Journal of Rational-Emotive & Cognitive-Behavior Therapy, Vol. 21, No. 2, Summer 2003 (© 2003)

DIMENSIONS OF PERFECTIONISM, UNCONDITIONAL SELF-ACCEPTANCE, AND DEPRESSION

Gordon L. Flett
Avi Besser
Richard A. Davis
York University
Paul L. Hewitt
University of British Columbia

ABSTRACT: The current research investigated the associations among dimensions of perfectionism, unconditional self-acceptance, and self-reported depression. A sample of 94 students completed the Multidimensional Perfectionism Scale, the Unconditional Self-Acceptance Questionnaire, and a self-report depression measure. Correlational results indicated that all three trait dimensions of perfectionism (i.e., self-oriented, other-oriented, and socially prescribed perfectionism) were associated negatively with unconditional self-acceptance. Also, as expected, depression was associated with relatively low unconditional self-acceptance. Finally, a path analysis revealed that unconditional self-acceptance mediated the association between socially prescribed perfectionism and depression, and other-oriented perfectionism was found to affect depression only indirectly through its association with low levels of self-acceptance. The findings indicate that perfectionists evaluate themselves in terms of a contingent sense of self-worth, and as such, they are vulnerable to psychological distress when they experience negative events that do not affirm their self-worth.

This research was supported by a major research grant from the Social Sciences and Humanities Research Council (SSHRC) of Canada and a sabbatical leave fellowship from York University to the first author. We would like to thank Colleen O'Brien Wood for her assistance with participant recruitment.

Address correspondence to Gordon L. Flett, Department of Psychology, York University, 4700 Keele Street, Toronto, Ontario, M3J 1P3, Canada.

KEY WORDS: perfectionism; depression; self-acceptance; self-worth.

Seminal theorists such as Albert Ellis and Carl Rogers have suggested that conditional self-worth is associated with psychological distress, but unconditional self-acceptance is a condition that fosters personal adjustment and well-being (Ellis, 1962; Rogers, 1951). Ellis (1962, 1977, 1995) has gone so far as to suggest that people with extremely high self-esteem are vulnerable individuals because they are often characterized by conditional self-acceptance as well as an excessive focus on evaluations, including social comparisons with other people.

The perfectionism literature abounds with case descriptions of perfectionists who find it difficult to unconditionally accept themselves, and parenthetically, these individuals are greatly concerned and preoccupied with obtaining the approval and avoiding the disapproval of other people (Flett & Hewitt, 2002). This inability to unconditionally accept the self sometimes extends to an inability to accept other people. For example, Ellis (2002) related the case study of John, a 36-year-old accountant who demanded perfection from himself and others. Ellis observed that John was:

> equally perfectionistic about his wife Sally and his two accounting partners. They, too, had to—yes, had to—perform well, dress well, and even play tennis well. And often they didn't, those laggards! John, of course, couldn't control others as he strove for his own perfection, so he was frequently enraged against his "careless" wife and partners, much more than he was anxious about his own performances. (Ellis, 2002, p. 225)

Contemporary research on individual differences in unconditional self-acceptance has confirmed that a lack of unconditional self-acceptance is deleterious to personal well-being. Recently, Chamberlain and Haaga (2001a) developed a 20-item self-report measure known as the Unconditional Self-Acceptance Questionnaire. Their initial research showed that low levels of unconditional self-acceptance were associated with depression and anxiety, as well as low levels of self-esteem, happiness, and life satisfaction in a community sample comprised of 107 volunteers. A related investigation examined the correlates of this scale in a sample of undergraduate students (Chamberlain & Haaga, 2001b). They also investigated how students low versus high in unconditional self-acceptance reacted to negative feedback in the context of

giving 90-second speeches to a small audience of students. Chamberlain and Haaga (2001b) reported that low levels of unconditional self-acceptance were associated with low self-esteem and elevated levels of self-esteem lability and proneness to depression. In general, they also found that students with higher levels of unconditional self-acceptance, relative to those with lower levels of unconditional self-acceptance, were less reactive to negative feedback about their performance on the public speaking task, and they tended to be more objective in their personal performance evaluations.

Numerous issues involving unconditional self-acceptance remain to be investigated. For instance, although the case descriptions of perfectionists suggest that they have low levels of unconditional self-acceptance, there is a relative paucity of empirical research on this issue. Accordingly, the purpose of the present article is to describe research on the association between unconditional self-acceptance and perfectionism. Consistent with our general approach, perfectionism was assessed as a multidimensional construct, as described by Hewitt and Flett (1991b). They developed a measure of perfectionism titled the Multidimensional Perfectionism Scale. This scale assesses three dimensions of perfectionism—self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. Whereas self-oriented perfectionism entails a striving for personal standards of perfection, other-oriented perfectionism involves a focus on the capabilities of others. As such, other-oriented perfectionism is associated with hostility and extrapunitive tendencies toward others rather than negative self-judgments (Hewitt & Flett, 1991b). The third dimension of perfectionism—socially prescribed perfectionism—is the component of perfectionism that is related most consistently to maladjustment. Socially prescribed perfectionism is a stable trait that is based on the perception that others have unrealistic standards and perfectionistic motives for one's own behaviors, and others will be satisfied only when these standards are attained. This perfectionism dimension is related to numerous social interaction variables including fear of negative social evaluation, belief in the external control of reinforcement, and need for the approval of others (Hewitt & Flett, 1991b). The perceived imposition of demands for perfection on the self is associated with a wide variety of psychological problems including depression, anxiety, suicidal tendencies, and personality disorders (Flett, Hewitt, Blankstein, & Mosher, 1995; Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Hewitt & Flett, 1991a, 1991b, 1993; Hewitt, Flett, & Ediger, 1996; Hewitt, Flett, & Endler, 1995; Hewitt, Flett, & Turnbull, 1992; Hewitt, Flett, & Weber, 1994; Mor, Day, Flett, & Hewitt, 1995).

GOALS OF THE CURRENT STUDY

As alluded to previously, the first goal of the current study was to examine the association between dimensions of perfectionism and unconditional self-acceptance. Recently, Flett, Hewitt, Oliver, and Macdonald (2002) postulated that dimensions of perfectionism might be associated with a contingent sense of self-worth and low unconditional self-acceptance. Similarly, Ellis (2002) pointed to the general hypercompetitiveness of perfectionists and suggested that they may exhibit a personality style that is focused excessively on evaluative outcomes, once again suggesting a link between perfectionism and a diminished sense of unconditional self-acceptance.

Some evidence of a link between perfectionism and low levels of unconditional self-acceptance was obtained in a study by Flett, Russo, and Hewitt (1994) that focused broadly on the association between dimensions of perfectionism and constructive thinking as assessed by Constructive Thinking Inventory (Epstein & Meier, 1989). Analyses that focused on overall levels of constructive thinking showed that socially prescribed perfectionism was associated with lower levels of constructive thinking. This study is particularly relevant to the current study because the Constructive Thinking Inventory includes a measure of self-acceptance, which is conceptualized as a positive form of emotional coping (Epstein & Meier, 1989). Flett et al. (1994) conducted analyses involving this subscale and found that all three perfectionism dimensions were associated significantly with lower levels of self-acceptance.

Another goal of the current study was to examine the associations among perfectionism, unconditional self-acceptance, and psychological distress, and to test the related possibility that unconditional self-acceptance mediates the association between perfectionism and distress. One potentially important line of investigation that has emerged in recent research focuses on the possibility that self-esteem mediates the link between perfectionism and depression (Preusser, Rice, & Ashby, 1994; Rice, Ashby, & Slaney, 1998). Research on perfectionism and self-esteem is significant from both a theoretical perspective and a practical perspective. At the theoretical level, evidence that self-esteem mediates the link between perfectionism and depression signifies that conceptual models should distinguish trait measures of standard setting (i.e., perfectionism) and the self-evaluative reactions that individuals have to their attainment or lack of attainment of perfectionistic standards. At the practical level, as alluded to earlier, if self-esteem

mediates the association between perfectionism and depression, it points to the need for positive interventions designed to bolster and foster a more positive sense of the self as a way of increasing the resilience and well-being of perfectionists.

Preusser et al. (1994) administered the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991b), the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and the Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979) to 167 undergraduate students. Correlation analyses indicated that self-oriented perfectionism and socially prescribed perfectionism in women were both associated with lower self-esteem and increased depression. Self-esteem in men was associated negatively with socially prescribed perfectionism, but it was not associated significantly with self-oriented perfectionism. Depression was associated significantly with both self-oriented and socially prescribed perfectionism. More importantly, tests of mediational effects found that self-esteem mediated the link between socially prescribed perfectionism for men and women. Moreover, self-esteem mediated the link between self-oriented perfectionism and depression in women.

Rice et al. (1998) conducted structural equation analyses of levels of perfectionism, self-esteem, and depression in a cross-sectional sample of students. First, they used factor analyses to identify a factor they described as "adaptive perfectionism" and a second factor described as "maladaptive perfectionism." The adaptive perfectionism factor was derived from scores on subscales assessing personal standards, order, and organization subscales. The maladaptive perfectionism factor included subscales from the Frost, Marten, Lahart, and Rosenblate (1990) measure (i.e., concern over mistakes, doubts about actions, parental criticism, and high parental expectations).

Subsequent structural equation modeling analyses showed that self-esteem was a partial mediator of the link between maladaptive perfectionism and depression, and there was still a direct link between maladaptive perfectionism and depression. The predicted positive association between adaptive perfectionism and self-esteem was not evident.

More recently, Flett et al. (2003) conducted two studies that examined perfectionism, self-esteem, and depression in students, with the caveat that self-esteem was studied in terms of two facets of self-esteem (i.e., self-liking and self-competence) identified by Tafarodi and Swann (1995, 2001). Flett et al. found that socially prescribed perfectionism had an indirect association with depression through its association with low self-liking and low self-competence. However, there

was also a direct link between socially prescribed perfectionism and depression, in addition to this indirect association.

The current study differs from previous research by focusing specifically on unconditional self-acceptance rather than a global measure of self-esteem. This is an important distinction because some people may have positive views of themselves but this positive sense of self is contingent on the reactions of other people. Chamberlain and Haaga (2001a, 2001b) have shown that unconditional self-acceptance is associated with general self-esteem, as might be expected, but the two constructs are not correlated to the extent that they are redundant with each other. There are also important conceptual differences between the constructs, so it is important to supplement previous work on perfectionism and self-esteem by adopting an extended focus on unconditional self-acceptance.

In summary, the current study examined the association between dimensions of perfectionism and unconditional self-acceptance. Also, in addition to examining how these variables are associated with depression, we also tested a mediational model that links perfectionism, low unconditional self-acceptance, and depression. We focused on a sample of university students not only because they are convenient but also because a focus on evaluative pressures involving the self is a highly salient aspect of the experience of many university students (Vredenburg, Flett, & Krames, 1993).

METHOD

Participants

The participants in our sample were 94 students (76 women, 16 men, and 2 unspecified) from York University. They were volunteers from a second-year psychology course. The mean age of these participants was 21.30 years ($SD = 2.60$).

Measures and Procedure

Participants were required to sign an informed consent form and then were asked to complete a battery of questionnaires that included the following.

Multidimensional Perfectionism Scale (MPS). The *MPS* (Hewitt & Flett, 1991b) has three subscales of 15 items each. Respondents make

7-point ratings of statements reflecting self-oriented perfectionism (e.g., "One of my goals is to be perfect in everything I do"), other-oriented perfectionism (e.g., "If I ask someone to do something, I expect it to be done flawlessly"), and socially prescribed perfectionism (e.g., "My family expects me to be perfect"). Extensive evidence indicates that the MPS subscales have adequate reliability and validity (Flett, Sawatzky, & Hewitt, 1995; Frost et al., 1993; Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991). For instance, MPS scores are correlated with perfectionism ratings made by significant others and by clinicians (Hewitt & Flett, 1991b).

Unconditional Self-Acceptance Questionnaire. The Unconditional Self-Acceptance Questionnaire (Chamberlain & Haaga, 2001a) is a 20-item scale with 11 reverse-keyed items. It consists of such items as "I believe that I am worthwhile simply because I am a human being" and "I feel I am a valuable person even when other people disapprove of me."

The Center for Epidemiological Studies Depression (CES-D). The *CES-D* scale is a 20-item inventory with items that measure the affective and somatic symptoms of depression. It is a well-known measure that has acceptable levels of internal consistency (Radloff, 1977).

RESULTS

Correlational Analyses

Table 1 presents the correlations, means, and standard deviations for all the measures used in the current study. Due to the relatively low number of men in this sample the analyses focused on the total sample. The zero-order correlations indicated that all three perfectionism dimensions were associated significantly with relatively low levels of unconditional self-acceptance, with the strongest association involving low unconditional self-acceptance and socially prescribed perfectionism, $r = -.47$, $p < .001$.

As expected, lower levels of unconditional self-acceptance were also associated with increased levels of depressive symptoms, $r = -.34$, $p < .001$. Analyses with the MPS dimensions indicated further that only socially prescribed perfectionism was associated significantly with depressive symptoms.

Table 1

Zero-Order Correlations, Means, and Standard Deviations for the Study Variables

Variables	*1*	*2*	*3*	*4*	*5*	*M*	*SD*
1. Self-oriented perfectionism	—	—	—	—	—	62.74	12.92
2. Other-oriented perfectionism	.47***	—	—	—	—	58.57	11.42
3. Socially prescribed perfectionism	.41***	.31**	—	—	—	52.61	12.33
4. Unconditional self-acceptance	−.29**	−.38***	−.47***	—	—	81.73	14.75
5. Depression	−.05	.01	.27**	−.34***	—	16.93	10.54

Note: $n = 94$ (two-tailed test).
*$p < .05$; **$p < .01$; ***$p < .001$.

Analyses of Mediation

Next, we used path analysis models to test the role of unconditional self-acceptance in the association between perfectionism and depressive symptomatology. Analyses were conducted with AMOS 4.0 based on the variance-covariance matrix (AMOS 4.0, Arbuckle, 1999). We tested the fit of the models using maximum likelihood estimations. In evaluating the overall goodness-of-fit for the Structural Equation Modeling (SEM) models, the following criteria were used: (a) the chi-square (χ^2) p value, which if $p > .05$ indicates that there are no statistically significant discrepancies between the observed data and the hypothesized model and the chi-square/df ratio[1]; (b) the Normed Fit Index (*NFI*; Bentler & Bonett, 1980), which specifies the amount of covariation in the data that is accounted for by the hypothesized model relative to a null model that assumes independence among factors; and (c) the Robust Comparative Fit Index (*CFI*; Bentler, 1990) and the

[1]Although a nonsignificant p value has traditionally been used as a criterion for not rejecting a SEM, this criterion is overly strict and sensitive for models with numerous variables (Kelloway, 1998). Therefore, we also used alternate criteria that reflect the real-world conditions of clinical research. We have chosen to accept a model in which the chi-square divided by the degrees of freedom ratio is less than two, or in which the *CFI*, *GFI*, and *NFI* are greater then 0.90. These moderately stringent acceptance criteria will clearly reject inadequate or poorly specified models, while accepting consideration models that meet real-world criteria for reasonable fit and representation of the data (Kelloway, 1998).

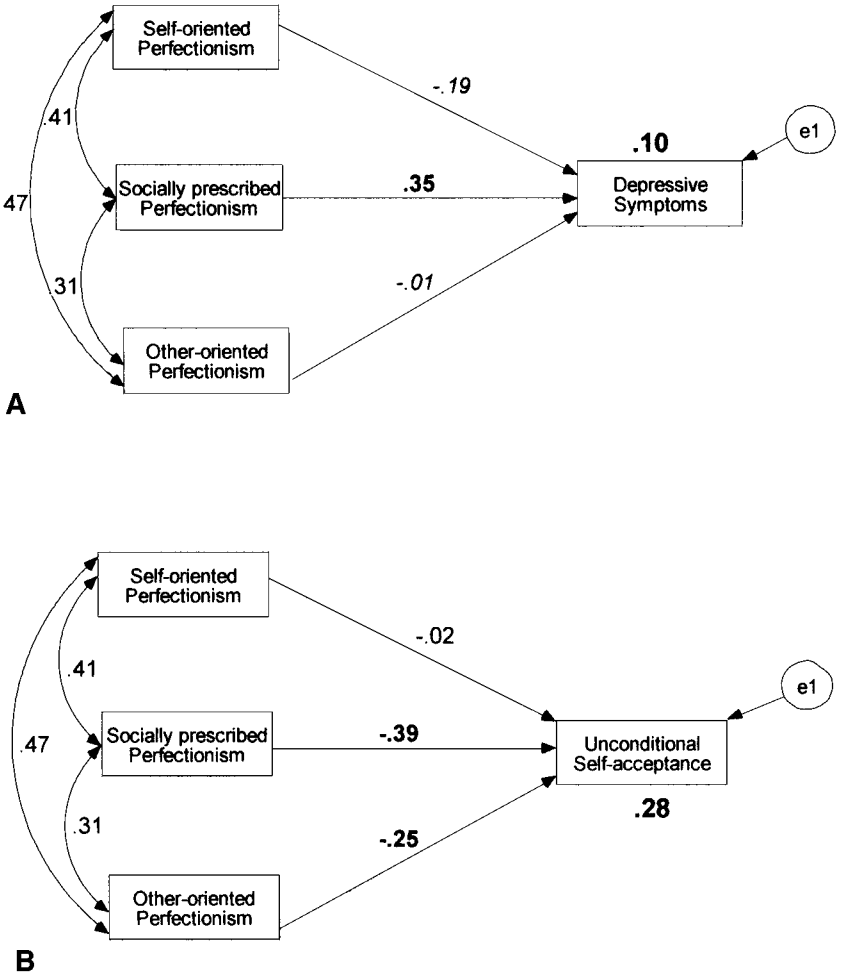
Goodness of Fit Index (*GFI*; Jöreskog & Sörbom, 1984), indexes similar to the *NFI*, that adjusts for the sample size (for the *NFI*, *CFI*, and *GFI* a cutoff of 0.90 is generally accepted as indicating a good fit, where 1.0 indicates a perfect fit).

Structural Models Specification

We followed Baron and Kenny's (1986) criteria for mediation according to which: First, there must be a significant association between the exogenous predictors, perfectionism dimensions, and endogenous criterion depression variables. Second, in an equation including both the mediator and the depression endogenous criterion variable, there must be a significant association between the perfectionism exogenous predictors and unconditional self-acceptance endogenous mediator, and the unconditional self-acceptance mediator must be a significant predictor of the depression endogenous criterion variable. Next, if there is a decline in the significant direct association between the perfectionism exogenous predictor and the depression endogenous criterion variables in the equation (including both the unconditional self-acceptance mediator and the perfectionism predictors variables), then the obtained pattern is consistent with the mediation hypothesis. If the direct-effect approaches zero, the unconditional self-acceptance mediator can be said to fully (although not necessarily exclusively) account for the relation between perfectionism (predictor) and depression (outcome; Baron & Kenny, 1986).

Analysis of the Direct Effect Model

Two models were estimated in the first step. In the first model we estimated the combined direct effects of self-oriented, other-oriented, and socially prescribed perfectionism exogenous observed variables on depression endogenous criterion variable scores. Similarly, in the second model, we estimated the combined direct effects of self-oriented, other-oriented, and socially prescribed perfectionism observed variables on unconditional self-acceptance endogenous criterion variable scores. These models were calculated while controlling for the correlations between the perfectionism variables and their direct effects on depression. This procedure enabled us to control for common variance of perfectionism variables with each other and depression while estimating their direct effect on depression. These models (multiple regressions; see Figure 1A and 1B) showed that while socially prescribed



Figures 1A and B

The Full Direct Effect Models

Note: Bold estimates are standardized maximum likelihood parameters statistically significant. Small circles represent residual variances, bidirectional arrows reflect correlations, and unidirectional arrows depict hypothesized directional, or "causal," links.

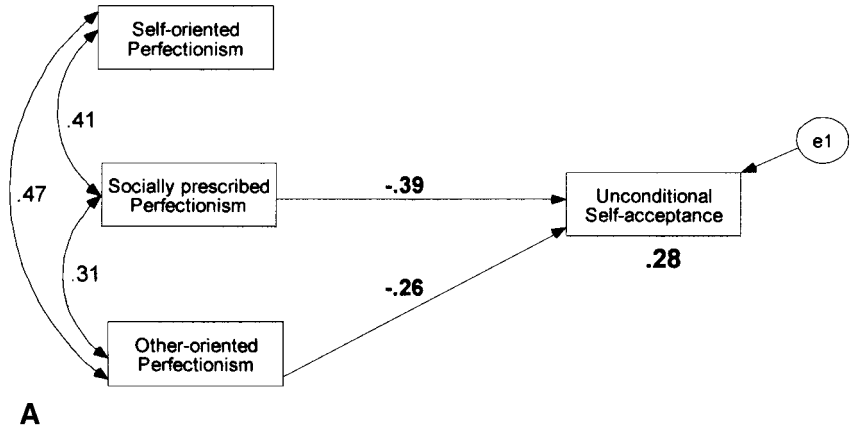
perfectionism was associated significantly with high depression (path coefficient = .35 t = 3.23, p = .001) and with low unconditional self-acceptance scores (path coefficient = −.39, t = −3.97, p = .0001), self-oriented perfectionism was not associated significantly with depression (path coefficient = −.19, t = −1.64, *ns*) nor with unconditional self-acceptance scores (path coefficient = −.02, t = −.15, *ns*).

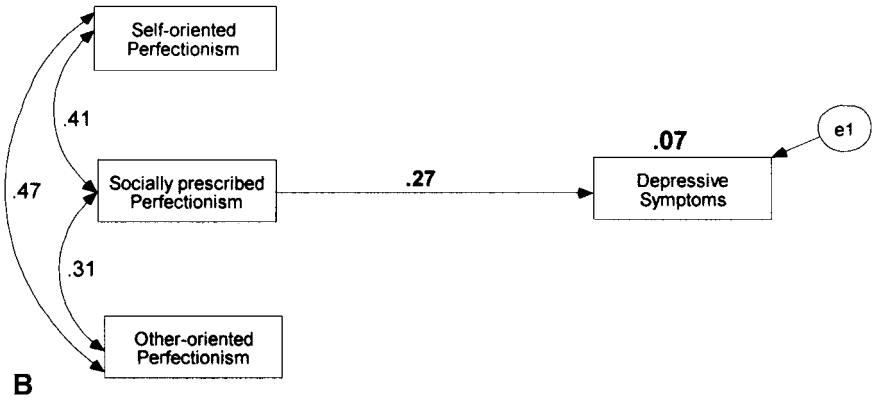
Other-oriented perfectionism was found to be associated significantly with low unconditional self-acceptance scores (path coefficient = $-.25$, $t = -2.46$, $p = .01$) but was not associated significantly with depression (path coefficient = $-.01$, $t = -.08$, *ns*). These direct effect models accounted for 28%, of the variance in unconditional self-acceptance scores and for 10% of the variance in depression scores.

The multiple regression models had zero degrees of freedom and thus could not be estimated for their fit to the empirical data. Modifications were then performed to obtain the most parsimonious models and to estimate their fit to the empirical data; we modified the ones presented in Figure 1, following Bentler and Mooijaart (1989), by removing any path that was not statistically significant. We removed the nonsignificant direct path from self-oriented perfectionism to unconditional self-acceptance (see Figure 2A). The more parsimonious model was found to fit the data very well, $\chi^2(1, N = 94) = .02$, $p = .88$; $\chi^2_{/df} = .02$; *GFI* = *CFI* =; *NFI* = 1.0, accounting for 28% of the variance in depression. Next, we removed the nonsignificant direct path from self-oriented perfectionism and other-oriented perfectionism to depression (see Figure 2B). The more parsimonious model was found to fit the data very well, $\chi^2(2, N = 94) = 3.26$, $p = .20$; $\chi^2_{/df} = .1.6$; *GFI* = .98; *CFI* = .97; *NFI* = .94, accounting for 7% of the variance in depression scores.

Analysis of the Mediating Model

We assumed that unconditional self-acceptance mediates the effects of perfectionism dimensions on levels of depression. Results from the combined direct effects models (see Figure 1) showed that only socially prescribed perfectionism has a direct effect on depressive symptoms, thus justifying the criteria required for mediation. In addition, these results showed that other-oriented perfectionism has a significant effect on unconditional self-acceptance. Accordingly, we specified a mediation model for the effect of socially prescribed perfectionism on depression while controlling for its association with self- and other-oriented perfectionism and the indirect effect of other-oriented perfectionism on depression through its effect on low unconditional self-acceptance scores (Figure 3). The specified direct indirect mediation model (Figure 3) was found to fit the data very well, $\chi^2(3, N = 94) = 5.48$, $p = .14$; $\chi^2_{/df} = .1.8$; *GFI* = .98; *CFI* = .97; *NFI* = .94, accounting for 28% of the variance in unconditional self-acceptance scores and for 13% of the variances in depression scores.





Figures 2A and B

The Final Direct Effect Models

Note: Bold estimates are standardized maximum likelihood parameters statistically significant. Small circles represent residual variances, bidirectional arrows reflect correlations, and unidirectional arrows depict hypothesized directional, or "causal," links.

As can be seen in Figure 3, high levels of socially prescribed perfectionism were associated with low levels of unconditional self-acceptance scores (path coefficient = $-.39$, $t = -4.22$, $p = .0001$), which, in turn, were associated with high levels of depression (path coefficient = $-.27$, $t = -2.47$, $p = .01$).

Mediation has occurred when the indirect effect of a predictor

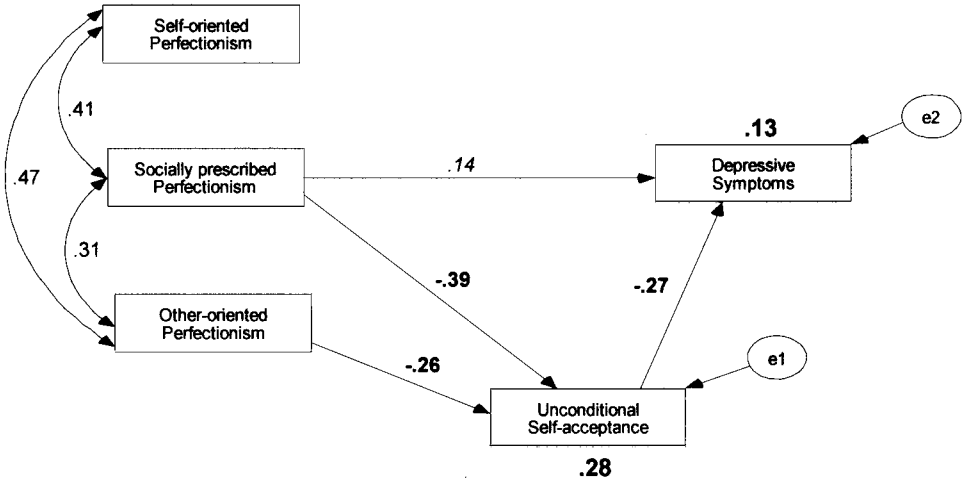


Figure 3

The Final Direct-Indirect Effect Model

Note: Bold estimates are standardized maximum likelihood parameters statistically significant. Small circles represent residual variances, bidirectional arrows reflect correlations, and unidirectional arrows depict hypothesized directional, or "causal," links.

through a mediator significantly reduces the predictor's direct effect (Baron & Kenny, 1986). As can be seen in Figure 1, the direct path from socially prescribed perfectionism to depression was significant: path coefficient = .35, $t = 3.23$, $p = .001$; in Figure 3, however, this path is nonsignificant; path coefficient = .14, $t = 1.3$, *ns.* The drop in the coefficient was significant according to Sobel's test (Baron & Kenny, 1986): $Z = 2.13$, $p = .03$. Thus, unconditional self-acceptance is an almost full (though not necessarily exclusive) mediator of the association between perfectionism and depression.

In addition, results of this model showed that although there was a nonsignificant effect for other-oriented perfectionism on depression, other-oriented perfectionism only had an indirect[2] effect on depression through its association with low levels of unconditional self-acceptance scores: path coefficient = $-.26$, $t = -2.47$, $p = .01$.

[2]See Holmbeck (1997) for further elaboration on the distinction between mediated and indirect effects.

DISCUSSION

The purpose of this research was to clarify and extend previous research on perfectionism and self-esteem by incorporating a focus on individual differences in unconditional self-acceptance. The first main finding that emerged from this study is that all three perfectionism dimensions measured by the *MPS* were associated with lower levels of unconditional self-acceptance. That is, self-oriented, other-oriented, and socially prescribed perfectionism were all linked with low unconditional self-acceptance. This finding extends the results of an earlier study that found a link between these perfectionism dimensions and low self-acceptance by showing that a similar pattern emerged with a measure of low unconditional self-acceptance. It is interesting to note that self-oriented perfectionism was associated with low unconditional self-acceptance even though a number of previous researchers have discussed self-oriented perfectionism as a relatively adaptive dimension in terms of personal adjustment (Frost et al., 1993; Slaney, Ashby, & Trippi, 1995). We have suggested elsewhere that the "adaptiveness" or "maladaptiveness" of self-oriented perfectionism depends greatly on whether the self-oriented perfectionist is experiencing positive life outcomes indicating success or negative life outcomes indicating failure (Flett, Hewitt, et al., 2002), and the current findings are in keeping with the notion that self-oriented perfectionism does indeed involve a contingent sense of self-worth.

Socially prescribed perfectionism was the *MPS* dimension that had the strongest association with low unconditional self-acceptance. This finding is in keeping with more general research on low self-esteem, which has shown consistently that low general self-esteem is associated with the perception that unrealistic standards are being imposed on the self (Flett, Hewitt, Blankstein, & O'Brien, 1991; Watson, Varnell, & Morris, 1999–2000). The results of the current study are not surprising in that the imposition of perfectionistic goals and standards on the self would foster a contingent sense of self-worth, and this can be regarded as the antithesis of unconditional self-acceptance. We also found that socially prescribed perfectionism was associated with depression, while the other two perfectionism dimensions were not associated significantly with depression. Previous research on trait perfectionism and depression with university student samples has yielded a similar pattern of results (Flett et al., 1994).

As expected, our results indicated further that low unconditional self-acceptance was associated with depression. This is in keeping with

theoretical suggestions (Ellis, 1962) as well as existing empirical research on the correlates and characteristics of the Unconditional Self-Acceptance Questionnaire (Chamberlain & Haaga, 2001a, 2001b). Previous research has shown that low unconditional self-acceptance is associated with depression and depression proneness in student samples (Chamberlain & Haaga, 2001a, 2001b).

Given that there were significant associations among socially prescribed perfectionism, depression, and unconditional self-acceptance, it was appropriate to test a mediational model. As seen in Figure 3, the SEM analyses indicated that unconditional self-acceptance did indeed mediate the association between socially prescribed perfectionism and depression, and there was no longer a significant direct association between socially prescribed perfectionism and depression when unconditional self-acceptance was included in the model. This finding is comparable though not identical to other studies that have tested a mediational model linking perfectionism, self-esteem, and depression. As noted earlier, Preusser et al. (1994) found that a general measure of self-esteem mediated the link between socially prescribed perfectionism and depression for men and women. Flett et al. (2003) found in two student samples that socially prescribed perfectionism was associated directly with depression, after controlling for the correlations among the three *MPS* dimensions, and socially prescribed perfectionism also had indirect associations with depression via its negative association with two facets of self-esteem (i.e., self-liking and self-competence). Our current findings are more in keeping with the results of the Preusser et al. study because a mediational effect was found and the direct link between socially prescribed perfectionism and depression was no longer significant, while the direct link between socially prescribed perfectionism and depression was still present in the research conducted recently by Flett et al. Perhaps the issue of whether socially prescribed perfectionism continues to have a direct link with depression depends greatly on the mediational factor under investigation, since unconditional self-acceptance is related but cannot be equated with facets of self-esteem such as self-liking and self-competence. This issue notwithstanding, in the current study, we should not lose sight of the broader finding that involves the mediational role of unconditional self-acceptance.

The current finding that unconditional self-acceptance is a mediator has some clear theoretical and practical implications. At the theoretical level, our findings illustrate that it is conceptually meaningful to distinguish trait perfectionism and unconditional self-acceptance. Most

importantly, at an applied level, it is important to foster a greater sense of unconditional self-acceptance among perfectionists, either through preventive efforts or treatment interventions, so that this may serve as a source of resiliency when impossible standards are not attained.

Another finding that emerged from this study is that other-oriented perfectionism was not associated directly with depression, but there was an indirect association. That is, as can be seen in Figure 3, other-oriented perfectionism was associated with low unconditional self-acceptance, which, in turn, was associated with increased depression. This pattern of findings indicates that individual differences in unconditional self-acceptance may play a subtle but important role in clarifying the conflicting results that have emerged with respect to the link between depression and other-oriented perfectionism. While most studies have found that other-oriented perfectionism is not associated significantly with depression (Flett, Hewitt, Blankstein, Solnik, & Van Brunschot, 1996), other studies have found that other-oriented perfectionism is associated with elevated depression (Hewitt, Flett, Norton, & Flynn, 1998), while other research has found that other-oriented perfectionism is associated with *reduced* levels of depression (Chang & Sanna, 2001). The current findings suggest that the nature of an association between other-oriented perfectionism and depression may be due, at least in part, to related individual differences in unconditional self-acceptance. Future research should explore the factors that have an influence on the association between other-oriented perfectionism and depression. One key factor may be the extent to which individuals high in other-oriented perfectionism perceive that others are a source of disappointment, especially in terms of providing adequate levels of social support. Perhaps the self-esteem of other-oriented perfectionists is fragile and conditional on the feedback and support they receive from others in a manner in keeping with the defensiveness of narcissistic individuals.

The current findings should be interpreted within the context of limitations inherent in this study. First and foremost, we did not assess these variables in a prospective design, so it will be important in future research to evaluate the associations among perfectionism, unconditional self-acceptance, and depression over time. Second, it is evident that the current findings are specific to university students and may not generalize to other segments of the population. Third, although we acknowledge the theoretical and empirical associations among dimensions of perfectionism, low unconditional self-acceptance, and psycho-

logical distress, it is important to extend this research by including other potential factors of likely importance, including the experience of stressful life events and perceived and actual levels of social support.

In summary, we found that all three trait dimensions of perfectionism assessed by the *MPS* were associated with relatively low levels of unconditional self-acceptance. Low unconditional self-acceptance was associated with elevated levels of depressive symptoms. Finally, structural equation analyses provided evidence that indicates that unconditional self-acceptance is an important mediator of the association between socially prescribed perfectionism and depression. Overall, these findings suggest the need for perfectionists to develop a sense of self-worth that is not contingent on the outcomes experienced by the self.

REFERENCES

Arbuckle, J. L. (1999). *AMOS: A structural equation modeling program*. Chicago: Small Waters.

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

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford.

Bentler P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238–246.

Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, *88*, 588–606.

Bentler, P. M., & Mooijaart, A. (1989). Choice of structural model via parsimony—A rationale based on precision. *Psychological Bulletin*, *106*, 315–317.

Chamberlain, J. M., & Haaga, D. A. F. (2001a). Unconditional self-acceptance and psychological health. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *19*, 163–176.

Chamberlain, J. M., & Haaga, D. A. F. (2001b). Unconditional self-acceptance and responses to negative feedback. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *19*, 177–189.

Chang, E. C., & Sanna, L. J. (2001). Negative attributional style as a moderator of the link between perfectionism and depressive symptoms: Preliminary evidence for an integrative model. *Journal of Counseling Psychology*, *48*, 490–495.

Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.

Ellis, A. (1977). Psychotherapy and the value of a human being. In A. Ellis &

R. Greiger (Eds.), *Handbook of rational-emotive therapy* (pp. 99–112). New York: Springer.

Ellis, A. (1995). Changing rational-emotive therapy (RET) to rational emotive behavior therapy (REBT). *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *13*, 85–89.

Ellis, A. (2002). The role of irrational beliefs in perfectionism. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 217–229). Washington, DC: American Psychological Association.

Epstein, S., & Meier, P. (1989). Constructive thinking: A broad coping variable with specific components. *Journal of Personality and Social Psychology*, *57*, 332–350.

Flett, G. L., Besser, A., Wang, J., Hewitt, P. L., Sherry, S. B., & Velyvis, V. (2003). *Perfectionism, dimensions of self-esteem, and depression: An analysis of self-liking and self-competence.* Manuscript submitted for publication.

Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5–31). Washington, DC: American Psychological Association.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Mosher, S. W. (1995). Perfectionism, life events, and depressive symptoms: A test of a diathesis-stress model. *Current Psychology*, *14*, 112–137.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., & O'Brien, S. (1991). Perfectionism and learned resourcefulness in depression and self-esteem. *Personality and Individual Differences*, *12*, 61–68.

Flett, G. L., Hewitt, P. L., Blankstein, K. R., Solnik, M., & Van Brunschot, M. (1996). Perfectionism, social problem-solving ability, and psychological distress. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *14*, 245–275.

Flett, G. L., Hewitt, P. L., Oliver, J. M., & Macdonald, S. (2002). Perfectionism in children and their parents: A developmental analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 89–132). Washington, DC: American Psychological Association Press.

Flett, G. L., Russo, F. A., & Hewitt, P. L. (1994). Dimensions of perfectionism and constructive thinking as a coping response. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, *12*, 163–179.

Flett, G. L., Sawatzky, D. L., & Hewitt, P. L. (1995). Dimensions of perfectionism and goal commitment: A further comparison of two perfectionism measures. *Journal of Psychopathology and Behavioral Assessment*, *17*, 111–124.

Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, C. S., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, *14*, 119–126.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, *14*, 449–468.

Hewitt, P. L., & Flett, G. L. (1991a). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, *100*, 98–101.

Hewitt, P. L., & Flett, G. L. (1991b). Perfectionism in the self and social con-

texts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, *60*, 456–470.
Hewitt, P. L., & Flett, G. L. (1993). Dimensions of perfectionism, daily stress, and depression: A test of the specific vulnerability hypothesis. *Journal of Abnormal Psychology*, *102*, 58–65.
Hewitt, P. L., Flett, G. L., & Ediger, E. (1996). Perfectionism and depression: Longitudinal assessment of a specific vulnerability hypothesis. *Journal of Abnormal Psychology*, *105*, 276–280.
Hewitt, P. L., Flett, G. L., & Endler, N. S. (1995). Perfectionism, coping, and depression symptomatology in a clinical sample. *Clinical Psychology and Psychotherapy*, *2*, 47–58.
Hewitt, P. L., Flett, G. L., Norton, G. R., & Flynn, C. (1998). Dimensions of perfectionism and chronic symptoms of unipolar and bipolar depression. *Canadian Journal of Behavioural Science*, *30*, 234–242.
Hewitt, P. L., Flett, G. L., & Turnbull, W. (1992). Perfectionism and MMPI indices of personality disorder. *Journal of Psychopathology and Behavioral Assessment*, *14*, 323–335.
Hewitt, P. L., Flett, G. L., Turnbull-Donovan, W., & Mikail, S. (1991). The Multidimensional Perfectionism Scale: Reliability, validity, and psychometric properties in psychiatric samples. *Psychological Assessment*, *3*, 464–468.
Hewitt, P. L., Flett, G. L., & Weber, C. (1994). Dimensions of perfectionism and suicide ideation. *Cognitive Therapy and Research*, *18*, 439–460.
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.
Jöreskog, K. G. & Sörbom, D. (1985). *LISREL VI: Analysis of linear structural relationships by the method of maximum likelihood.* Mooresville, IN: Scientific Software.
Kelloway, E. K. (1998). *Using LISREL for structural equation modeling: A researcher's guide*. Thousand Oaks, CA: Sage.
Mor, S., Day, H. I., Flett, G. L., & Hewitt, P. L. (1995). Perfectionism, control, and components of performance anxiety in professional performers. *Cognitive Therapy and Research*, *19*, 207–225.
Preusser, K. J., Rice, K. G., & Ashby, J. S. (1994). The role of self-esteem in mediating the perfectionism-depression connection. *Journal of College Student Development*, *35*, 88–93.
Radloff, L. S. (1977). The CES-D Scale: A self-report measure depression scale for research in the general population. *Applied Psychological Measurement*, *1*, 385–401.
Rice, K. G., Ashby, J. S., & Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. *Journal of Counseling Psychology, 45,* 304–314.
Rogers, C. R. (1951). *Client-centered therapy: Its current practice, implications, and theory*. Boston: Houghton Mifflin.
Rosenberg, M. (1965). *Society and the adolescent child*. Princeton, NJ: Princeton University Press.

Slaney, R. B., Ashby, J. S., & Trippi, J. (1995). Perfectionism: Its measurement and career relevance. *Journal of Career Assessment*, *3*, 279–297.

Tafarodi, R. W., & Swann, W. B., Jr. (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment*, *65*, 322–342.

Tafarodi, R. W., & Swann, W. B., Jr., (2001). Two-dimensional self-esteem: Theory and measurement. *Personality and Individual Differences*, *31*, 653–673.

Vredenburg, K., Flett, G. L., & Krames, L. (1993). Analogue versus clinical depression: A critical re-appraisal. *Psychological Bulletin*, *113*, 327–344.

Watson, P. J., Varnell, S. P., & Morris, R. J. (1999–2000). Self-reported narcissism and perfectionism: An ego-psychological perspective and the continuum hypothesis. *Imagination, Cognition, and Personality*, *19*, 59–69.