Avoidance Mediates the Relationship Between Perceived Criticism in the Family of Origin and Psychological Distress in Adulthood

M. Zachary Rosenthal
Melissa A. Polusny
Victoria M. Follette

ABSTRACT. This study examined a mediational model whereby avoidance was hypothesized to mediate the relationship between higher perceived criticism in the family of origin and psychological distress in adulthood. Undergraduate women (*N = 141) completed self-report* instruments assessing perceptions of criticism in the family of origin, avoidant coping, experiential avoidance, and psychological distress. The mediational model was tested using procedures outlined by Baron and Kenny (1986). Support was found for the hypothesized model: (a) Higher perceived criticism was associated with higher avoidance, (b) higher avoidance was associated with greater distress, (c) higher perceived criticism was asso-

ciated with greater distress, and (d) the relationship between perceived criticism and distress was non-significant when adding avoidance into the model. Results suggest that avoidance may be an emotion regulation strategy associated with perceived criticism in the family of origin that exacerbates psychological problems in adulthood. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> © 2006 by The Haworth Press, Inc. All rights reserved.]*

Many psychological disorders are characterized by behaviors that function to reduce the frequency or intensity of aversive internal experiences (e.g., unwanted emotions, cognitions, or sensations). For example, compulsive rituals neutralize obsessional thoughts and images (Salkovskis, 1989), substance use may diminish negative affect (Stasiewicz & Maisto, 1993), and self-injurious behavior may temporarily alleviate acute emotional distress (Leinbenluft, Gardner, & Cowdry, 1987). Hayes and colleagues have described cognitive and behavioral responses that function to reduce unpleasant internal experiences as experiential avoidance (Hayes, Strosahl, & Wilson, 1999; Hayes, Wilson, Gifford, Follette, & Strosahl, 1996). According to Hayes et al., (1996; 1999) avoidance is a common phenomenon that becomes problematic when used chronically as a means of regulating internal experiences, such as emotion and cognition.

A growing body of evidence suggests that attempts to suppress unwanted emotions or thoughts may actually increase the intensity and severity of the emotions and thoughts being avoided (e.g., Salkovskis & Campbell, 1994; Wegner, 1994). Moreover, the chronic use of avoidance has been associated with greater psychopathology such as anxiety (Craske & Hazlett-Stevens, 2002), depressive symptoms (Polusny, Rosenthal, Aban, & Follette, 2004), severity of posttraumatic stress disorder (PTSD) symptomatology (Boeschen, Koss, Figueredo, & Coan, 2001), substance abuse (Polusny et al., 2004; Stasiewicz & Maisto, 1993), greater psychological distress (Marx & Sloan, 2002), and poorer clinical outcomes (e.g., Hayes et al., 1996; Roemer, Litz, Orsillo, & Wagner, 2001). Recent evidence also suggests that avoidance may be causally related to psychological distress. Using structural equation modeling, for example, Lynch, Robins, Morse, and Krause (2001)

found that emotion inhibition mediated the relationship between negative affect intensity and acute psychological distress in both clinical and non-clinical samples.

Although women may stereotypically be viewed as more emotionally expressive than men, a number of studies have documented gender differences in emotion inhibition. For example, females appear better able to hide or control their emotional expressions and control their emotional arousal than men (Bjorklund & Kipp, 1996). Gender differences in emotion inhibition may be attributed in part to gender socialization and gender-role stereotypes that encourage girls to inhibit expression of negative emotions that are inconsistent with the traditional feminine role. These findings must be interpreted with caution since research in this area has been limited, and some researchers have failed to find gender differences in facial expressive control (Gross & Levenson, 1993).

The tendency to engage in avoidance as a means of emotion regulation is likely influenced by multiple proximal and distal factors. However, emotional invalidation in the family environment may be an important developmental risk factor for problems with chronic avoidance or escape from aversive emotions or cognitions. Specifically, processes in the family environment associated with the parental socialization of emotions may contribute to the development of avoidant regulation strategies (Eisenberg, Cumberland, & Spinrad, 1998; Wenzlaff & Eisenberg, 1998). Research has demonstrated that parental responses that acknowledge children's negative emotions and attempt to teach skills for tolerating and regulating these emotions have been associated with children's adaptive coping, the development of emotion regulation skills, and social competence (Eisenberg, Fabes, & Murphy, 1996; Gottman, Katz, & Hooven, 1996). Some evidence suggests that children's emotion regulation abilities mediate the impact of parental emotion socialization behaviors on children's social competence and problem behaviors (Eisenberg et al., 2001; McDowell, Kim, O'Neil, & Parke, 2002). On the other hand, minimizing, punitive, and nonsupportive parental responses that communicate to the child that their negative emotions are not acceptable have been associated with higher levels of avoidance coping and lower levels of social competence (Eisenberg & Fabes, 1994; Eisenberg et al., 1996; Jones, Eisenberg, Fabes, & MacKinnon, 2002).

Gender differences in parental socialization of emotions also have been explored (see Eisenberg et al., 1998 for review). Parents may respond differently to the emotional expressions of daughters compared to sons (Garner, Robertson, & Smith, 1997), and parental reactions may have differential influences on boys' and girls' social competence (Jones

et al., 2002). For example, research suggests that mothers may be more affectively positive in their social interactions with their daughters than with their sons (Garner et al., 1997). Girls may consequently learn that expression of negative affect is not acceptable. Other research indicates that men report greater negative emotion socialization in childhood compared to women (Krause, Mendelson, & Lynch, 2003). Moreover, parents' use of problem focused reactions to children's negative emotions is associated with social competence for boys, but related to poorer social and emotional functioning in girls (Jones et al., 2002).

The importance of parent-child interactions in the socialization of emotions is consistent with Hayes' theory of experiential avoidance, which stipulates that avoidance behaviors are socially encouraged and modeled by the social-verbal community, particularly primary caretakers and family members (Hayes et al., 1996). Unsupportive parental responses to children's negative emotions provide explicit behavioral training in suppressed emotional responding. Parents who lack ability to manage their own emotions effectively may have difficulties helping their children develop effective emotion regulation strategies. Compared to children of nonmaltreating parents, maltreated children engage in greater withholding of negative emotional expressions, show more emotion dysregulation, and use fewer effective strategies for coping with emotionally arousing situations (Shipman & Zeman, 2001). Parents who themselves have developed emotion regulation skills may be better equipped to tolerate their children's negative emotionality and emotional intensity, and consequently may be more effective in teaching skills that lead to more positive socioemotional functioning in their children (Cumberland-Li, Eisenberg, Champion, Gershoff, & Fabes, 2003).

Linehan (1993) suggested that the socialization of emotions in an invalidating family environment places one at risk for problems with emotion regulation, including chronic avoidance. The invalidating environment is broadly characterized by pervasive criticizing, minimizing, trivializing, punishing, or erratically reinforcing communication of private experiences, and over-simplifying the ease of problem solving. For example, a parent may pervasively communicate, "You're not angry, you just think you are," or "When you say no, you really mean yes." According to Linehan, this social process hinders the development of emotion regulation, as emotions become labeled as inappropriate, untrue, unimportant, or due to shameful personal flaws. In this way, deficits may emerge in the ability to identify and discriminate between emotional states, as well as tolerate unpleasant emotions.

There are no published measures designed specifically to assess invalidation in the family environment. However, a recent study examined the relationship between emotional invalidation and psychological distress using retrospective self-report measures of parental socialization of emotions and psychological abuse (Krause et al., 2003). Findings from this study supported a mediational model, whereby chronic ambivalence over emotional expression and suppression of unwanted thoughts mediated the relationship between emotional invalidation and psychological distress in a non-clinical sample. The results from Krause et al. (2003) suggest the possibility that the tendency to inhibit emotional experience and expression may play an important role in the development and maintenance of psychological distress among individuals with a history of emotional invalidation. However, replication studies are needed in order to further support such a model.

Invalidation in the family environment can be characterized and measured in many ways, including sexual, physical, or emotional abuse. However, a prototypical example of invalidation is pervasive familial criticism. Perceived criticism has been linked to higher relapse rates for schizophrenia (Baker, Kazarian, Helmes, Ruckman, & Tower, 1987) and substance use (Fals-Stewart, O'Farrell, & Hooley, 2001), as well as poor treatment outcome for mood disorders (Hooley & Teasdale, 1989) and anxiety disorders (Chambless & Steketee, 1999; Renshaw, Chambless, & Steketee, 2001; Tarrier, Sommerfield, & Pilgrim, 1999).

Parental criticism may have significant importance in the lives of women. Women report receiving more negative interpersonal feedback from their parents and report responding with greater negative affect to such feedback than men (Lundgren & Rudawsky, 1998). Moreover, others have found that parental criticism may have broad effects on girls' self worth. Davison and Birch (2002) found that parental weight-related criticism predicted overweight girls' perception of having lower peer acceptance as well as self-perceptions of having lower physical and cognitive abilities. In addition, Linehan (1993) postulated that emotional invalidation, including pervasive parental criticism, is the primary socially mediated process in the etiology of borderline personality disorder, a disorder characterized primarily by women (American Psychiatric Association, 1994). Taken together, the theoretical and empirical literatures on perceived criticism and avoidance suggest that perceived criticism is a predictor of psychopathology and maladjustment that is consistent with Linehan's theoretical conceptualization of the invalidating family environment.

In the present study, the relationships between perceived criticism in the family of origin, avoidance, and psychological distress in adulthood were examined using a series of regression equations, as proposed by Baron and Kenny (1986). Consistent with Hayes's theory of experiential avoidance and Linehan's conceptualization of invalidating family environments, it was hypothesized that avoidance would mediate the relationship between perceived criticism and psychological adjustment.

METHOD

Participants

Participants were 141 women over the age of 18 enrolled at a state university in the western United States. The mean age was 19.1 (*SD* = 1.6). The majority of participants were Caucasian (79.4%) and reported an annual family income during childhood of $30,000 per year or more (80.8%).

Procedure

All participants were recruited from a larger study examining the role of childhood environmental influences on mental health concerns for women. Accordingly, participation in the current study was restricted to females. Informed consent was obtained, and participants completed self-report questionnaires in small groups of approximately 6-10 women. Following completion of the questionnaires, participants were given a list of community resources for psychological and physical health services. In addition to research credit for psychology coursework, incentives included one $150 and two $50 cash prizes awarded in a lottery after completion of the study.

Measures

Perceived Criticism. The Family Emotional Involvement and Criticism Scale (FEICS; Shields, Franks, Harp, McDaniel, & Campbell, 1992, 1994) was used to assess perceived criticism in the family of origin. The FEICS includes a Perceived Criticism subscale consisting of the following items: "My family approved of most everything I did," "My family found fault with my friends," "My family complained about the way I handled money," "My family approved of my friends,"

"My family complained about what I did for them," "My family was always trying to get me to change," and "I had to be careful what I did or my family would put me down." The FEICS has a stable two factor structure, excellent internal consistency, and has shown convergent and discriminant validity (Shields et al., 1992, 1994). In the present study, Cronbach's alpha for this scale was .84. High scores on this measure reflect reports of higher criticism in the family environment.

Avoidance Coping. The Escape-Avoidance scale of the Ways of Coping Questionnaire (WOC; Folkman & Lazarus, 1988) was used as a measure of the tendency to use escape and avoidance as strategies for coping with stress. Examples of items in this scale include: "I avoided being with people in general," "I refused to believe that it had happened," and "I tried to make myself feel better by eating, drinking, smoking, using drugs, or medications, etc." The Escape-Avoidance subscale has demonstrated adequate internal consistency in previous studies (Folkman & Lazarus, 1988). In the present study, Cronbach's alpha for this scale was .69.

Experiential Avoidance. The 16-item version of the Acceptance and Action Questionnaire (AAQ; Hayes et al., in press) was used to measure the pathological process of individuals' attempts to control, escape, or avoid negatively evaluated private events (e.g., internal experiences such as emotions, thoughts, sensations). Items are rated on a 7-point scale (e.g., $1 = $ *never true*, $4 = $ *sometimes true*, $7 = $ *always true*) with some items requiring reverse scoring. The possible range of scores on the AAQ is 0 to 112, with higher scores indicating greater experiential avoidance.

The AAQ has demonstrated adequate internal consistency (Cronbach's $\pm = .70$) (Hayes et al., in press). Results of confirmatory factor analyses suggest that the scale captures key aspects of experiential avoidance, including control, escape, or avoidance of negatively evaluated private events (e.g., "I try hard to avoid feeling depressed or anxious," "Anxiety is bad," and "I try to suppress thoughts and feelings that I don't like just by not thinking about them"), as well as taking behavioral action despite experiencing aversive private events (e.g., "When I feel depressed or anxious, I am unable to take care of my responsibilities"). Evidence for concurrent validity comes from studies showing that the AAQ correlates moderately with measures of general psychopathology, which is consistent with the assumption that attempts to avoid or control private experiences may often be pathogenic (Hayes et al., in press). The AAQ has demonstrated convergent validity with the White Bear Suppression Inventory (Wegner & Zanakos, 1994) and

discriminant validity with the worry and punishment subscales of the Thought Control Questionnaire (Wells & Davies, 1994). In the present study, Cronbach's alpha for the AAQ was .66.

Psychological Distress. The Symptom Checklist-90 Revised (SCL-90-R; Derogatis & Lazarus 1994) is a 90-item self-report instrument designed to assess a range of psychological problems and symptoms of psychopathology. The global severity index (GSI) was used in this study as a general measure of psychological adjustment. The GSI is obtained by taking the SCL-90-R total score and dividing by the number of items completed, and is commonly used as a sensitive measure of general psychological distress. Extensive research has supported the reliability and validity of the SCL-90-R (e.g., Derogatis & Lazarus 1994; Nezu, Ronan, Meadows, & McClure, 2000). In the present study, Cronbach's alpha for the SCL-90R GSI was .96.

Data Analytic Plan

The multiple regression strategy outlined by Baron and Kenny (1986) and Holmbeck (1997) was used to test avoidance as a mediator in the relationships between perceived criticism in the family of origin and psychological distress in adulthood. According to Baron and Kenny (1986), four statistical criteria must be met to establish a variable as a mediator, and these four conditions can be tested using a series of regression analyses (Holmbeck, 1997). First, there must be a significant relationship between the predictor variable (perceived criticism) and the mediator (avoidance). Second, a significant relationship must be established between the predictor and the dependent variable (psychological distress). Third, the mediator must be significantly related to the dependent variable. Fourth, the relationship between the predictor and the dependent variable must be significantly reduced when the mediator is added to the regression equation. Sobel's (1982) formula was used to test whether the association between perceived criticism and psychological distress was significantly reduced after adding avoidance to the regression equation.

RESULTS

Table 1 presents means, standard deviations, and bivariate intercorrelations among variables. As hypothesized, variables were significantly positively correlated. Because the avoidance variables (i.e., AAQ & WOC-EA) were highly correlated, and to reduce the possibility

TABLE 1. Means, Standard Deviations, and Intercorrelations Between Perceived Criticism, Avoidance Measures, and Psychological Distress (N = 141)

Variable	1	2	3	4	Mean	S.D.
1. PC	--				11.08	5.37
2. WOC-EA	.24**	--			5.27	4.09
3. AAQ	.27**	.41**	--		54.48	9.84
4. SCL-90R GSI	.21*	.37**	.48**	--	.43	.35

Note. *p < .05, **p < .01
PC = Perceived criticism score on the Family Emotional Involvement and Criticism Scale;
WOC-EA = Ways of Coping-Escape/Avoidance Score; AAQ = Acceptance and Action
Questionnaire; SCL-90R = Symptom Checklist-90 Revised Global Symptom Index.

of committing Type I errors, a composite measure of avoidance was created by using a z-score transformation of each variable and then combining the two transformed scores. The combined avoidance z-scores were used in subsequent analyses.

Regression analyses were then conducted as outlined above based on Baron and Kenny (1986) and Holmbeck (1997). First, the impact of perceived criticism on avoidance was examined. Perceived criticism was a significant predictor of higher avoidance (^{2} = .29, p < .001). Second, the impact of perceived criticism on psychological distress was examined. Perceived criticism was a significant predictor of higher psychological distress (^{2} = .21, p < .05).

The final regression equation tested: (a) whether avoidance was significantly related to psychological distress, and (b) whether the effect of perceived criticism on psychological distress was reduced when avoidance was added to the regression equation. Simultaneous entry of variables was used (Baron & Kenny, 1986). Avoidance was significantly related to psychological distress (^{2} = .50, p < .0001), and when added to the equation, there was a reduction in betas for perceived criticism (from ^{2} = .21, p < .05 to ^{2} = .06, p > .05), which was significant (z = 3.09; p < .01) using Sobel's (1982) test. These findings demonstrated that avoidance fully mediated the relationships between perceived criticism in the family of origin and psychological distress in adulthood.

Results of the regression analyses are shown in the path diagram in Figure 1. The direct effect of perceived criticism on psychological distress is represented by the standardized coefficient for path C (^{2} = .21). The indirect effect of perceived criticism on psychological distress was computed by multiplying the standardized coefficients of paths A and B that link perceived criticism to psychological distress through avoidance ([^{2}{A} = .29 $\times$ ^{2}{B} = .50] = .15). In summary, avoidance ac-

FIGURE 1. Path diagram of regression analyses (standardized beta weights) showing avoidance fully mediating the relationships between perceived criticism in the family of origin and psychological distress in adulthood. $*p < .01$, $**p < .001$.
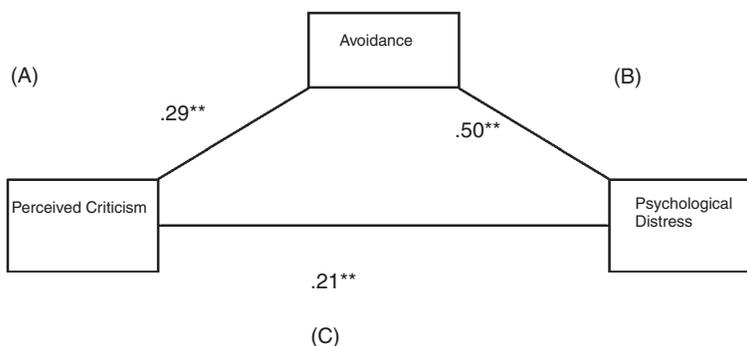
counted for 15% of the total effect of perceived criticism on psychological distress.

DISCUSSION

Findings from this study support the hypothesis that avoidance mediates the relationship between perceived criticism in the family of origin and psychological maladjustment in adulthood. These results are consistent with an emerging developmental literature on the adverse effects of parental emotional restriction in childhood (Eisenberg et al., 1998, 2001; Krause et al., 2003; Wenzlaff & Eisenberg, 1998). Children raised in families characterized by high criticism and punishing responses to emotional expression are at risk for problems identifying and communicating emotions, such as alexithymia (Kench & Irwin, 2000; Le, Berenbaum, & Raghavan, 2002), greater psychological distress (Garside & Klimes-Dougan, 2002), or the development of more severe pathology such as borderline personality disorder (Linehan, 1993; Weaver & Clum, 1993). Children in such families may learn by modeling or direct aversive contingencies that expressions of certain internal experiences are unacceptable, and efforts to suppress or control these experiences may be reinforced by family members.

Findings in this study are consistent with converging lines of research pointing to the pathogenic role of chronic avoidance or inhibition

of emotions. Meta-analytic reviews suggest that deliberate attempts to suppress unwanted thoughts may result in a modest rebound effect (Abramowitz, Tolin, & Street, 2001; Wenzlaff & Wegner, 2000). In a series of studies, Lynch and colleagues found that emotion inhibition mediates the relationship between: (a) affect intensity and psychological distress, (b) the personality trait of dependency and eating disorder symptomatology, and (c) childhood emotional invalidation and psychological distress (Krause et al., 2003; Krause, Robins, & Lynch, 2000; Lynch et al., 2001). The present study replicates findings from Krause et al. (2003), providing additional evidence that avoidance may indeed function as a mediator in the relationship between perceptions of emotional/psychological abuse or criticism in childhood and psychological distress in adulthood. By using different measures of family invalidation and avoidance and explicitly examining the role of avoidance as a maladaptive style of regulating emotions in the lives of women, the present study extends previous research. In contrast to Krause et al. (2003), which included small samples of both men ($n = 49$) and women ($n = 78$), the current study is the first to test the proposed mediational model in a larger sample of women.

These findings have direct clinical relevance to several recently developed psychosocial treatments designed to target problems associated with the avoidance of unpleasant emotions and cognitions: Dialectical Behavior Therapy (DBT; Linehan, 1993) and Acceptance and Commitment Therapy (ACT; Hayes et al., 1999). In DBT, the underlying theoretical model states that invalidation in the family environment, including pervasive criticism, is the primary social process that mediates the emergence of psychopathology (Linehan, 1993). Emotion regulation skills are taught in DBT to help develop skills in emotional awareness, discrimination between emotional states, and emotional acceptance. In ACT, experiential exercises and metaphors are used to alter problematic language processes associated with the avoidance of emotions. These treatments both highlight the importance of the family environment in the development of skillful emotion regulation styles.

There are several important limitations to this study. First, assessment relied on retrospective self-report instruments. Because these variables are by definition historical and distal, there is some concern for errors in reporting. Responses to items assessing perceived criticism in the family of origin at best reflect one's current perception of historical events. At worst, retrospective self-reports are under the control of extraneous variables not controlled for in this study, such as social desirability or personality variables (e.g., pessimism). Second, the cross-

sectional nature of these data precludes the direct test of a developmental theory. Direct tests of the developmental effects of family invalidation on avoidance and subsequent problems in functioning can be addressed with prospective studies.

Third, the broader theoretically driven constructs of interest, experiential avoidance, and the invalidating family environment, both may be best assessed using a multi-trait multi-method approach (Campbell & Fiske, 1959). For example, invalidation in the family environment or psychological abuse can be characterized in a number of ways, including the punishment of emotional expression, chronic hostility, emotional over-involvement, humiliation, and emotional neglect. Similarly, pervasive familial criticism is a specific example of invalidation or psychological abuse. Although parental criticism is one component of expressed emotion, a construct associated with family environments of children with externalizing problems (Peris & Baker, 2000), as well as patients with mood disorders (Hooley & Teasdale, 1989) or schizophrenia (e.g., Baker et al., 1987), studies aiming to clarify the relationship between criticism and other aspects of emotional invalidation or psychological abuse are warranted. Because the broader construct of psychological abuse has historically had definitional problems (O' Hagan, 1995), future studies more thoroughly examining this construct would benefit from including multiple methods (e.g., self report, observation) and measures. In addition, it may be fruitful for studies in this area to assess the construct of avoidance in different ways, including via observation, interview, or with different self-report instruments (e.g., avoidant coping, avoidance as a symptom of post-traumatic stress, and as a general style of responding to aversive internal experiences). The measurement of these aspects of avoidance would allow for important distinctions to be made in specifying the precise pathogenic process of chronic avoidance.

Fourth, because this study involved the use of an undergraduate, predominantly Caucasian sample, it is unknown whether the results of this study are generalizeable to clinical, community, or ethnically diverse populations. Although the use of a non-clinical sample in this study provides important preliminary findings, future studies utilizing clinical samples will help clarify whether avoidance differentially influences specific psychological problems, or if it or more generally underlies maladjustment and distress. In addition, because previous studies suggest that males report higher levels of emotional invalidation than females (Krause et al., 2003), the exclusion of males in this study is a key limitation. Future studies are needed in order to more comprehensively understand whether emotional invalidation in the family environment

differentially impacts the development of preferred emotion regulation strategies in males compared to females.

Few would argue with the notion that psychopathology is often related to dysfunctional family environments that teach maladaptive coping skills. Future research that better elucidates the mechanisms underlying this relationship has important implications not only for understanding the development of psychopathology, but also in suggesting targets for intervention in clients presenting with problems associated with avoidance.

REFERENCES

Abramowitz, J. S., Tolin, D. F., & Street, G. P. (2001). Paradoxical effects of thought suppression: A meta-analysis of controlled studies. *Clinical Psychology Review*, *21*, 683-703.

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th Ed.). Washington, DC: Author.

Baker, B., Kazarian, S. S., Helmes, E., Ruckman, M., & Tower, N. (1987). Perceived attitudes of schizophrenic inpatients in relation to rehospitalization. *Journal of Consulting and Clinical Psychology*, *55*, 775-777.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.

Bjorklund, D. F., & Kipp, K. (1996). Parental investment theory and gender differences in the evolution of inhibition mechanisms. *Psychological Bulletin*, *120*, 163-188.

Boeschen, L. E., Koss, M. P., Figueredo, A. J., & Coan, J. A. (2001). Experiential avoidance and posttraumatic stress disorder: A cognitive mediational model of rape recovery. *Journal of Aggression, Maltreatment & Trauma*, *4*, 211-245.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multi-trait-multimethod matrix. *Psychological Bulletin*, *56*, 81-105.

Chambless, D. L., & Steketee, G. (1999). Expressed emotion and behavior therapy outcome: A prospective study with obsessive-compulsive and agoraphobic outpatients. *Journal of Consulting and Clinical Psychology*, *67*, 658-665.

Craske, M. G., & Hazlett-Stevens, H. (2002). Facilitating symptom reduction and behavior change in GAD: The issue of control. *Clinical Psychology: Science and Practice*, *9*, 69-75.

Cumberland-Li, A., Eisenberg, N., Champion, C., Gershoff, E., & Fabes, R. A. (2003). The relation of parental emotionality and related dispositional traits to parental expression of emotion and children's social functioning. *Motivation & Emotion*, *27*, 27-56.

Davison, K. K., & Birch, L. L. (2002). Processes linking weight status and self-concept among girls from ages 5 to 7 years. *Developmental Psychology*, *38*, 735-748.

Derogatis, L. R., & Lazarus, L. (1994). SCL-90-R, Brief Symptom Inventory, and matching clinical rating scales. In M. Maruish (Ed.), *The use of psychological testing for treatment planning and outcome assessment* (pp. 217-248). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, *9*, 317-333.

Eisenberg, N., & Fabes, R. A. (1994). Mothers' reactions to children's negative emotions: Relations to children's temperament and anger behavior. *Merrill-Palmer Quarterly*, *40*, 138-156.

Eisenberg, N., Fabes, R. A., & Murphy, B. C. (1996). Parents' reactions to children's negative emotions: Relations to children's social competence and comforting behavior. *Child Development*, *67*, 2227-2247.

Eisenberg, N., Losoya, S., Fabes, R. A., Guthrie, I. K., Reiser, M., Murphy, B. et al. (2001). Parental socialization of children's dysregulated expression of emotion and externalizing problems. *Journal of Family Psychology*, *15*, 183-205.

Fals-Stewart, W., O'Farrell, T. J., & Hooley, J. M. (2001). Relapse among married or cohabitating substance-abusing patients: The role of perceived criticism. *Behavior Therapy*, *32*, 787-801.

Folkman, S., & Lazarus, R. S. (1988). *Ways of Coping Questionnaire manual*. Palo Alto, CA: Mind Garden/Consulting Psychologists Press.

Garner, P. W., Robertson, S., & Smith, G. (1997). Preschool children's emotional expressions with peers: The role of gender and emotion socialization. *Sex Roles*, *36*, 675-691.

Garside, R. B., & Klimes-Dougan, B. (2002). Socialization of discrete negative emotions: Gender differences and links with psychological distress. *Sex Roles*, *47*, 115-128.

Gottman, J. M., Katz, L. F., & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology*, *10*, 243-268.

Gross, J.J., & Levenson, R.W. (1993). Emotional suppression: Physiology, self-report, and expressive behavior. *Journal of Personality and Social Psychology*, *64*, 970-986.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York: Guilford Press.

Hayes, S. C., Strosahl, K., Wilson, K. G., Bissett, R. T., Pistorello, J., Toarmino, D. et al. (in press). The Acceptance and Action Questionnaire (AAQ) as a measure of experiential avoidance. *Psychological Record.*

Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, *64*, 1152-1168.

Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology*, *65*, 599-610.

Hooley, J. M., & Teasdale, J. D. (1989). Predictors of relapse in unipolar depressives: Expressed emotion, marital distress, and perceived criticism. *Journal of Abnormal Psychology*, *98*, 229-235.

Jones, S., Eisenberg, N., Fabes, R. A., & MacKinnon, D. P. (2002). Parents' reactions to elementary school children's negative emotions: Relations to social and emotional functioning at school. *Merrill-Palmer Quarterly*, *48*, 133-159.

Kench, S., & Irwin, H. J. (2000). Alexithymia and family environment. *Journal of Clinical Psychology*, *56*, 737-745.

Krause, E. D., Mendelson, T., & Lynch, T. R. (2003). Childhood emotion invalidation and adult psychological distress: The mediating role of emotion inhibition. *Child Abuse and Neglect*, *27*, 199-213.

Krause, E. D., Robins, C.J., & Lynch, T.R. (2000). A mediational model relating sociotropy, ambivalence over emotional expression and eating disorder symptoms. *Psychology of Women Quarterly*, *24*, 328-335.

Le, H., Berenbaum, H., Raghavan, C. (2002). Culture and alexithymia: Mean levels, correlates and the role of parental socialization of emotions. *Emotion*, *2*, 341-360.

Leinbenluft, E., Gardner, D. L., & Cowdry, R. W. (1987). The inner experience of the borderline self-mutilator. *Journal of Personality Disorders*, *1*, 317-324.

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: Guilford Press.

Lundgren, D. C., & Rudawsky, D. J. (1998). Female and male college students' responses to negative feedback from parents and peers. *Sex Roles*, *39*, 409-429.

Lynch, T. R., Robins, C. J., Morse, J. Q., & Krause, E. D. (2001). A mediational model relating affect intensity, emotion inhibition, and psychological distress. *Behavior Therapy*, *32*, 519-536.

Marx, B. P., & Sloan, D. M. (2002). The role of emotion in the psychological functioning of adult survivors of childhood sexual abuse. *Behavior Therapy*, *33*, 563-577.

McDowell, D., Kim, M., O'Neil, R., & Parke, R. D. (2002). Children's emotional regulation and social competence in middle childhood: The role of maternal and paternal interactive style. *Marriage & Family Review*, *34*, 345-364.

Nezu, A. M., Ronan, G. F., Meadows, E. A., & McClure, K. S. (2000). *Practitioner's guide to empirically based measures of depression*. Dordrecht, Netherlands: Kluwer Academic Publishers.

O' Hagan, K. P. (1995). Emotional and psychological abuse: Problems of definition. *Child Abuse and Neglect*, *19*, 449-461.

Peris, T. S., & Baker, B. L. (2000). Applications of the expressed emotion construct to young children with externalizing behavior: Stability and prediction over time. *Journal of Child Psychology & Psychiatry & Allied Disciplines*, *41*, 457-462.

Polusny, M. A., Rosenthal, M. Z., Aban, I., & Follette, V. M. (2004). Experiential avoidance as a mediator of the effects of adolescent sexual victimization on adult psychological distress. *Violence and Victims*, *19*, 1-12.

Renshaw, K. D., Chambless, D., & Steketee, G. (2001). Comorbidity fails to account for the relationship of expressed emotion and perceived criticism to treatment outcome in patients with anxiety disorders. *Journal of Behavior Therapy and Experimental Psychiatry*, *32*, 145-158.

Roemer, L., Litz, B. T., Orsillo, S. M., & Wagner, A. W. (2001). A preliminary investigation of the role of strategic withholding of emotions in PTSD. *Journal of Traumatic Stress*, *14*, 149-156.

Salkovskis, P. M. (1989). Cognitive-behavioral factors and the persistence of intrusive thoughts in obsessional problems. *Behavior Research and Therapy*, *27*, 677-682.

Salkovskis, P. M., & Campbell, P. (1994). Thought suppression induces intrusion in naturally occurring negative intrusive thoughts. *Behavior Research and Therapy*, *32*, 1-8.

Shields, C. G., Franks, P., Harp, J. J., McDaniel, S. H., & Campbell, T. L. (1992). Development of the Family Emotional Involvement and Criticism Scale (FEICS): A self-report scale to measure expressed emotion. *Journal of Marital and Family Therapy*, *18*, 395-407.

Shields, C. G., Franks, P., Harp, J. J., McDaniel, S. H., & Campbell, T. L. (1994). Family Emotional Involvement and Criticism Scale (FEICS): II. Reliability and validity studies. *Family Systems Medicine*, *12*, 361-377.

Shipman, K. L., & Zeman, J. (2001). Socialization of children's emotion regulation in mother-child dyads: A developmental psychopathology perspective. *Development and Psychopathology*, *13*, 317-336.

Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equation models, In S. Leinhart (Ed.), *Sociological methodology* (pp. 290-312). San Francisco: Jossey-Bass.

Stasiewicz, P. R., & Maisto, S. A. (1993). Two-factor avoidance theory: The role of negative affect in the maintenance of substance use and substance use disorder. *Behavior Therapy*, *24*, 337-356.

Tarrier, N., Sommerfield, C., & Pilgrim, H. (1999). Relatives' expressed emotion (EE) and PTSD treatment outcome. *Psychological Medicine*, *29*, 801-811.

Weaver T. L., & Clum, G. A. (1993). Early family environments and traumatic experiences associated with borderline personality disorder. *Journal of Consulting & Clinical Psychology*, *61*, 1068-1075.

Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review*, *101*, 34-52.

Wegner, D. M., & Zanakos, S. (1994). Chronic thought suppression. *Journal of Personality*, *62*, 615-640.

Wells, A., & Davies, M. I. (1994). The Thought Control Questionnaire: A measure of individual differences in the control of unwanted thoughts. *Behavior Research and Therapy*, *32*, 871-878.

Wenzlaff, R. W., & Eisenberg, A. R. (1998). Parental restrictiveness of negative emotions: Sowing the seeds of thought suppression. *Psychological Inquiry*, *9*, 310-313.

Wenzlaff, R. M., & Wegner, D. M. (2000). Thought suppression. *Annual Review of Psychology*, *51*, 59-91.