

Maladaptive Perfectionism, Adult Attachment, and Self-Esteem in College Students

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Extending an earlier study that found high self-esteem to modify the impact of otherwise maladaptive perfectionism on depression, the current study used adult attachment theory to explore the link between perfectionism, self-esteem, and depression in college students. Results indicated that self-esteem buffered the effects of maladaptive perfectionism on depression and that adult attachment security moderated the association between perfectionistic self-doubt and self-esteem. Counseling implications of these findings are discussed.

There has been considerable interest in perfectionism in the counseling and student development literature in recent years. College counselors regularly encounter perfectionistic clients because of the exceptionally high prevalence of perfectionism among college student populations: As many as two thirds of some college samples have been categorized as perfectionistic (Grzegorek, Slaney, Franze, & Rice, 2004).

Increased interest in assisting perfectionistic clients has been paralleled by the development of useful multidimensional conceptualizations and operationalizations of perfectionism (Frost, Marten, Lahart, & Rosenblate, 1990; Hamachek, 1978; Hewitt & Flett, 1991; Slaney, Rice, Mobley, Trippi, & Ashby, 2001). Two high-order dimensions of perfectionism, with different adjustment implications, have emerged in some of this work. The first dimension, variously termed as *adaptive, normal, or personal standards perfectionism*, is often characterized by high personal standards (e.g., preferences for personal competence, expectations for strong personal performance, high personal goals for oneself) that relate positively to variables such as active coping, high self-esteem, achievement, and conscientiousness (Parker, 1997; Rice & Lapsley, 2001).

The second dimension, often labeled as *maladaptive or neurotic perfectionism*, is typified by excessive concerns about making mistakes, self-doubt, and perception of failure to attain personal standards (Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Slaney et al., 2001). High personal standards appear to be associated with both adaptive and maladaptive dimensions of perfectionism (Rice & Mirzadeh, 2000). High standards combined with excessive concerns about mistakes seem to be especially maladaptive, whereas high standards but low concerns about mistakes may be adaptive (Rice & Dellwo, 2002).

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Of particular interest to college student counselors is that maladaptive perfectionism has been repeatedly associated with a host of psychological problems, such as depression, anxiety, disordered eating, dysfunctional attitudes, and substance abuse (see Blatt, 1995, for a review). Self-esteem and depression have been frequently used as indicators of college adjustment or maladjustment in much of this research. For example, Preusser, Rice, and Ashby (1994) found that self-esteem mediated the effects of maladaptive perfectionism on depression for a sample of college students. They concluded that perfectionists might become depressed because perfectionism diminishes self-esteem. However, their study was limited by single subscale indicators of the constructs and by a relatively small sample size. Furthermore, potentially more adaptive dimensions of perfectionism were not consistently associated with self-esteem. In a follow-up study, Rice, Ashby, and Slaney (1998) measured perfectionism, self-esteem, and depression in a large sample of more than 400 university students. Using structural equation modeling, they found only partial support for the mediational role of self-esteem in predicting depression, and only when maladaptive perfectionism was in the model. Adaptive perfectionism was not significantly related to either self-esteem or depression. In exploratory moderator analyses, they found that the effects of maladaptive perfectionism on depression were significantly buffered by high self-esteem; in addition, they further identified a number of maladaptive perfectionists with high self-esteem. Because it seemed unlikely that maladaptive perfectionists could have high self-esteem, the current study was undertaken to examine and explain this puzzling finding within a different theoretical context.

A number of theoreticians and researchers have examined the link between important relationships in childhood and aspects of emotional functioning and personality. For instance, one of the more frequently used measures of perfectionism (Enns & Cox, 2002) contains two subscales specifically measuring parental expectations and parental criticism because of their presumed important role in perfectionism. Sorotzkin (1998, pp. 87–89) noted that parents of (maladaptive) perfectionists tend to be nonapproving or inconsistently approving. Consistent with these expectations, in a study of young adult university students, Rice and Mirzadeh (2000) found that insecure attachment bonds were common among maladaptive perfectionists and that secure bonds were common among adaptive perfectionists.

The present study extends the findings of Rice and Mirzadeh (2000) by using a measure of adult (as opposed to parental) attachment. According to attachment theory (Bowlby, 1988), the quality of early experiences with parental caregivers shapes the development of one's general orientation to intimate peer relationships. Negative early experiences with parental figures (e.g., excessive criticism, indifference, or overindulgence) are likely to promote an insecure *adult* attachment orientation, whereas supportive yet autonomy-encouraging interactions with parents promote a secure adult attachment orientation. Two dimensions (i.e., anxiety and avoidance) are assumed to underlie variation in adult attachment orientation (Simpson, Rholes, & Nelligan, 1992), and a substantial amount of research literature has shown that these dimensions are

related to cognitive processes, affect regulation strategies, and interpersonal behaviors (Lopez & Brennan, 2000). Individuals with high levels of adult attachment anxiety report strong fears of rejection and abandonment in their intimate peer relationships; they are also easily overwhelmed by negative emotions. Persons with high levels of avoidance report discomfort with intimacy and closeness, along with stronger desires for interpersonal distance and self-sufficiency; they are also more likely to suppress negative emotions. Relative to their insecure peers, persons with low avoidance and low anxiety in their adult attachment orientations demonstrate more positive, cohesive, and integrated self-structures (Mikulincer, 1995); greater tolerance for ambiguity and uncertainty (Mikulincer, 1997); and less vulnerability to depression (Murphy & Bates, 1997).

In light of these findings, we speculated that among maladaptive perfectionists, variations in adult attachment orientations may be linked to important differences in self-esteem and depression. Knowing about these links could reveal aspects of personal and interpersonal functioning that would be important for counselors to assess and perhaps address in their work with perfectionistic clients with depression or who have low self-esteem. We expected that maladaptive perfectionists with an otherwise secure adult attachment orientation may possess a more cohesive self-structure that is less vulnerable to performance-related threats to self-esteem. Moreover, these perfectionists may be better equipped to regulate distressing feelings than are their less secure counterparts, thus enabling them to maintain high self-esteem despite acknowledging perfectionistic performance standards, self-doubts, and concerns over mistakes. Conversely, maladaptive perfectionists with concurrently high attachment anxiety and avoidance were expected to possess a less stable and cohesive self-structure, rendering them especially vulnerable to negative effects associated with their perfectionistic expectations. In sum, we hypothesized that participants' overall level of adult attachment security might contribute unique variance to the prediction of self-esteem and depression among maladaptive perfectionists. In addition, we sought to examine whether adult attachment security moderated the negative impact of maladaptive perfectionism on self-esteem and depression.

Method

Participants and Procedure

A total of 211 students who were attending a large, public university in the north central region of the United States participated in the study. There were 51 men and 152 women (8 with missing data for gender). The average age of participants was 21.32 years ($SD = 4.61$; range 18 to 55). Most of the students were White (84%), followed by Black/African American (8%), Asian/Asian American (3%), multicultural mixed race/ethnicity (3%), and Native American/American Indian (2%). Most students in the sample (62%) lived in off-campus housing, with most of the rest living in university residences (26%).

Students were recruited from courses in personal adjustment, substance abuse, and communications. Approximately 300 students were enrolled in those courses,

making the participation rate about two thirds of those recruited. Although students were recruited only from those courses and all participants were volunteers, they represented a wide array of college majors. Just over half (56%) had completed four or fewer semesters at the university.

Instruments

The Multidimensional Perfectionism Scale (MPS; Frost et al., 1990) was used to measure perfectionism, with specific focus on the Concern Over Mistakes, Doubts About Actions, and Personal Standards subscales. These subscales have evidenced strong reliability and validity in several psychometric studies (e.g., Frost et al., 1993). Concern Over Mistakes and Doubts About Actions have been identified as the major components of the emergent maladaptive perfectionism factors in several factor analytic studies (e.g., Stöber, 1998). Therefore, these two subscales were used as our indicators of maladaptive perfectionism. Furthermore, given our interest in maladaptive perfectionism and the possibility that high personal standards could be adaptive or maladaptive, we controlled for Personal Standards scores in the analyses when examining the effects of the Concern Over Mistakes and Doubts About Actions subscales.

Internal consistency for the Concern Over Mistakes and Doubts About Actions subscales has been adequate. In several studies of college students, Cronbach's coefficient alphas for the Concern Over Mistakes subscale have typically been in the .90 range. For Doubts About Actions, coefficient alphas have been in the .70 to .77 range (Frost et al., 1990, 1993; Rice & Mirzadeh, 2000; Rice et al., 1998). In the current study, alphas were .87 and .76, respectively. These and other subscales from the MPS have been shown to relate in expected directions with other measures of perfectionism and with various adjustment indicators (e.g., Slaney et al., 2001).

Adult attachment was measured with the Adult Attachment Questionnaire (Simpson et al., 1992). The Avoidance subscale measures comfort with interpersonal closeness and dependency, whereas the Anxiety subscale assesses fears about separateness or abandonment. Simpson et al. reported Cronbach's coefficient alphas in college samples of .81 for the Avoidance subscale and .58 to .61 for the Anxiety subscale. In the current study, coefficient alphas for these two subscales were .82 and .69, respectively. Other research has found these subscales to be significantly predictive of support that dating couples offer one another during a stressful experience (Simpson et al., 1992) and negatively related to constructive thinking among college students (Lopez, 1996). Given our interest in examining whether participants' overall level of attachment security affected interrelationships among our study variables, we created a composite security of attachment score by summing the raw scores for the Avoidance and Anxiety subscales. This composite score was significantly correlated with both the Avoidance and Anxiety subscale scores ($r_s = .89$ and $.73$, respectively). Cronbach's coefficient alpha for the composite scale was .80.

The Rosenberg Self-Esteem Inventory (SEI; Rosenberg, 1965, 1979) was used to measure a general perception of self-worth or positive self-esteem. Internal

consistency and validity studies of the measure have supported its use with college students. For example, several studies of college students have found Cronbach's coefficient alphas for the measure to be in the .82 to .93 range (Goldsmith, 1986; Rice et al., 1998). In our study, Cronbach's alpha was .89. This measure tends to be negatively correlated with depression (Rice et al., 1998) and relates in expected directions with other measures (Goldsmith, 1986; Rosenberg, 1965, 1979).

The Center for Epidemiological Studies-Depression Scale (CES-D) was used to measure depression (Radloff, 1977). The CES-D was designed to measure depression in general population samples. Numerous studies have yielded evidence supporting the psychometric integrity of the CES-D (e.g., Sheehan, Fifield, Reisine, & Tennen, 1995). In several studies, Cronbach's coefficient alpha for the CES-D has been in the .90 range (in the current study, alpha was .88). The CES-D correlates with other assessments of depression and emotional maladjustment (e.g., Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977).

Results

Descriptive statistics for the participants in our study were comparable to those of other studies of college students who completed these measures (e.g., Frost et al., 1993; Rice & Dellwo, 2002; Rice & Mirzadeh, 2000). None of the variables presented significant departures from normality (skew ranged from $z = |.01|$ to $|.85|$ and kurtosis ranged from $z = |.12|$ to $|.73|$). Correlations among the subscales revealed a significant and positive association between scores on Concern Over Mistakes and Doubts About Actions ($r = .55$), and both of these measures were significantly associated with lower SEI scores ($r_s = -.56$ and $-.45$, respectively) and higher CES-D scores ($r_s = .44$ and $.63$, respectively).

For moderator analyses, we used centered predictor variables and their multiplicative interaction terms in regression equations (Aiken & West, 1991). The first set of analyses attempted to replicate the Maladaptive Perfectionism \times Self-Esteem interaction predicting depression that was found by Rice et al. (1998). Two sets of analyses were conducted, each with the different indicator of maladaptive perfectionism (Concern Over Mistakes and Doubts About Actions). In each analysis, the CES-D total score served as the dependent variable.

The interaction between scores on Concern Over Mistakes and SEI in predicting CES-D scores was not significant, $\Delta R^2 = .007$, $F(1, 206) = 2.75$, $p < .10$. However, the interaction between Doubts About Actions and SEI scores added significant explained variance in CES-D scores, $\Delta R^2 = .01$, $F(1, 206) = 3.77$, $p < .05$. Because of the difficulty in detecting statistically significant interaction effects (McClelland & Judd, 1993), both of the interactions were further examined by following procedures outlined by Aiken and West (1991). These procedures revealed that as SEI scores increased, CES-D scores decreased, even for those with elevated scores on Concern Over Mistakes and Doubts About Actions. Another interpretation is that, as SEI scores were lowered, the depressogenic effects of perfectionism were more intense. Elevations in CES-D scores appeared somewhat more dramatic for those who had high scores on these perfec-

tionism dimensions. For example, the difference in predicted CES-D scores between groups of students categorized with high or low Doubts About Actions scores under the high SEI score category was just over half a standard deviation ($M_s = 10.71$ and 2.16 , respectively), but under the low SEI score category, this difference exceeded a full standard deviation ($M_s = 22.23$ and 9.33 , respectively). In fact, the predicted CES-D score for the group with high scores on Doubts About Actions was well above a typically used cutoff (16) for the CES-D, indicating potentially clinically significant depression.

The next set of analyses examined the moderating effects of adult attachment security on maladaptive perfectionism in predicting self-esteem. The predictor variables were centered, and two multiplicative interaction terms were created representing the Two-Way Perfectionism (Concern Over Mistakes, Doubts About Actions) \times Adult Attachment Security (composite score) interactions of most interest. The first step in each analysis consisted of regressing SEI scores on Personal Standards scores, thereby partialling the effects of standards from the subsequent analyses. Next the main effects for perfectionism and adult attachment security were entered, followed in the third step by the relevant interaction.

In each analysis, approximately 40% of the variance in SEI scores was attributable to the predictors. As expected, greater degrees of attachment insecurity ($\beta = -.28$ and $-.29$), along with greater maladaptive perfectionism ($\beta = -.54$ for Concern Over Mistakes and $\beta = -.43$ for Doubts About Actions), predicted lower SEI scores. Personal Standards scores did not account for significant variation in SEI scores after the first step in each set of equations, $F(1, 208) = 0.43, p > .10$. However, when the remaining variables had been entered, scores on the Personal Standards subscale emerged as one of several significant contributors to the prediction of SEI scores. The only significant Perfectionism \times Adult Attachment Security interaction to emerge as significant involved Doubts About Actions, $\Delta R^2 = .011, F(1, 206) = 3.70, p < .05$.

Follow-up procedures to analyze this interaction indicated that otherwise high levels of SEI scores among maladaptive perfectionists decreased as adult attachment insecurity increased. This result demonstrated that participants' reported level of relationship security qualified the effect of perfectionistic self-doubts on overall self-esteem and yielded a finding that may have important implications for counseling practice (discussed below). Stated differently, under generally favorable relationship conditions (high security of attachment), maladaptive perfectionists with excessive self-doubt tend to report esteem generally comparable to that reported by students with lower self-doubt. However, under less favorable relationship conditions (high insecurity), those with high self-doubt experience self-esteem at a level just over a standard deviation below that of students with low self-doubt. Indeed, at low levels of attachment insecurity (i.e., having greater security), the predicted SEI score revealed approximately a one half standard deviation difference between students with high and low Doubts About Actions scores ($M_s = 30.15$ and 33.76 , respectively). At high levels of attachment insecurity, the difference between these groups exceeded a standard deviation ($M_s = 26.25$ and 31.78 , respectively).

Discussion

The results of this study demonstrated that attachment security is an important variable for counselors to consider as they work with perfectionistic clients. Our findings indicate that students' current level of attachment security may function to either lessen or intensify the negative effects of maladaptive perfectionism on self-esteem. Among students who acknowledge high levels of attachment security, self-doubt appears to have a less adverse impact on self-esteem, whereas among students with low levels of attachment security, self-doubt was more prominently related to low self-esteem. Such associations make intuitive sense if one considers that performance-related doubts necessarily coexist with more general (attachment-related) appraisals of the trustworthiness and dependability of one's intimate social context and of one's own motivation to access these resources. Relative to their secure peers, persons with insecure adult attachment orientations typically appraise their intimate relationships as less supportive and dependable, or they view themselves as less interested in or capable of accessing these resources. In the absence of relationship security, personal doubts may assume more self-referential importance and thus have more pernicious effects on self-esteem.

Elements of maladaptive perfectionism, such as personal doubts and concerns with mistakes, present challenges to adaptive emotional self-regulation. Secure attachments with others may temper the potentially toxic effects of self-doubts on self-esteem by providing perfectionistic individuals with more accurate and balanced "self-referential" feedback on their strivings and expectancies for achievement. For example, a perfectionistic student might be inclined to self-criticism when things do not go well on an exam or assignment, due to cognitive distortions that overemphasize personal responsibility and minimize perceived efficacy (Rice, Bair, Castro, Cohen, & Hood, 2003); however, if this student enjoys secure attachment bonds with others, these relationships may provide sufficient emotional support and corrective feedback to reduce the effect of situational self-appraisals on overall self-esteem. Conversely, insecurely attached perfectionistic individuals may be disinclined to seek, or less able to access, mitigating feedback, thus withdrawing further into private, obsessional concerns about their work.

Implications for Practice

One important clinical implication of our findings is that the perfectionistic self-doubts of students with insecure attachment orientations may be part of a broader self-critical and ruminative cognitive-affective-interpersonal pattern. If our speculations are correct, then counselors working with perfectionistic college students might be advised to carefully explore the quality of the student's intimate peer relationships as a means of both contextualizing the meaning ascribed to "doubts about actions" and assessing the risk of maladaptive coping. Where such risks exist, counseling interventions that specifically address

those relationship expectations, tensions, and conflicts that underlie attachment insecurity may be necessary treatment components.

It is worth noting that although a secure attachment bond between client and therapist contributes to effective counseling (Bowlby, 1988), such a bond may be especially difficult to accomplish with perfectionistic individuals (Blatt, Zuroff, Bondi, Sanislow, & Pilkonis, 1998; Zuroff et al., 2000). One speculation is that maladaptive perfectionists may be hypersensitive to perceived criticisms from others, such as counselors, and may misinterpret counselor interventions as criticism rather than help, thus damaging the therapeutic relationship. The perfectionistic student client might also harbor unrealistic expectations of the counseling experience that, left untended, could derail the formation of an effective working alliance.

In working with perfectionistic clients, counselors should pay close attention to the nature of their developing relationship with the clients and carefully explore clients' early and emergent expectations of the relationship and of the therapeutic change process. Perfectionistic students may especially benefit from cognitive and interpersonal interventions that encourage them to "step back" from a recent esteem-damaging performance event, whether in a counseling session or external to it, and to examine how lowered feelings of self-worth may result from constricted ways of thinking about the event that are exacerbated by the client's experience of a disapproving and unsupportive relational context (insecure attachment). That relational context could then be contrasted with specific features of the therapeutic relationship that invite and encourage alternative and constructive/healthy ways of thinking about performance-related events (see other general practice considerations from attachment-theory perspectives described by Bowlby, 1988; Cassidy & Shaver, 1999; Lopez & Brennan, 2000; Pistole & Watkins, 1995; Rutter, 1995).

Limitations and Recommendations for Future Inquiry

To test our speculations and implications more sensitively, future studies should address several limitations of the present study. For example, we adopted a survey research design and relied exclusively on self-report measures gathered at one point in time at a single university. Greater external validity can be achieved through replications at other institutions. One important extension of this research would be a study of counseling center clients. Similarly, we did not pose or examine sex- or race-related hypotheses, which could also be fruitful investigations in future research. Internal validity will be enhanced through experimental studies that use *in vivo* performance tasks, observer ratings, and immediate assessments of cognitive processes (e.g., thought listing) to enrich our understanding of how maladaptive perfectionism (and adult attachment orientations) affect performance-related appraisals and coping strategies. We further suspect that it would be valuable to assess the stability of self-esteem in future studies of maladaptive perfectionism. It is plausible that at any given time, at least some maladaptive perfectionists may report high self-esteem if

they believe they are currently meeting their own performance expectations. These self-esteem estimates, however, may fluctuate widely over time and across performance contexts. Such variability could only be assessed through careful longitudinal study of self-esteem and performance patterns and appraisals.

Previous studies have generally shown that, although common to both adaptive and maladaptive perfectionism, high personal standards are unrelated to self-esteem. Our regressions of separate indexes of maladaptive perfectionism along with attachment security on self-esteem corroborated this finding when Personal Standards scores were controlled. However, when all model predictors were simultaneously considered, the score on the Personal Standards subscale (in both cases, $\beta = .34$ and $.13$) emerged as a significant predictor of self-esteem. In short, whether high personal standards are capable of predicting self-esteem may be a function of their coexistence with either adaptive or maladaptive components of perfectionism.

In sum, we found that performance-related doubts had more adverse effects on self-esteem among maladaptive perfectionists with insecure adult attachment orientations than among their counterparts with secure orientations. Perhaps the perfectionistic student's broader (attachment-related) expectations regarding the accessibility, dependability, and capacity of intimate others to provide care and support function as important phenomenological qualifiers of the potential threat of performance doubts on self-esteem and thus reflect the degree of resilience or vulnerability of the student's self-esteem to such threats. If so, then helping students form or restore favorable attachment expectations may be a critical component of a comprehensive treatment program for maladaptive perfectionism.

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