

The Dimensions of Perfectionism

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Perfectionism is a major diagnostic criterion for one DSM-III diagnosis, and it has been hypothesized to play a major role in a wide variety of psychopathologies. Yet there is no precise definition of, and there is a paucity of research on, this construct. Based on what has been theorized about perfectionism, a multidimensional measure was developed and several hypotheses regarding the nature of perfectionism were tested in four separate studies. The major dimension of this measure was excessive concern over making mistakes. Five other dimensions were identified, including high personal standards, the perception of high parental expectations, the perception of high parental criticism, the doubting of the quality of one's actions, and a preference for order and organization. Perfectionism and certain of its subscales were correlated with a wide variety of psychopathological symptoms. There was also an association between perfectionism and procrastination. Several subscales of the Multidimensional Perfectionism Scale (MPS), personal standards and organization, were associated with positive achievement striving and work habits. The MPS was highly correlated with one of the existing measures of perfectionism. Two other existing measures were only moderately correlated with the MPS and with each other. Future studies of perfectionism should take into account the multidimensional nature of the construct.

KEY WORDS: perfectionism; perfectionistic thinking; personal standards; self-evaluation.

In 1983 Asher Pacht devoted his APA Distinguished Professional Contribution Award address to the topic of perfectionism (Pacht, 1984). In it he argued that perfectionism is a widespread and extremely debilitating problem. He linked it

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to a host of psychological and physical disorders including alcoholism, erectile dysfunction, irritable bowel syndrome, depression, anorexia, obsessive compulsive personality disorder, abdominal pain, dysmorphophobia, ulcerative colitis, writer's block, Type A coronary-prone behavior, and chronic olfactory paranoid syndromes. Others have linked perfectionism with migraine headaches, suicide, and even law school dropout rates (Burns, 1980; Hollander, 1965). Despite the presumed seriousness of perfectionism and the many maladies thought to be associated with it, few studies of this phenomenon exist. Part of the reason for this may be the varied and nonspecific definitions of perfectionism, and the difficulty in measuring such a loosely defined construct.

Although a precise definition of perfectionism has been elusive, the literature has emphasized a small number of important features. Most prominent among these has been the setting of excessively high personal standards of performance. Virtually all writing on this topic emphasizes the setting of excessively high standards as central to the concept (Burns, 1980; Hamachek, 1978; Hollander, 1965; Pacht, 1984). A major problem with defining perfectionism in this way is that it does not distinguish perfectionistic people from those who are highly competent and successful. The setting of and striving for high standards is certainly not in and of itself pathological. On the contrary, some evidence indicates that it reflects a positive outlook on life (Blatt, D'-Afflitti, & Quinlan, 1976). Hamachek (1978) draws a distinction between normal and neurotic perfectionists. Normal perfectionists are those who set high standards for themselves yet "feel free to be less precise as the situation permits" (p. 27). Neurotic perfectionists, on the other hand, set high standards but allow little latitude for making mistakes; thus they never feel that anything is done completely enough or well enough. The implication of this distinction is that perfectionism involves high standards of performance *which are accompanied by tendencies for overly critical evaluations of one's own behavior*. The psychological problems associated with perfectionism are probably more closely associated with these critical evaluation tendencies than with the setting of excessively high standards.

The literature on perfectionism has described several of these overly critical evaluative tendencies. The first of these has to do with the level of concern over mistakes in performance. The major distinction between Hamachek's (1978) normal and neurotic perfectionist is that normal perfectionists have wider latitude in allowing minor flaws in their performance while still accepting it as successful. Neurotic perfectionists are so overly concerned with mistakes that even minor ones are likely to result in the perception that their standards have not been met. The overconcern for mistakes, according to Hamachek (1978), leads perfectionists to strive for their goals by a fear of failure rather than a need for achievement. Burns (1980) and Pacht (1984) also emphasize the importance of fear of mistakes in defining perfectionism. Burns (1980) char-

acterizes it as part of the dichotomous thinking style of depressives described by Beck (1976). Performance must be perfect or it is worthless. Any minor flaw constitutes failure.

A second and related evaluative tendency emphasized in the literature on perfectionism is a vague sense of doubt about the quality of one's performance (Burns, 1980; Hamachek, 1978). This feeling does not have to do with the recognition or evaluation of specific mistakes, but the sense that a job is not satisfactorily completed. This experience has been extensively described in the literature on obsessional experiences (see Reed, 1985) as a feeling of uncertainty regarding an action or belief. Reed (1985) groups perfectionism with other characteristics of obsessive-compulsives which reflect a "*reluctance to complete a task*" (p. 115, emphasis in the original). The central feature, according to Reed, is uncertainty regarding when a task is done.

Besides an overconcern with mistakes and a tendency to doubt the quality of one's work, most writers describe perfectionists as people who place considerable value on their parents' expectations and evaluations of them. Each of the major contributors to this area (Burns, Pacht, Hamachek, & Hollander) has described this parental connection as the core of the disorder and its etiology. They have hypothesized that perfectionists grew up in environments where love and approval were conditional. To feel love and approval, they must perform at ever increasing levels of perfection. Any failure or mistake risks rejection by the parents and loss of love. For the perfectionist, self-evaluations of performance are inextricably tied to assumptions about parental expectations and approval or disapproval. Perfectionists feel their parents have set standards they cannot meet, and failure to meet them means a potential loss of parental love and acceptance. These notions are integral and perhaps central components of perfectionism.

A final feature sometimes used to characterize perfectionists is an overemphasis on precision, order, and organization. Hollander (1965) describes it as a tendency to be "fussy and exacting" (p. 96) with an overemphasis on neatness, "There is a place for everything, and everything must be in its place" (p. 96). He even describes it as a fetish for orderliness. While it does not have to do with setting standards or how performance regarding those standards is evaluated, it does have to do with how the individual goes about the day-to-day task of meeting those standards and therefore may be an important dimension of perfectionism.

There are several existing measures of perfectionism which are portions of scales designed to measure broader constructs. Each of these scales has a slightly different emphasis. Burns (1980) adapted a portion of the Dysfunctional Attitudes Scale to create a scale which was heavily weighted on personal standard setting and concern over mistakes. A related subscale from Jones' (1968) Irrational Beliefs Test (IBT) is more heavily weighted on personal standard

setting. The Eating Disorders Inventory (EDI; Garner, Olmstead, & Polivy, 1983) contains a perfectionism subscale which emphasizes personal standard setting as well as parental expectations. None tap all five of the dimensions of perfectionism hypothesized above. Also, those dimensions measured are covered by a limited number of items. One purpose of the present investigation was to expand the measurement of perfectionism by developing a multidimensional measure which samples all five dimensions. A second purpose was to provide preliminary evidence regarding the reliability and validity of the new multidimensional measure. Finally, three separate studies were run to test specific hypotheses about the nature and scope of perfectionism. These studies examined the relationship between the new measure and other measures of perfectionism, general psychopathology, depression, compulsivity, and procrastination among samples of normal young adults.

STUDY 1: SCALE DEVELOPMENT

In order to create an expanded measure of perfectionism, a large number of items sampling each of the hypothesized dimensions of perfectionism were developed. Items from the existing scales of perfectionism were used as well as additional items designed to tap the dimensions reviewed above. All items were categorized into one of the five dimensions. These scales were purified using reliability analyses and subjected to factor analyses. Factor scores and subsequent reliability analyses were used to create the final scale.

Method

Subjects. Two samples of subjects were used to derive the subscales. Subjects in the first sample were 232 female undergraduates enrolled in psychology courses who volunteered to complete a series of questionnaires in return for a chance to win \$40 in a lottery. Their responses were used to refine the items and as the basis for an initial factor analysis. A second sample of 178 female undergraduates enrolled in introductory psychology classes was administered the items which resulted from the factor analysis of the first sample.

Procedure. Initial item selection was based on the content of other perfectionism scales and the definition of perfectionism outlined above. Sixty-seven items were generated which fit conceptually into each of the five dimensions of perfectionism (Personal Standards, Concern over Mistakes, Parental Expectations, Doubting of Actions, and Organization). Personal Standards setting was conceptualized as the setting of very high standards and the excessive importance placed on these high standards for self-evaluation. The

Concern over Mistakes component was conceptualized as negative reactions to mistakes, a tendency to interpret mistakes as equivalent to failure, and a tendency to believe that one will lose the respect of others following failure. The tendency to believe that one's parents set very high goals and are overly critical comprised the Parental Expectations component. The tendency to feel that projects are not completed to satisfaction constituted the Doubting of Actions component. Finally, emphasis on the importance of and preference for order and Organization made up the last component.

The items included several from two of the existing measures of perfectionism (Burns, 1980; Garner et al., 1983), several from an existing measure of obsessionality (Rachman & Hodgson, 1980), and a large number of items which were generated anew. All items were in the form of statements and laid out in a Likert-type format with 5-point response continua from "strongly disagree" to "strongly agree." These 67 items were reduced to 47 using reliability analyses to purify each of the above dimensions.

Using the subjects from sample 1, responses to the 47 items were correlated and the resulting matrix was subjected to factor analysis. Items included in the significant factors of this factor analysis were administered to a separate sample of subjects and subjected to a second factor analysis. Following this factor analysis, the items loading most consistently on each factor were treated as unit-weighted members of new, multi-item scales. The psychometric properties of each new scale were determined. For both factor analyses, a principal-factor solution was employed. The initial communality estimates were based on the squared multiple correlations between each item and all other items taken together. Factors were rotated to orthogonal simple structure according to the Varimax criterion. A minimum eigenvalue of 1.0 was employed for factor extraction.

Results and Discussion

The principal-factor solution for the subjects in sample 1 produced 10 distinct factors, each with eigenvalues greater than 1.0. These 10 factors accounted for 64 percent of the total variance among the 47 items. The four factors contributing the least amount of variance were dropped from further consideration since they were either single-item factors or were not easily interpretable. The remaining 6 factors (36 items) accounted for 54 percent of the total variance.

The factors roughly corresponded to the major dimensions used to create the items. The first factor consisted of those items having to do with concern over making mistakes. The nine-item factor accounted for the largest amount of variance (22.5%). The second factor, which accounted for 12.5% of the variance, consisted of six items having to do with organization and neatness.

The third factor was eight items reflecting high personal standards of performance and the tendency to evaluate oneself based on performance. This factor accounted for 6.6% of the variance. The fourth and fifth factors were five- and four-item factors, which were the original Parental Expectations dimension. Factor 4 consisted of those items having to do with high parental expectations (5.4% of the variance). Factor 5 consisted of those items having to do with excessive parental criticism (3.8% of the variance). The final factor was composed of four items reflecting doubts about actions (2.8% of the variance).

The resulting 36 items were administered to a separate group of subjects. Their responses were subjected to a factor analysis. The principal-factor solution produced six distinct factors which replicated the six factors observed in sample 1. The six-factor solution accounted for 64.5% of the variance among the 36 items. There were several items which loaded more highly on a different factor than that observed in sample 1. In most of these cases the item also loaded, although slightly less highly, on the scale to which it was assigned in the first factor analysis. The final assignment of items to subscales was done to maintain the conceptual integrity of the subscales and to maximize their reliability. The effect of these procedures was to replace one item on the Concern over Mistakes subscale with a different item, and to drop one item from the Personal Standards subscale and replace a second one. The other four subscales (Parental Expectations, Parental Criticism, Doubting, and Organization) remained the same as those derived from the initial factor analysis. Several items from the Parental Expectation scale loaded on the Parental Criticism dimension in this analysis. Since they also had substantial loading on the Parental Expectation factor, they were retained in that factor. The Concern over Mistakes (CM) subscale again contributed the most variance (25%), followed by the Organization (O) (15.7%), Parental Criticism (PC) (8.6%), Personal Standards (PS) (7.1%), Doubting (D) (4.6%), and Parental Expectations (PE) (3.5%). In both of these studies, it appears that Concern over Mistakes is the most central component of perfectionism. The items for each factor are shown in Table I.²

Reliabilities were computed for the resulting factor scales. The coefficients of internal consistency ranged from .77 to .93 (see Table I). The reliability of the total perfectionism scale was .90. The six scales created from the factors were for the most part highly correlated with one another. One exception was the Organization scale which showed the weakest pattern of intercorrelation with the other subscales (see Table II). It also showed the weakest correlation with the total of the other items in the perfectionism scale (see Table II). For these reasons Organization items were not used to compute over-

²The final 35-item Multidimensional Perfectionism Scale contained two items from the Burns Perfectionism Scale (items 4 and 10), four items from the EDI (Garner *et al.*, 1983; items 15, 18, 19, and 20), and three items from the MOCI (Rachman & Hodgson, 1980; items 17, 28, and 32).

Table I. MPS Subscale Items and Chronbach's Alpha Coefficient for Each Subscale**Concern over Mistakes (CM)**

alpha = .88

9. If I fail at work/school, I am a failure as a person.
10. I should be upset if I make a mistake.
13. If someone does a task at work/school better than I, then I feel like I failed the whole task.
14. If I fail partly, it is as bad as being a complete failure.
18. I hate being less than the best at things.
21. People will probably think less of me if I make a mistake.
23. If I do not do as well as other people, it means I am an inferior human being.
25. If I do not do well all the time, people will not respect me.
34. The fewer mistakes I make, the more people will like me.

Personal Standards (PS)

alpha = .83

4. If I do not set the highest standards for myself, I am likely to end up a second-rate person.
6. It is important to me that I be thoroughly competent in everything I do.
12. I set higher goals than most people.
16. I am very good at focusing my efforts on attaining a goal.
19. I have extremely high goals.
24. Other people seem to accept lower standards from themselves than I do.
30. I expect higher performance in my daily tasks than most people.

Parental Expectations (PE)

alpha = .84

1. My parents set very high standards for me.
11. My parents wanted me to be the best at everything.
15. Only outstanding performance is good enough in my family.
20. My parents have expected excellence from me.
26. My parents have always had higher expectations for my future than I have.

Parental Criticism (PC)

alpha = .84

3. As a child, I was punished for doing things less than perfect.
5. My parents never tried to understand my mistakes.
22. I never felt like I could meet my parents' expectations.
35. I never felt like I could meet my parents' standards.

Doubts about Actions (D)

alpha = .77

17. Even when I do something very carefully, I often feel that it is not quite right.
28. I usually have doubts about the simple everyday things I do.
32. I tend to get behind in my work because I repeat things over and over.
33. It takes me a long time to do something "right."

Organization (O)

alpha = .93

2. Organization is very important to me.
7. I am a neat person.
8. I try to be an organized person.
27. I try to be a neat person.
29. Neatness is very important to me.
31. I am an organized person.

Table II. Intercorrelations Among the Subscales of the MPS^a

	CM	PS	PE	PC	DA	O	P
CM							
PS	.47 ^b						
PE	.36 ^b	.21 ^b					
PC	.31 ^b	.04	.62 ^b				
DA	.47 ^b	.24 ^b	.14	.27 ^b			
O	.16 ^c	.43 ^b	.01	-.07	.16 ^c		
P	.57 ^b	.50 ^b	.40 ^b	.34 ^b	.42 ^b	.23 ^b	

^aCorrelations between overall perfectionism (P) and each subscale represent the correlation between each subscale and the total of the other items in the overall perfectionism measure.

^b $p < .01$.

^c $p < .05$.

Table III. Correlations Among the Four Perfectionism Scales^a

	MPS	Burns	IBT	EDI
MPS				
Burns	.846			
IBT	.567	.572		
EDI	.593	.654	.506	

^aFor all entries, $r > .29$, $p < .01$.

all perfectionism scores in the subsequent investigations reported here, although the subscale was included as a separate factor. This had little effect on the internal reliability of the overall perfectionism score ($\alpha = .90$).

STUDY 2: CORRELATION OF MULTIDIMENSIONAL PERFECTIONISM SCALE WITH OTHER PERFECTIONISM SCALES

In order to determine the relationship between the Multidimensional Perfectionism Scale (MPS) and other measures of perfectionism, the MPS was administered to a group of subjects along with three other perfectionism measures.

Methods

Subjects. Subjects were 84 female undergraduates enrolled in an introductory psychology course. Early in the academic semester the subjects were asked to complete a packet of questionnaires which included the MPS, the Burns' Per-

Table IV. Correlations Among MPS Subscales and Other Perfectionism Scales

MPS subscales	Other scales		
	Burns	IBT	EDI
CM	.866 ^b	.609 ^b	.569 ^b
PS	.529 ^b	.526 ^b	.440 ^b
PE	.434 ^b	.146	.364 ^b
PC	.423 ^b	.144	.206 ^a
D	.473 ^b	.311 ^b	.338 ^b
O	.176	.245 ^a	.141

^a*p* < .05.^b*p* < .01.

fectionism Scale (Burns, 1980), the Self-Evaluative (SE) Scale from the IBT (Jones, 1968), and the Perfectionism Scale from the EDI (Garner *et al.*, 1983).

Results

The correlations among the scales are shown in Table III. The MPS was highly correlated with the Burns Perfectionism Scale. This may be due, in part, to some item overlap. The correlations with the IBT SE Scale and the EDI Perfectionism Scale, although statistically significant, were smaller in magnitude and suggest that these measures are tapping something slightly different from the MPS and Burns scales. The relatively low correlation between the IBT and EDI perfectionism measures also suggests that they are measuring something different from one another.

Correlations between these measures of perfectionism and the MPS subscales indicate that the most overlap occurs with the Concern over Mistakes subscale and to a lesser extent with the Personal Standards subscale (see Table IV). All of the subscales of the MPS, except for Organization, correlated with the Burns perfectionism scores. The magnitude of correlations between MPS subscales and the other two perfectionism measures tended to be smaller than those with the Burns perfectionism measure.

Reliability analyses indicated that the MPS had a Chronbach alpha of .91, the Burns scale alpha was .82, the IBT SE scale alpha was .78, and the EDI Perfectionism Scale alpha was .70.³ The reliability coefficients of the MPS subscales were consistent with those reported in the previous section (CM = .91, PS = .81, PE = .82, PC = .77, D = .79, O = .94).

In addition to having a consistent factor structure across different samples and adequate internal consistency, the MPS is highly correlated with the other major measures of perfectionism. It should be noted that this is, in part, due

³Differences in the magnitudes of these coefficients may be due to differences in scale length.

to item overlap between the MPS, Burns, and EDI scales. The item overlap between these scales limits the extent to which the correlations between them can be used as an independent validation of the MPS. Examination of the subscale structure suggests that the major component of the MPS and the other measures of perfectionism is Concern over Mistakes. The Organization subscale was the least highly correlated with the other subscales of the MPS and the other measures of perfectionism. For this reason, in this and the subsequent investigations reported here, Organization is included as a separate factor but the items are not used in the calculation of the overall perfectionism score.

STUDY 3: PERFECTIONISM, PSYCHOPATHOLOGY, AND DEPRESSION

A primary purpose of this study was to test whether perfectionism was related to a broad range of symptoms of psychopathology among normal individuals. A second purpose was to determine whether the pattern of these relationships is different for the separate dimensions of perfectionism. It was expected that the Concern over Mistakes and Doubting dimensions would be more closely related to psychopathology than Personal Standards and Organization.

Because perfectionists believe minor mistakes constitute failure and their self-esteem is based on how well they perform, perfectionists have been hypothesized to be especially vulnerable to depression (Burns, 1980). Several studies have supported the hypothesis that perfectionism is related to depression using the Burns scale (Hewitt & Dyck, 1986; Pirot, 1986) and the Self-Expectations Scale of the IBT (LaPointe & Crandall, 1980; Nelson, 1977). These relationships have tended to be small (Pirot, 1986) and apparent only under certain circumstances (Hewitt & Dyck, 1986). Additional goals of this study were to determine whether the MPS was associated with depression and to identify what features of depression are most relevant to perfectionism. With the exception of Hewitt and Dyck, no attempts have been made to determine what aspects of depression are most closely associated with perfectionistic thinking. Theorizing and research by Blatt and his colleagues are relevant to this purpose. Blatt *et al.* (1976) have proposed that depression may be described along two primary dimensions. Dependency depression is thought to reflect abandonment fears, helplessness, and the tendency to be dependent on someone for love, nurturance, and protection. Self-critical depression reflects feelings of inferiority, worthlessness, guilt, and a tendency to be critical of oneself. In a self-critical depression, individuals are likely to feel they have failed to live up to their own or someone else's expectations for them. The two dimensions have been found to exist among normal adults as well as among psychiatric populations (Blatt *et al.*, 1976; Blatt, Quinlan, Chevron, McDonald, & Zuroff, 1982).

Given the presumed nature of perfectionism it should be more closely associated with self-critical depression than dependency depression. Furthermore, this relationship should be most apparent with the Concern over Mistakes and Doubting subscales, since these come the closest to the nature of self-critical depression.

A third subscale of the Blatt *et al.* Depressive Experiences Questionnaire (DEQ) reflects "a positive picture of goal-oriented strivings and feelings of accomplishment" (p. 385). The items reflect, among other things, high standards of performance. This construct is similar to Hamachek's notion of normal perfectionism, that is, the positive striving for achievement. While the MPS measures primarily what Hamachek calls neurotic perfectionism, several subscales may not only reflect pathological thinking, but also a more positive orientation toward life. Specifically, the Personal Standards subscale contains items having to do with high standards and may be associated with positive self-concept. Although this scale is correlated with the more "pathological" subscales of perfectionism (see Study 1), it is possible that high scores could also reflect more positive achievement striving. If so, Personal Standards would be correlated with the DEQ Efficacy scale.

It also has been suggested that perfectionistic people experience greater levels of guilt and shame (Hamachek, 1978) because of their overly moralistic self-evaluations (Sorotzkin, 1985). A final purpose of the present study is to determine whether people with a perfectionistic thinking style experience higher levels of guilt.

Method

Subjects. Subjects for the study were 72 female undergraduate students at a small liberal arts college. Subjects completed the questionnaires in small groups early in the semester.

Measures. The 35-item Multidimensional Perfectionism Scale was administered to all subjects. The scale has an overall perfectionism score as well as six subscale scores. Items from the Organization scale were not used in calculating the overall perfectionism score.

In order to measure general psychopathology and psychiatric symptoms, subjects completed a shortened version of the SCL-90, the Brief Symptom Inventors (BSI; Derogatis & Melisaratos, 1983). This scale consists of nine primary symptom dimensions and three global indices of distress (general distress—GDI, frequency of symptoms—PST, and intensity of symptoms—PSDI).

To test the hypotheses regarding perfectionism and type of depression, the Depressive Experiences Questionnaire (DEQ; Blatt *et al.*, 1976) was used. This measure has three subscales: Dependency Depression, Self-Critical Depres-

Table V. Correlations Between MPS and BSI

BSI subscale	MPS subscales						
	P	CM	PS	PE	PC	D	O
Somatization	.325 ^a	.255	.233	.093	.141	.425 ^a	.171
Inter. Sens.	.297	.309 ^a	.113	.013	.107	.523 ^a	.161
Depression	.463 ^a	.392 ^a	.211	.238	.242	.546 ^a	.117
Anxiety	.439 ^a	.355 ^a	.159	.205	.271	.596 ^a	.117
Obs.-Comp.	.356 ^a	.299	.088	.140	.202	.579 ^a	.183
Hostility	.359 ^a	.309 ^a	.165	.253	.163	.349 ^a	.041
Phobic Anx.	.276	.229	.074	.038	.203	.491 ^a	.160
Paranoid Idea	.444 ^a	.403 ^a	.271	.169	.205	.480 ^a	.207
Psychoticism	.432 ^a	.352 ^a	.183	.182	.242	.600 ^a	.202
GSI	.472 ^a	.394 ^a	.210	.210	.257	.610 ^a	.185
PST	.371 ^a	.314 ^a	.115	.157	.204	.560 ^a	.148
PSDI	.564 ^a	.477 ^a	.284	.301 ^a	.323 ^a	.583 ^a	.172

^a $p < .01$.

sion, and Efficacy. A unit-weight scoring system was used in calculating the scores on these subscales (Welkowitz, Lish, & Bond, 1985).

Klass's (1987) Situational Guilt Scale was used to assess various aspects of guilt. The scale generates an overall measure of guilt and three subscales: Interpersonal Harm, Norm Violation, and Self-Control Failure.

Results

Significant correlations were found between overall perfectionism and 10 out of the 12 BSI scales ($p < .01$). As expected, the most consistent pattern of significant correlations with the BSI scales was seen for the Concern over Mistakes (9 out of 12 correlations significant) and Doubting of Actions (12 out of 12 correlations significant) subscales. For Personal Standards and Organization, none of the correlations were significant. The correlations between perfectionism scales and the BSI depression scale were not noticeably greater than the correlations with other BSI scales. Thus, there is little evidence of a unique relationship between perfectionism and depression. See Table V.

The correlations between perfectionism and the DEQ subscales are displayed in Table VI. Perfectionism was significantly correlated with both Dependency Depression and Self-Critical Depression. Partial correlations revealed that while perfectionism was significantly correlated with Self-Critical Depression when Dependency Depression was controlled, the correlation between perfectionism and Dependency Depression was not significant when Self-Critical Depression was controlled. Thus, as hypothesized, perfectionism was more closely associated with Self-Critical Depression than Dependency Depression.

Table VI. Pearson (and Partial) Correlation Coefficients Between MPS and DEQ Subscales^a

MPS Subscales	DEQ subscales	
	Self-Critical Depression	Dependency Depression
P	.452 ^b (.362 ^b)	.293 ^c (-.035)
CM	.421 ^b (.298 ^c)	.313 ^b (.030)
PS	.212 (.148)	.153 (.007)
PE	.116 (.118)	.045 (-.050)
PC	.195 (.241 ^a)	.032 (-.147)
D	.606 ^b (.444 ^b)	.466 ^b (.077)
O	.081 (.015)	.100 (.061)

^aThe partial correlations between MPS and Self-Critical Depression control for Dependency Depression while the correlations between MPS and Dependency Depression control for Self-Critical Depression.

^b $p < .01$.

^c $p < .05$.

This pattern was identical for the Concern over Mistakes subscale and the Doubting subscale. See Table VI.

Also supporting the hypothesis, the Personal Standards subscale was positively correlated with the Efficacy subscale of the DEQ ($r = .53$, $p < .001$). Thus, although Personal Standards was marginally correlated with depression on the BSI, it is also associated with a more positive self-concept. To more closely examine the nature of the Personal Standards scale, a partial correlation was conducted between Personal Standards and the DEQ subscales controlling for Efficacy. When the variance in common with Efficacy was controlled, the Personal Standards scale was positively and significantly correlated with both Dependency Depression ($r = .24$) and Self-Critical Depression ($r = .29$). It would appear that Personal Standards is associated with positive feeling (Efficacy) and, at the same time, depression.

Interestingly, the correlation between overall perfectionism and Efficacy was only marginally significant ($r = .198$, $p < .10$). When Dependency Depression and Self-Critical Depression were controlled, this relationship was significant and positive ($r = .362$, $.264$, respectively; $p < .05$). It would appear that this relationship is due to the contribution of the Personal Standards subscale since none of the other scales was associated with Efficacy.

The overall perfectionism measure was not significantly correlated with any of the measures of guilt. The Concern over Mistakes and Doubting subscales were the only perfectionism measures which were correlated with any of the guilt scales. Concern over Mistakes was correlated with Interpersonal Harm and Norm Violation, and Doubting of Actions was correlated with overall guilt and Norm Violation. These correlations were small in magnitude, and given the total number of correlations in this analysis, could be attributable to chance. It is possible that the range of guilt scores among this normal population

Table VII. Correlations Between MPS and Situational Guilt Scale (SGS)

MPS Subscales	Guilt	SGS subscale		
		Interpersonal Harm	Norm Violation	Self-Control Failure
P	.157	.218	.213	.053
CM	.227	.290 ^a	.258 ^a	.113
PS	.175	.179	.176	.144
PE	-.037	.050	-.005	-.097
PC	-.125	-.058	.004	-.221
D	.244 ^a	.215	.262 ^a	.199
O	.160	.108	.198	.151

^a $p < .05$.

was sufficiently restricted that it reduced the magnitude of these correlations. See Table VII.

STUDY 4: COMPULSIVITY AND PROCRASTINATION

Perfectionism has long been associated with compulsivity. Jones (1918) described it as a core characteristic of the anal personality. Straus (1948) linked perfectionism with the doubts and indecisiveness of compulsives and hypothesized that it is a characteristic which allows obsessionals to complete actions. Schneider (1958) has postulated that excessively high standards are the cause of the basic feeling of inadequacy among compulsives. The DSM-III manual also lists perfectionism as one of the diagnostic criteria for the Obsessive-Compulsive (OC) personality disorder. None of the research done thus far on perfectionism, however, has attempted to link it with compulsivity. The findings of Study 2 offer some indication of an association. Perfectionism was associated with the Obsessionality subscale of the BSI. Interestingly, however, although overall perfectionism, Concern over Mistakes, and Doubting of Actions subscales were correlated with obsessionality, the Personal Standards subscale was not. This study was designed to provide further evidence regarding the relationship between perfectionism and compulsivity by using measures specifically designed to assess compulsivity.

A further characteristic which has been linked to perfectionistic thinking is the tendency to procrastinate. Procrastination allows the individual to avoid less than perfect performance. The association between the two has been hypothesized by those theorizing about perfectionism (Burns, 1980; Hamachek, 1978; Sorotzkin, 1985), and by those theorizing about procrastination (Solomon & Rothblum, 1984). As of yet, however, no data exist regarding this relationship.

Method

Subjects and Measures. One Hundred and six female college students completed the Multidimensional Perfectionism Scale, the Maudsley Obsessive-Compulsive Inventory (MOCI, Rachman & Hodgson, 1980), the Everyday Checking Behavior Scale (ECBS; Sher, Frost, & Otto, 1983) and the Procrastination Assessment Scale-Students (PASS; Solomon & Rothblum, 1984). The MOCI is a widely used measure of obsessive-compulsive experiences. It contains an overall measure of compulsivity and four subscales (Checking, Cleaning, Slowness, and Doubting). The ECBS is a self-report measure of the frequency of day-to-day checking behaviors (e.g., checking to make sure keys are in purse or pocket). It has been found to be related to other compulsive experiences (Frost, Sher, & Green, 1986; Frost & Sher, 1989).

In the PASS, subjects are presented with six academic situations and asked (1) how frequently they procrastinate on each of them, and (2) the extent to which procrastination is a problem for them in doing these tasks. A second section of the PASS involves reasons for procrastination. These reasons have been condensed into two major categories by factor analysis. The first of these involves items which reflect a fear of failure. Reasons included on this scale are a number of things which are similar to perfectionism (e.g., concern over meeting standards, etc.). The second factor reflects the aversiveness of the task and lack of motivation to complete the task. Because of the overlap with the fear of failure factor, it was expected that perfectionism would be more closely associated with this reason for procrastination than the task aversiveness/laziness factor.

Results

The correlations between the MPS and measures of compulsivity reveal a pattern of significant relationships⁴ (see Table VIII). Overall perfectionism was correlated with general compulsivity, three out of the four MOCI subscales, and the ECBS. The same pattern was true of Concern over Mistakes and Doubting of Actions. Personal Standards was correlated with overall compulsivity and two out of four of the MOCI subscales, but not with the ECBS. The negative correlation between Slowness and Parental Expectations and Parental Criticism were unexpected. Whether this reflects a true relationship must be examined in future studies.

⁴Because of the substantial item overlap between the Doubt Subscale of the MPS and the Doubting scale of the MOCI, the high correlation between these two would be expected and does not reflect an independent verification of the contents of the scale.

Table VIII. Correlations Between MPS, MOCI, and ECBS

MPS Subscales	Total MOCI	MOCI subscales				ECBS
		Check	Wash	Slow	Doubt	
P	.503 ^b	.380 ^b	.343 ^b	-.034	.463 ^b	.207 ^a
CM	.523 ^b	.395 ^b	.330 ^b	.071	.440 ^b	.267 ^b
PS	.383 ^b	.171	.265 ^a	.188	.397 ^b	.091
PE	.226 ^a	.258 ^a	.221 ^a	-.242 ^a	.179	.094
PC	.097	.141	.065	-.303 ^b	.097	.029
D	.535 ^b	.405 ^b	.217 ^a	.147	.651 ^b	.259 ^b
O	.088	.041	-.029	.160	.114	.165

^a*p* < .05.^b*p* < .01.

Table IX. Correlations Between MPS and Procrastination

MPS Subscales	Procrastination			
	Frequency	Severity	Fear of failure	Task aversiveness
P	.088	.212 ^a	.477 ^b	.260 ^b
CM	.136	.220 ^a	.435 ^b	.257 ^b
PS	-.300 ^b	-.045	.358 ^b	-.101
PE	.210 ^a	.180	.197 ^a	.272 ^b
PC	.241 ^a	.215 ^a	.227 ^a	.303 ^b
D	.185	.348 ^b	.553 ^b	.268 ^b
O	-.368 ^b	-.174	.013	-.351 ^b

^a*p* < .05.^b*p* < .01.

Overall perfectionism was significantly correlated with the extent to which procrastination was reported as a problem by the subjects. Interestingly, it was not associated with the frequency of procrastination. The pattern of correlations between procrastination and the subscales of perfectionism varied as a function of the subscale. The Concern over Mistakes scale was positively correlated with the extent to which procrastination was seen as a problem, but not its frequency. Personal Standards was negatively correlated with the frequency of procrastination, but not the extent to which it was a problem. Organization was also negatively associated with the frequency of procrastination and the task aversiveness reason for procrastination. This is further evidence that these two subscales reflect some of the positive characteristics of perfectionism, especially with respect to planning and completion of tasks. Such planning may reduce the level of aversiveness that produces procrastination. Parental Expectations and Criticism were both positively correlated with the

frequency of procrastination and the extent to which it is a problem. See Table IX.

As expected, the correlations between perfectionism and fear of failure tended to be larger than those between perfectionism and task aversiveness. It should be noted that this was not true for the Parental Expectations and Parental Criticism subscales.

GENERAL DISCUSSION

The findings in this investigation provide evidence for the reliability of the MPS, preliminary data regarding its validity, and data on the usefulness of examining separate dimensions of this construct. Although the definitions of perfectionism have emphasized the setting of excessively high standards of performance, the present series of studies suggest that Concern over Mistakes is more central to the concept, and is the major component in other measures of perfectionism as well. Furthermore, it was the dimension which was most closely related to symptoms of psychopathology. The dimensions of high Personal Standards and Organization were related to several positive personal characteristics. Future research on perfectionism should take into account the multi-dimensional nature of this construct.

In addition to Concern over Mistakes and Personal Standards, the other dimensions of perfectionism (perceptions of parental expectations, perceptions of parental criticism, and Doubting of Actions) were related to the overall perfectionism measure, the other subscales of the MPS, and other perfectionism measures. One additional hypothesized dimension of perfectionism (Organization) was only marginally related to overall perfectionism and the other subscales. Furthermore, it was related to only one of the other perfectionism measures. Therefore it does not appear to be a core component of perfectionism.

The overall perfectionism score from the MPS correlated highly with the Burns perfectionism measure. This relationship may be inflated given that two items overlap. The moderate correlations with the IBT and EDI measures suggest they are measuring something slightly different from the MPS and Burns scales. This is somewhat surprising given that four items from the EDI overlap with the MPS. Interestingly, the IBT SE Scale and the EDI Perfectionism Scale did not correlate highly enough with each other to consider them measures of the same construct. Thus, the MPS and the Burns scales appear to be measuring the same construct, while the IBT and EDI scales appear to be measuring constructs which are slightly different. Caution must be exercised in generalizing findings using these different measures of perfectionism.

Several hypotheses regarding the nature of perfectionism were supported by this series of studies. As hypothesized, perfectionism was correlated with a

wide variety of symptoms of psychopathology. Furthermore, the Concern over Mistakes subscale and the Doubting of Actions subscale showed the most consistent correlations with BSI scales. It should be noted that these associations were demonstrated within a group of normal subjects. This may have reduced the size of the observed correlations because of the restricted range of psychopathology. Alternatively, these correlations may have overestimated the associations due to differences between normal and clinical samples. Further research comparing normal subjects to clinical samples of depressives, obsessive-compulsives, and other patient groups would further elucidate the relationship between perfectionism and psychopathology. In addition, the present series of studies used only female subjects. Further research using male subjects is needed to validate the MPS and determine the extent of the hypothesized relationship between perfectionism and psychopathology.

As expected, perfectionism was more closely related to Self-Critical Depression than Dependency Depression. When Self-Critical Depression was held constant in a partial correlation, Dependency Depression was no longer related to any of the perfectionism subscales. When Dependency Depression was held constant, the relationships between perfectionism and Self-Critical Depression remained significant. This relationship was most apparent for the Concern over Mistakes and Doubting of Actions subscales. Although perfectionism was related to Self-Critical Depression, there is some question about the extent to which there is a unique relationship between perfectionism and depression. Many of the other BSI subscales had correlations with perfectionism which were very close to the magnitude of the correlation with the BSI depression subscale.

Several writers have emphasized the importance of distinguishing between perfectionism which is considered pathological and similar characteristics which are healthy (Hamachek, 1978; Pacht, 1984). The findings from the present series of studies suggest that while most of the dimensions of perfectionism are associated with psychological distress, the setting of high personal standards is associated with healthy experiences. Personal Standards was associated with Efficacy from the DEQ, and it was negatively correlated with the frequency of procrastination. It appears that some of the variance in the Personal Standards subscale is associated with the positive achievement striving or normal perfectionism described by Hamachek (1978). When the variance in common with Efficacy from the DEQ was controlled, however, Personal Standards was significantly correlated with depression. It would appear that a different portion of the variance is associated with negative experiences. Further research may explain more clearly the nature of this component of perfectionism and its relationship to the other components. Specifically, the relationship between Personal Standards and Concern over Mistakes needs further clarification. It may be, for instance, that high Personal Standards are associated with psychopathol-

ogy only among people who are high in Concern over Mistakes. It might also be that individuals with relatively lower personal standards and high concern over mistakes would have different problems and concerns than those who are high on both of these dimensions.

The hypothesis that perfectionism would be related to guilt received weak support. Concern over Mistakes and Doubting of Actions were weakly correlated with several subscales of the Situational Guilt Scale. Concern over Mistakes was correlated with Interpersonal Harm and Norm Violation guilt. Doubting was correlated with overall guilt and Norm Violation. The correlations between overall perfectionism and guilt subscales were not significant. Although this could reflect a restriction of range phenomena, at present there is little evidence of a relationship between perfectionism and guilt.

There was ample evidence from these studies that perfectionism is associated with compulsive experiences. Overall perfectionism, Concern over Mistakes, and Doubting were all associated with the BSI Obsessive-Compulsive subscale and various subscales of the MOCI. It should be noted that there is considerable item overlap between the Doubting scale of the MPS and the Doubt subscale of the MOCI. Because of this, correlations between these two will be spuriously high. The Concern over Mistakes scale, however, has no overlap and was significantly correlated with MOCI scores.

The hypothesis regarding perfectionism and procrastination also was supported by this investigation. Perfectionism, Concern over Mistakes, Parental Expectations, Parental Criticism, and Doubting of Actions were each correlated with frequency or severity of procrastination. Personal Standards and Organization, however, were negatively correlated with frequency of procrastination and may represent the positive aspects of achievement striving and planning of work strategies. Further research concerning the relationship between perfectionism and approach to work and work goals is needed.

These findings indicate that people high in perfectionism experience a higher frequency and wider variety of symptoms of psychopathology than persons low in perfectionism. Perfectionists also tend to have higher levels of Self-Critical Depression but not Dependency Depression, and they are more frequently and seriously plagued by procrastination. The findings further indicate that perfectionism is not a unidimensional construct but a multidimensional one. Its separate dimensions relate to depression, procrastination, and symptomatology in different ways. To properly understand the nature of perfectionism, it is important to examine these dimensions separately. Perfectionism is also a characteristic which varies along a continuum. An individual may display varying amount of overall perfectionism, and varying amounts of each of the characteristics sampled by the subscales. The implications and importance of patterning of these characteristics is still to be investigated.

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