervention program. In: L. R. Huesmann (Ed.), *Aggressive behavior: current perspectives* (pp. 97–130). New York: Plenum Press.

Rieves, L., & Cash, T. F. (1996). Social developmental factors and women's body-image attitudes. *Journal of Social Behavior and Personality*, *11*, 63–78.

Roth, D., Coles, M., & Heimberg, R. G. (2002). The relationship between memories for childhood teasing and anxiety and depression in adulthood. *Journal of Anxiety Disorders*, *16*, 151–166.

Roth, D., Fresco, D., & Heimberg, R. G. (in press). Cognitive vulnerability for social anxiety disorder. In: L. B. Alloy & J. H. Riskind (Eds.). *Cognitive vulnerability to emotional disorders*. New York: Lawrence Erlbaum.

Roth, D. A., & Heimberg, R. G. (in press). Cognitive vulnerability to social anxiety [Special issue: cognitive vulnerability to psychological problems]. *Journal of Social and Clinical Psychology*.

Russell, D. W., & Cutrona, C. E. (1988). *Development and evolution of the UCLA Loneliness Scale*. Unpublished manuscript, Center for Health Services Research, College of Medicine, University of Iowa.

Schwartz, D. J., Phares, V., Tantleff-Dunn, S., & Thompson, J. K. (1999). Body image, psychological functioning, and parental feedback regarding physical appearance. *International Journal of Eating Disorders*, *25*, 339–343.

Slee, P. T. (1995). Peer victimization and its relationship to depression among Australian primary school students. *Personality and Individual Differences*, *18*, 57–62.

Spielberger, C. D. (1983). *Manual for the State-Trait Anxiety Inventory STAI (Form Y)*. Palo Alto, CA: Mind Garden.

Spielberger, C. D. (1989). *State-Trait Anxiety Inventory: a comprehensive bibliography*. Palo Alto, CA: Consulting Psychologists Press.

Storch, E. A. (2002). Commentary on ''a multi-component social skills training program for pre-adolescent girls with few friends''. *Child and Family Behavior Therapy*, *24*, 73–74.

Storch, E. A., Masia-Warner, C., & Brassard, M. R. (in press). The relationship of peer victimization to social anxiety and loneliness in adolescence. *Child Study Journal*.

Storch, E. A., Masia-Warner, C., & Brassard, M. R. (2003a). The relationship of peer victimization to social anxiety and loneliness in adolescence. *Child Study Journal*, *33*, 1–18.

Storch, E. A., Nock, M. K., Masia-Warner, C., & Barlas, M. E. (2003b). Peer victimization and social-psychological adjustment in Hispanic-American and African-American children. *Journal of Child and Family Studies*, *12*, 439–452.

Streiner, D. L. (2003). Being inconsist about consistency: when coefficient alpha does and doesn't matter. *Journal of Personality Assessment*, *80*, 217–222.

Thompson, J. K. (1996). Body image, eating disorders and obesity—an emerging synthesis. In: J. K. Thompson (Ed.), *Body image, eating disorders and obesity: an integrative guide for assessment and treatment* (pp. 1–20). Washington, DC: American Psychological Association.

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.

Walter, K. S., & Inderbitzen, H. M. (1998). Social anxiety and peer relations among adolescents: testing a psychobiological model. *Journal of Anxiety Disorders*, *12*, 183–198.

Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology*, *33*, 448–457.

Wheaton, B., Muthen, B., Alwin, D. F., & Summers, G. F. (1977). Assessing reliability and stability in panel models. In: D. R. Heise (Ed.), *Sociological methodology* (pp. 84–136). San Francisco: Jossey-Bass.

Whisman, M. A., Perez, J. E., & Ramel, W. (2000). Factor structure of the Beck Depression Inventory—Second Edition in a student sample. *Journal of Clinical Psychology*, *56*, 545–551.