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Perfectionism and Mental Health in Australian University Students: Is There a Relationship?

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Perfectionism and Mental Health in Australian University Students: Is There a Relationship?

The relationship between perfectionism and negative emotional states was investigated in 405 male and female Australian University students, using a multidimensional measure of perfectionism, and two measures of emotional distress. There was a significant positive association between perfectionism and (a) depression, (b) anxiety, and (c) stress. This result was independent of age or gender, with the exception of stress. These results and their implications for future research and the treatment of students with high levels of perfectionism are discussed.

Recently, researchers have begun to better define the characteristics of perfectionism and to examine the relationship between perfectionism and other dimensions of well-being, including mental health. In this study, we sought to investigate whether perfectionism is related to a broad range of symptoms of psychological health amongst a sample of Australian university students. A second purpose was to determine whether particular dimensions of perfectionism are separately related to specific symptoms and indicators of psychopathology, in particular, depression, anxiety, and stress.

An interest in the dimension of perfectionism as a personality variable as well as in the motivation underlying perfectionism, can be traced back to the psychoanalytic tradition. The seminal works of both Horney (1950/1991) and Adler (1956), provided the foundation for subsequent investigations into the nature of perfectionism. In Horney's view, meticulous orderliness and exacting fastidiousness, behaviors commonly described as perfectionistic, represented only superficial aspects of "the need to attain the highest degree of excellence" (p. 196). She argued that the more important aspects are at a deeper level of psychic experience and involve not only a means to superiority, but also a method of controlling life.

Adler (1956) saw the striving for perfection as a normal and innate aspect of human development in the claim that "the striving for perfection is innate in the sense that it is a part of life, a striving, an urge, a something that without which life would be unthinkable" (Adler, p. 104).

Arguably the most widely cited theorist in the area, Hamachek (1978) described perfectionism as a psychological phenomenon that "is a clinical mystery" and went on to distinguish between two types of perfectionism—the normal and the neurotic. Hamachek's distinction made an important contribution to the perfectionism literature. According to Hamachek, normal perfectionists are those who derive pleasure from doing well at something that is difficult. In contrast, neurotic perfectionists are those unable to feel pleasure as a result of their efforts, because they "never seem good enough. . . . They are unable to feel satisfaction because in their own eyes they never seem to do things good enough to warrant that feeling" (p. 27). In Hamachek's view, normal perfectionism is not only nonpathological,

but desirable, as it is an aspect of the need for achievement. Motivated by a striving for perfection, the normal perfectionist is able to adopt a flexible approach in the manifestation of those strivings. Perfectionism is thus a desirable personality trait, which involves a desire to meet high standards and develop competent, accomplished behaviors. The normal perfectionist derives pleasure and satisfaction from effort and possesses the ability to be less precise according to the situation.

In support of this view, Frost, Marten, Lahart, and Rosenblate (1990) suggested that selfcritical evaluations of one's performance or achievements is a factor that differentiates between normal and neurotic perfectionism. Following the observation that a precise definition of perfectionism was "elusive" in the existing literature, Frost et al. noted that considerable emphasis had been given to the "setting of excessively high personal standards" (p. 450), which they contended is not necessarily pathological in and of itself. On this basis, Frost and his colleagues reasoned that this definition does not differentiate between perfectionistic individuals and those who are highly competent and successful. Similarly, Blatt (1995) concluded that neurotic perfectionism involves severe self-criticism in his extensive investigation of perfectionism and depression. Blatt employed Hamachek's (1978) proposed normal/neurotic distinction and conceptualized neurotic perfectionism from an object-relations perspective. In this view, neurotic perfectionists are prone to depressive experiences that are the result of internalized self-criticism. Halgin and Leahy (1989) described perfectionists "as individuals afflicted by an ego-dystonic and compulsive drive to achieve unattainable goals" (p. 222), linking what they termed "insatiable perfectionism" as a common factor in the suicides of university students.

The introduction of multidimensional approaches to the assessment of perfectionism has significantly enhanced the possibilities for psychological research aimed at a more precise understanding of the nature and correlates of perfectionism. In this regard, it could be argued that the most important finding that has emerged from this research is the evidence supporting the involvement of two distinct global factors, which reflect maladaptive evaluative concerns and positive achievement findings (Flett, Sawatzky, & Hewitt, 1995; Frost, Heimberg, Holt, Mattia, & Neubauer, 1993).

Theorists have long recognized a potential relationship between perfectionism and mental health. A rapidly expanding empirically based literature and improved assessment instruments have provided some support to this relationship. To date, in both clinical and nonclinical samples, there is evidence to suggest that perfectionism is related to eating disorders (Garner, 1990; Minarik & Ahrens, 1996), suicide ideation and suicide attempts (Baumeister, 1990; Hewitt, Flett, & Turnbull-Donovan, 1992; Hewitt, Flett, & Weber, 1994), depression (Blatt, 1995; Frost et al., 1990), anxiety (Alden, Bieling, & Wallace, 1994), procrastination (Frost et al., 1990) and neuroticism (Hewitt, Flett, & Blankstein, 1991). Additionally, perfectionism appears as a diagnostic criterion in the <u>Diagnostic and Statistical</u> <u>Manual of Mental Disorders</u> (4th ed., American Psychiatric Association, 1994) for obsessivecompulsive personality disorder.

There is increasing, but still limited, evidence indicating a relationship between perfectionism and general psychological well-being. There are, however, several studies that point to the relationship between perfectionism and particular symptoms or syndromes, including headaches in children (Kowal & Pritchard, 1990) and eating disorders (Kenny & Rogers, 1994; Tiggeman & Dyer, 1995). Perfectionistic individuals experience increased negative affect before, during, and after evaluative tasks, judge their work as lower in quality than nonperfectionists, and report that the quality of their work should have been better (Frost et al., 1990). Furthermore, people high in perfectionism reportedly experience an increased frequency and greater range of symptoms of psychopathology than those with low levels of perfectionism, and are more seriously troubled by both severity and frequency of procrastination (Frost et al., 1990).

Of specific interest in the current study, the relationship between anxiety and perfectionism has been investigated within a number of different frameworks. Alden et al. (1994) investigated perfectionism, dysphoria, and social anxiety in a study of undergraduate students. Results suggested that the association between perfectionistic thinking and emotional states is not fully explained by dysfunctional standard setting alone. In a clinical study of social phobic patients, elevated scores on two perfectionism dimensions, Concern Over Mistakes and Doubts About Actions, were reportedly indicative of increased social

anxiety, trait anxiety, and general psychopathology (Juster et al., 1995). The Concern Over Mistakes dimension has been seen as more central to the construct of perfectionism, due to its close relationship with measures of psychopathology. Doubts About Actions however, is also associated with measures of pathology, and in particular, is related to compulsive experiences (Frost et al., 1990). In each of these studies, age and gender were not shown to be significant factors in the relationship between perfectionism and psychological states. Given the lack of perfectionism research in Australia, we investigated these variables in the current study.

The purpose of this study was to investigate the relationship between (a) the overall level of perfectionism, (b) dimensions of perfectionism, and (c) mental health in the context of an Australian university student population. Two hypotheses were proposed. In the first instance, we predicted a significant and positive relationship between perfectionism and increased psychological distress, independent of age or gender. Secondly, we expected that the perfectionism dimensions of Concern Over Mistakes and Doubts About Actions would be positively associated with the negative emotional states of depression, anxiety, and stress.

[METHOD] [A]

[Participants] [B]

The sample consisted of 405 students (101 males; 301 females) from an Australian university who volunteered to participate in the study. The age of participants ranged from 17 to 54 with a mean of 22.7 years and a standard deviation of 6.4 years, and 95% were enrolled as full-time students and 5% were part-time. Of the total sample, 15% had used a mental health service in the previous 12 months, and 16% reportedly used the university counseling services at some time. 97% of the students were Australian citizens, while 2% identified as permanent residency and 1% as visiting students from other countries. No other information regarding ethnic origins was collected.

[Measures] [B]

A survey instrument was developed comprising standardized instruments to measure perfectionism, depression, anxiety, and stress, and the general psychological functioning of students. Questions relating to the use of mental health services in the last 12 months, including university counseling services, and demographic details were also included.

[The Multidimensional Perfectionism Scale (MPS).] [C]The MPS (Frost et al., 1990) is a 35-item scale comprised of six subscales designed to tap the dimensions and nature of perfectionism. The MPS produces an overall perfectionism score in addition to the six subscale scores: Personal Standards, Concern Over Mistakes, Doubts About Actions, Parental Criticism, Parental Expectations, and Organization. For example, Doubts About Actions is measured with items such as, "Even when I do something very carefully, I often feel that is not quite right," and Personal Standards is measured with items such as, "I set higher goals than most people." Scores are derived from responses on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Convergent validity of the MPS has been demonstrated (Frost et al., 1990) in sufficient positive correlations with the Burns Perfectionism Scale (Burns, 1980), the Self-Evaluative subscale of the Irrational Beliefs Test (Jones, 1980) and the perfectionism subscale of the Eating Disorders Inventory (EDI) (Garner, Olmstead, & Polivy, 1983). There is also consistent evidence of concurrent validity in the three studies of the MPS and by Hewitt and Flett's (1991) scale of the same name (Flett, Sawatzky, & Hewitt, 1995; Frost et al., 1993; Hewitt et al., 1991). An internal reliability for the MPS has been reported as .90 (Cronbach's α) with scores for the subscales ranging from .77 to .93 (Frost et al., 1990).

In the current study, a 29-item, five subscale version in which the Organization subscale is omitted was used, as this subscale score is not required for the calculation of the total perfectionism score. All subscales were scored so that higher scores reflected increased levels of perfectionism. [The General Health Questionnaire (GHQ).] [C] The GHQ (Goldberg & Hillier, 1979) is a 28-item self-administered screening instrument designed to detect psychological distress in both clinical and nonclinical settings. The GHQ consists of four subscales to determine somatic symptoms, anxiety and insomnia, social dysfunction, and severe depression, in addition to a total score.

Scores are derived from responses on a 4-point scale, which ranges from 0 (<u>better than</u> <u>usual</u>) to 3 (<u>worse than usual</u>), with higher scores reflecting an increased level of psychological distress. Split-half reliability for the total scale was reported as .95 (Goldberg & Williams, 1988). In this sample, the internal reliability of the GHQ was .90 (Cronbach's α).

[The Depression Anxiety and Stress Scale (DASS).] [C] The DASS (Lovibond & Lovibond, 1995a) is a 42-item measure of three self-report scales, designed to assess the negative emotional states of depression, anxiety, and stress. Each scale contains 14 items further divided into subscales of two to five items of similar content. The Depression subscale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest or involvement, anhedonia, and inertia. The Anxiety subscale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The Stress scale is reportedly sensitive to levels of chronic nonspecific arousal. Difficulty relaxing, nervous arousal, and being easily upset or agitated, irritableor overreactive and impatient are assessed.

Participants rate the extent to which they have experienced each symptom over the past week on a 4-point scale measuring severity and frequency. Scores are determined by summing the scores for the relevant items in each scale. Reported internal consistencies (coefficient alpha) for each scale of the DASS derived from the Australian normative data are: Depression = .91; Anxiety = .84; Stress = .90 (Lovibond & Lovibond, 1995b). Test-retest reliability was not reported.

[Procedure] [**B**]

Students were surveyed during university lecture periods. The purpose of the study was explained and students were informed that participation was voluntary. Participants were asked to read the information form preceding the questionnaire before completing the survey. Questionnaires were then returned for data analysis, with anonymity preserved. The total response rate was 80.5%, with 10 questionnaires invalidated due to incomplete responses. Students were given both written and verbal instructions on how to access university counseling services if they identified a need in this area. Sample α on the Depression scale was .92, Anxiety was .87, and Stress was .92 in comparison to those that Lovibond and Lovibond (1995) reported, which were .91, .84, and .90 respectively.

[RESULTS] [A]

[Data Analysis] [**B**]

Initial screening procedures assessed data quality, and an 82.2% item response rate was found. Analyses of Variance and a series of hierarchical regression analyses were used to investigate the relationship between perfectionism (MPS total and subscale scores) and GHQ scores, and between perfectionism and all other measures.

Internal reliability analyses (Cronbach's α) were conducted on the MPS and MPS subscales. Alpha coefficients are shown in Table 1, together with those that Frost et al. (1991) reported in their Smith College sample. The results in the current Australian sample are seen to be consistent with those reported by Frost et al. (1991). Means and standard deviations for all perfectionism scores, for this sample by gender, are also shown in Table 1.

TABLE 1 GOES ABOUT HERE

Internal reliability analyses were also conducted for the DASS measures and are consistent with Australian normative data (Lovibond & Lovibond, 1995b).

[Analysis of Variance] [B]

Preliminary analyses involved examining both GHQ and MPS total scores for age and gender differences. A 3 x 2 ANOVA (17 to 19 years vs. 20 to 24 years vs. 25 or more years) and two levels of gender (male vs.female). No significant age or gender differences were evident on either GHQ or MPS scores. On GHQ scores ($\underline{M} = 22.50$, $\underline{SD} = 10.46$), the main effects for age, $\underline{F}(2, 356) = 2.17$, gender, $\underline{F}(1, 356) = 1.86$ were not significant, nor was there a significant interaction effect, $\underline{F}(1, 356) = .36$. Similarly, on the MPS scores none of the age main effects, $\underline{F}(2, 373) = 1.11$, gender differences $\underline{F}(1, 373) = .58$, nor interaction effects between age and gender $\underline{F}(2, 373) = 1.39$, were significant. Subsequent analyses were therefore conducted on the entire sample.

[Multiple Regression] [B]

A series of separate hierarchical regression analyses were conducted to determine the amount of variance in GHQ scores, depression, anxiety, and stress explained by perfectionism (total scores) and perfectionism dimensions. For each analysis, age and gender were entered in the first block and MPS total scores in the second block. This analysis was then repeated in a second regression for each dependent measure, with the perfectionism dimension scores substituted for total perfectionism scores.

With the exception of Stress, age and gender were nonsignificant in all equations, and total MPS scores (in the first regression for each variable) and the perfectionism dimensions (in the second regression for each) were able to account for small but significant additional variance.

[Perfectionism and GHQ Scores] [B]

For GHQ scores, age and gender did not explain a significant overall proportion of the variance, $\underline{\mathbf{R}}^2 = .010$, $\underline{\mathbf{F}}(2, 360) = 1.79$, <u>ns</u>. MPS total scores when introduced into the model in Block 2, added a significant predictive power to the model, $\underline{\mathbf{R}}^2_{\Delta} = .052$, $\underline{\mathbf{F}}_{\Delta}$ (1, 359) = 19.98, $\underline{\mathbf{p}} < .001$. In the full model, $\underline{\mathbf{R}}^2 = .062$, $\underline{\mathbf{F}}(3, 359) = 7.91$, $\underline{\mathbf{p}} < .001$, total perfectionism scores made a significant contribution, $\mathbf{\beta} = .23$, $\underline{\mathbf{t}} = (359)$, 4.47, $\underline{\mathbf{p}} < .001$, accounting for 6% of the variance in GHQ scores.

This analysis was repeated with the perfectionism dimensions substituted for total MPS scores, to determine the contribution of the dimensions of perfectionism to variance in GHQ scores. Variables entered the regression model equation model in the following manner: age and gender were entered in Block 1; and Parental Expectations, Personal Standards, Doubts About Actions, Concern Over Mistakes, and Parental Criticism were all entered in Block 2.

Age and gender were not significant at the end of the first block, $\underline{\mathbf{R}}^2 = .010$, $\underline{\mathbf{F}}(2, 361) = 1.79$, <u>ns</u>. At Block 2, with the five dimensions in the equation, a significant proportion of variance was added to the model, $\underline{\mathbf{R}}^2 \triangleq .082$, $\underline{\mathbf{F}} \triangleq (5, 356) = 6.46$, $\underline{\mathbf{p}} < .001$. As a block, the perfectionism dimensions accounted for an additional 8% of the variance in GHQ scores. Of the five dimensions, Doubts About Actions was the only significant subscale score, $\mathbf{\beta} = .26$, $\underline{\mathbf{t}}(356) = 3.20$, $\underline{\mathbf{p}} < .001$. The full model predicted 9% of the variance in GHQ scores, $\underline{\mathbf{R}}^2 = .092$, $\underline{\mathbf{F}}(7, 356) = 5.16$, $\underline{\mathbf{p}} < .001$.

[Perfectionism and Depression] [B]

The relationship between depression and perfectionism and between depression and dimensions of perfectionism was then assessed.

With depression as the criterion variable, the prediction offered by the full regression model was found to differ significantly from chance, $\underline{R}^2 = .056$, $\underline{F}(3, 377) = 7.47$, $\underline{p} < .001$, explaining 5% of the variance in depression. Age and gender were not found to be significant predictors alone, $\underline{R}^2 = .008$, $\underline{F}(2, 377) = 1.68$, <u>ns</u>. However, when total perfectionism scores

were also entered into the model, a significant amount of additional variance was accounted for, $\underline{R}^2 = .047$, $\underline{F}_{\Delta}(3, 377) = 19.00$, $\underline{p} < .001$. The addition of total perfectionism scores provided unique variability in depression scores, $\beta = .21$, (377) = 4.35, $\underline{p} < .0001$, and 4.7% of the additional variance in depression scores was accounted for by the unique contribution of total perfectionism (reflected in total MPS scores).

In the second regression, age and gender were again entered first and were not found to be significant. Perfectionism subscale scores were then entered into the equation and accounted for significant additional variance, $\underline{R}^2_{\Delta} = .123$, \underline{F}_{Δ} (7, 374) = 10.63, p < .001. With all variables in the model predicting depression scores, the perfectionism dimensions, as a block, explained an additional 12% of the variance in depression scores. Consistent with the previous results for GHQ scores, the only significant perfectionism dimension was the Doubts About Actions subscale, $\beta = .380$, t (374) = 5.03, p < .0001.

[Perfectionism and Anxiety] [B]

The relationship between anxiety and perfectionism, and anxiety and perfectionism dimensions was then assessed using the same procedure. Six per cent of the observed variability in anxiety scores was accounted for by the full regression model ($\underline{R}^2 = .062$, $\underline{F}(3, 377) = 8.05$, $\underline{p} < .0001$.). Age and gender were again entered first and were not found to be significant, however MPS total scores added a significant proportion of variance to the model, $\underline{R}^2 = .058$, $\underline{F}_{\underline{A}}(3, 377) = 23.33$, $\underline{p} < .0001$. Consistent with the previous findings, 5% of the additional variance in anxiety scores was accounted for by the unique contribution of perfectionism, $\beta = .241$, $\underline{t}(377) = 4.83$, $\underline{p} < .0001$.

In the second regression, the model again consisted of age, gender and the perfectionism dimensions being used to predict anxiety scores, explaining 9% of the variance ($\underline{R}^2 = .096$, $\underline{F}(7, 374) = 5.70$, $\underline{p} < .0001$). Again, age and gender alone were not significant when entered into the first block, whereas the MPS subscale scores in the second step added a significant

proportion of variance to the model, $\underline{R}^2_{\underline{\Delta}} = .094$, $\underline{F}_{\underline{\Delta}}$ (5, 374) = 7.81, <u>p</u> < .0001. The Doubts About Actions dimension was again the only significant subscale, $\beta = .287$, <u>t</u> (374) = 3.27, <u>p</u> < .001.

[Perfectionism and Stress] [B]

Scores on the third subscale of the DASS measure, Stress, were assessed in the same manner. For the overall model, with stress as the criterion variable and age, gender, and total perfectionism scores as predictor variables, the regression equation offered prediction which differed significantly from chance, $\underline{R}^2 = .081$, $\underline{F}(3, 374) = 10.99$, $\underline{p} < .0001$, with 8% of the variance in stress scores explained. In contrast to the previous results, age and gender explained a significant proportion of the variance in stress scores, $\underline{R}^2 = .021$, F(2, 374) = 4.20, p < . 05, with a significant predictive contribution of age, $\beta = .128$, t (374) =

2.59, <u>p</u> < .05. When the other variables were entered into the regression model at Block 2, MPS total scores added significant extra variance to the model, $\underline{R}^2_{\underline{\Delta}} = .059$,

<u> F_{Δ} </u> = 24.04, p < .0001. Total perfectionism scores contributed a unique proportion of 5.9% of the added variance in stress scores, $\beta = .244$, <u>t</u> (374) = 4.90, <u>p</u> < .0001.

Results were similar in the second regression with the MPS subscale scores, entered in Block 2 after the contribution of age and gender were tested with the full model, explaining 11% of the variance, $\underline{R}^2 = .110$, $\underline{F}(7, 370) = 6.54$, $\underline{p} < .001$. Age and gender initially accounted for a significant proportion of the variance, $\underline{R}^2 = .022$, $\underline{F}(2, 370) = 4.20$, $\underline{p} < .05$, and with the addition of the MPS subscale scores in the second block, a further unique contribution of 8% of the incremental variance in stress scores was noted, $\underline{R}^2_{\Delta} = .088$, \underline{F}_{Δ} (5, 370 = 7.33, $\underline{p} <$.0001. Consistent with all previous results, Doubts About Actions was again the only significant perfectionism dimension, $\beta = .234$, \underline{t} (370) = 3.05, $\underline{p} < .01$.

[DISCUSSION] [A]

In this study we examined the extent to which perfectionism and dimensions of perfectionism were related to psychological functioning and specific negative emotional states in a university student population. Overall, the results indicate that elevated levels of perfectionism are associated with high scores on a broad measure of indicators of psychological distress in this sample. Analyses revealed a significant positive association between perfectionism and (a) depression, (b) anxiety and (c) stress. This association was independent of age and gender, with the exception of stress. Furthermore, one perfectionism dimension in particular, Doubts About Actions, was consistently and specifically related to psychological distress and negative emotional states in this sample.

The first hypothesis suggested in this study was confirmed by finding that a positive relationship between increased perfectionism and increased psychological distress was not influenced by age or gender. Consistent with previous research, no significant age or gender effects were found for total perfectionism scores on the MPS, thus supporting the first hypothesis (Parker & Adkins, 1995). Additionally, the mean scores and standard deviations obtained in the current study did not differ markedly from those of other studies with mixed-sex samples (e.g. Adkins & Parker, 1996). This result clearly indicates that there is a potential use in future research for this measure of the perfectionism construct.

The results of this study show a significant association between increased perfectionism and increased psychological distress, as hypothesized. Significant differences on GHQ scores were found between perfectionist groups, with regression and analyses showing that perfectionism contributed unique variance (6%). This finding is consistent with Frost et al.'s (1990) previous research, which revealed a pattern of significant correlations between overall perfectionism and a measure of general psychological distress (Brief Symptom Inventory), (Derogatis & Melisaratos, 1983). Tobin & Carson (1994) and Tyrell (1992) found a high prevalence of psychological distress in students. In one other Australian survey of student mental health, a strong relationship between internalized thoughts, behviors, and emotions, and increased negative affect was evident (Burgess, Oberklaid, Schweitzer, Krzywdzinski, & Klayich, 1997). Given the results reported here, perfectionism as a generic construct may be

one variable contributing to increased distress in students that has not previously been accounted for in this context.

The second purpose of this study was to determine whether perfectionism was related to the particular syndromes of depression, anxiety, and stress. As expected, for each relationship investigated, overall perfectionism was predictive of increased levels of depression, anxiety, and stress and accounted for significant proportions of the variance, at a consistent level of around 5% for each measure. Although age and gender were not significant in the predictive models for depression and anxiety, this result differed for stress, suggesting that older students with higher levels of perfectionism may be more affected by stress.

Hewitt and Dyck (1986) investigated depression, stress, and perfectionism in university students and found that the relationship between stressful life events and depression was significantly elevated in perfectionistic individuals and that perfectionism was predictive of current levels of depression. The results of the current study are consistent with previous findings, although the depression and perfectionism measures differ from those that Hewitt and Dyck used.

It should also be noted that as the DASS scales assess negative emotional states with reference to the participants' experiences in the week prior to completing the questionnaire, the results of the current study refer to levels of emotional states immediately preceding completion of the questionnaire. Total perfectionism was thus predictive of both depression and anxiety, consistent with previous research indicating a relationship between perfectionism (Frost & Marten, 1990; Frost et al., 1990; Frost et al., 1993), and demonstrative of a clear link between perfectionism and both depression and anxiety.

A consistent result in this study was that of the five perfectionism dimensions, Doubts About Actions emerged as the most significant predictor of psychological distress. Perfectionism dimensions explained significant proportions of the variance in each relationship explored, ranging between 12% for depression and 8% for stress, with Doubts About Actions contributing unique variance in each. Furthermore, these findings are consistent with previous studies that suggested that (a) Doubts About Actions was specific to anxiety (Frost et al., 1993) and (b) that depression and negative affect were correlated with

Concern Over Mistakes, Doubts About Actions, and Parental Criticism (Frost et al., 1990; Minarik & Ahrens, 1996).

On the basis of the current findings, the Doubts About Actions dimension of perfectionism may be a particularly pernicious component in the construct of perfectionism. This dimension reflects a tendency to feel that projects are not completed to satisfaction (Frost et al., 1990) and has been characterized as a vague sense of doubt about the quality of one's performance (Burns, 1980; Hamachek, 1978). In the MPS, Doubts About Actions is assessed by three items drawn from the Maudsley Obsessive-Compulsive Inventory (Rachman & Hodgson, 1980). Obsessive-compulsive features have been emphasized as core characteristics of the perfectionistic personality, and as noted, perfectionism has been included as a central component in the diagnosis of obsessive-compulsive personality disorder (<u>DSM-IV</u>), which, not surprisingly, points to a possible comorbidity between perfectionism and obsessive-compulsive symptoms.

[Conclusion] [B]

The current study provides evidence of a significant and consistent association between perfectionism and psychological well-being within an Australian sample of male and female university students. Several limitations of the study need to be acknowledged. Although the current findings indicate a specific relationship between (a) overall perfectionism, (b) one dimension of perfectionism, and (c) measures of psychological distress, these findings do not clearly account for patterns of associations between the negative and positive aspects of perfectionism. Future research may be directed at assessing the extent of specific differential relationships between perfectionism dimensions and types of depression in nonclinical and clinical cohorts. Given previous findings indicative of an association between depression subtypes and perfectionism variables, and the role of perfectionism in the possible etiology of depression, future research may explore this relationship further. An investigation of therapeutic outcomes with perfectionist groups, particularly university students attending student counseling services, could be informative in this regard.

Whereas clients presenting as anxious, depressed, or dependent are likely to be identified as problematic and requiring treatment, individuals with a perfectionist personality

may either not seek treatment or not be viewed as possessing problematic behaviors because the desire to excel is often described as an admirable attribute. Clinicians have observed that perfectionism is treatment resistant and that perfectionists in treatment require long-term psychodynamically oriented approaches for the most effective treatment outcome. The current findings have important clinical implications for the assessment and treatment of young adults with psychological disorders in the university setting.

In the context of treatment, we wish to suggest that there may be some validity in the use of the MPS as an assessment instrument. Students presenting as anxious and depressed may, in many cases, be assisted by addressing and investigating the role and the extent to which perfectionism may be a relevant factor in understanding the etiology of their difficulties.

In the current study we found that perfectionism and perfectionism dimensions influenced syndromes and clinical indicators of psychopatholgy in this Australian student population. Further, this relationship was not influenced by age or gender except in the case of stress. Additionally, the perfectionism dimension characterized as reflecting an aspect of maladaptive evaluative concerns, Doubts About Actions, emerged as the perfectionism dimension most associated with negative emotional states in this sample.

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TABLE 1

Scale	СМ	PS	D	PC	PE	MPS Total
Males						
M	24.86	22.11	11.39	10.49	14.29	82.89
<u>SD</u>	7.44	5.47	3.35	3.87	4.51	19.26
Females						
<u>M</u>	23.34	21.84	10.78	9.66	13.99	79.78
<u>SD</u>	8.63	5.54	3.69	4.41	4.97	21.92
Total						
<u>M</u>	23.68	21.90	10.94	9.86	14.05	80.46
<u>SD</u>	8.44	5.51	3.61	4.28	4.86	21.29
α^1	.92	.83	.84	.86	.79	.94
α^2	.88	.83	.84	.84	.77	.90

MPS and Subscale Scores: Means and Standard Deviations by Gender With Comparison of Alpha Coefficients for the Current Sample and the Smith College Sample

<u>Note.</u> Current sample: $\underline{N} = 405$. Smith College sample: $\underline{N} = 232$ (females) (Frost et al., 1990). CM = Concern Over Mistakes; PS = Personal Standards; D = Doubts About Actions; PC = Parental Criticism; PE = Parental Expectations.