Comparisons of Males and Females With *DSM-III* Dependent Personality Disorder

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Abstract. To determine whether *DSM-III* dependent personality disorder (PD) differed in males and females, 30 females and 11 males with this diagnosis were selected from a psychiatric outpatient population. Standardized measures of Axis I, Axis II, and family history were used. There were no differences in age or in the prevalence of Axis I or Axis II disorders in males and females, indicating that females were probably not misdiagnosed as having dependent PD. However, relatives of males had significantly more major depressive disorder and *DSM-III* anxious personality disorder cluster, while relatives of females had significantly more panic disorder. This may indicate different predisposing factors to dependent PD in males and females.

Key Words. Personality, dependent, *DSM-III*, gender.

Dependent personality disorder (PD) was placed in *DSM-III* (American Psychiatric Association, 1980) because experts in the field thought that it was a valid disorder worthy of a preliminary attempt at definition. Little empirical evidence was available to guide this attempt. The inclusion of dependent PD in *DSM-III* has spurred some research in the field. There is now evidence that dependent personality traits or orientation may be related to risk for physical (Greenberg and Bornstein, 1988a) or psychological disorders (Greenberg and Bornstein, 1988b); that different prototypes and categorizagions of dependent personality and attachment patterns might be empirically derived (Pilkonis, 1988; West and Sheldon, 1988); and that *DSM-III* dependent PD might run in families (Reich, 1989a). Thus, there is some preliminary work supporting the decision to include dependent PD in *DSM-III*.

One worry clinicians and researchers had about dependent PD was that it might be sex biased. Although it is reasonable for some valid disorders to be more prevalent in one sex than another (e.g., histrionic PD in females and antisocial PD in males), there was concern that normally socialized female traits might be misinterpreted as pathological. To my knowledge, there is only one study with a large number of subjects that investigated the gender prevalence of dependent PD, and that study did not reveal a gender difference in prevalence (Reich, 1987). However, there is a report indicating that gender may be an important intervening variable in how dependency traits relate to depressive symptoms (Smith et al., 1988).

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The present study is the first to use a standardized *DSM-III* personality disorder measure and to compare males and females with dependent PD on clinical, demographic, and family history variables.

Methods

Population. Patients in this study were drawn from two groups. The first group consisted of panic disorder patients who responded to advertisements recruiting subjects for a treatment trial. Axis I disorders in this group were diagnosed by a board-certified psychiatrist on the basis of the Structured Clinical Interview for *DSM-III* (SCID; Spitzer and Williams, 1983). All patients were required to meet *DSM-III-R* criteria for panic disorder (American Psychiatric Association, 1987) and to be having at least one panic attack a week. Patients were excluded if they had schizophrenia, mental retardation, organic brain syndrome, mania, obsessive-compulsive disorder, drug or alcohol abuse in the last year, or major depression that dominated or preceded their panic disorder symptoms.

The second group was drawn from a study of randomly selected new intakes to a psychiatric outpatient clinic. Patients with psychotic symptoms, organic brain syndrome, and mental retardation were excluded. Patients' Axis I diagnoses were determined by a Master's level interviewer using the Schedule for Affective Disorders and Schizophrenia-Lifetime Version (SADS-L; Endicott and Spitzer, 1978). The SADS-L uses Research Diagnostic Criteria (RDC; Spitzer et al., 1978).

Although different procedures were used to measure Axis I disorders, this is not so much of a problem as it may seem. The major thrust of this study is Axis II not Axis I disorders. Also, practically all Axis I disorders were excluded except depression and panic disorders, and the RDC and *DSM-III* do not show major differences in these areas. In addition, analysis of the different population groups separately did not indicate any differences in outcome for the two groups.

Instruments. Personality disorders in patients were determined by the Personality Diagnostic Questionnaire (PDQ; Hyler et al., 1983), a 152-item, self-administered, true/false instrument measuring all 11 *DSM-III* personality disorders (and some self-defeating PD criteria also). Test-retest reliability (kappa) for psychiatric outpatients at 1 month is $\geqslant 0.56$ for paranoid, schizotypal, antisocial borderline, avoidant, and compulsive personality disorders (Hurt et al., 1984). Preliminary work with 2-month test-retest on the PDQ gave kappas of 0.80 for the anxious personality disorder cluster, 0.75 for dependent personality, and 0.50 for avoidant personality (Reich, 1989*b*).

The choice of a self-report instrument could be criticized on the grounds of lesser reliability or validity than an interview instrument. However, my test-retest reliabilities were performed on panic disorder patients before and after effective treatment—a fairly stringent test of reliability. Moreover, the PDQ has now been used in a number of studies which appeared to give results in line with previous studies or concurrently used personality measures (Pfohl et al., 1987; Reich et al., 1987*b*, 1989*a*; Reich, 1988*a*; Reich and Troughton, 1988). Although there is one report stating that the PDQ does not have high agreement with clinicians (Hyler et al., 1989), standardized instruments were developed to overcome poor clinician agreement. Unfortunately, not even carefully developed *DSM-III* personality instruments agree well with each other (Reich et al., 1987*a*; Widiger et al., 1988). Data are now available indicating that the PDQ may agree as well with interview Axis II measures as they agree with each other. Kappas of agreement for dependent PD between the PDQ and SCID-II, PDQ and Personality Diagnostic Examination (PDE), and SCID-II and PDE were 0.62, 0.56, and 0.60, respectively. (The SCID-II and PDE are standardized *DSM-III* Axis II interview instruments.) When the PDQ diagnosis for dependent PD was compared to a "lead standard," predictive power positive was 0.57 and predictive power negative was 0.97 (Skodol et al., 1988; S. Hyler, personal communication). Although these values are not perfect, they are as high as those of other standardized Axis II measures.

Family history measures included the Family History-Research Diagnostic Criteria

(FHRDC; Andreasen et al., 1977) and the Family History for *DSM-III* Anxiety and Personality Disorders (FHPD; Reich et al., 1985). The FHRDC is an accepted standard in the field and is applied to RDC affective and schizophrenic disorders. The FHPD is designed to supplement the FHRDC and to measure *DSM-III* anxiety and personality disorder clusters. Published studies indicate that it has reasonable validity (Reich, 1988a, 1988c; Reich and Yates, 1988).

Procedures. The PDQ and other measures were given to the panic disorder patients after they had been free of medication for 1 week. (Panic patients were gradually tapered off their antianxiety medications.) For the outpatients, the measures were taken within 1 week of intake, usually before any treatment had begun. (Most of these patients had not begun treatment when tested; the others had been in treatment at most 2 or 3 days when the PDQ was administered.) Patients were asked to respond to the questionnaire "as they usually were" and not as they were during the acute illness. The instruments were administered and scored by Master's level research assistants, whose only duties were to explain how to take tests and, if needed, to answer specific questions. Patients were diagnosed as having a personality disorder on the PDQ if they met all the personality criteria necessary for a *DSM-III* diagnosis and scored ≥ 2 on the PDQ impairment distress scale.

Analyses. Patients with dependent PD (with impairment) on the PDQ were selected from the total population. These patients were then divided into two groups based on gender. The two groups were compared to each other on age, Axis I disorders and other relevant diagnostic and functional symptoms, Axis II disorders, and family history results. Fisher's exact test was used for statistical analysis, and an α level of 0.01 was chosen (indicating that only one positive result out of 100 would be spurious). Since there are fewer than 45 comparisons made in this report, the 0.01 level seemed to be a reasonable margin of safety.

For family history results where a trend ($p < 0.10$) was shown, a second calculation was performed. This was based on the knowledge that in general family history methods have, at best, half the sensitivity of direct interview methods (Andreasen et al., 1977; Cohn, 1988). Extrapolating what the results would be if the sensitivity were doubled (simulating a direct interview condition) gives the extrapolated values. This method has previously been used by Baron et al. (1985).

Since some of the comparisons had a modest sample size, the power of the key comparisons was computed and reported. Power calculations performed assume an α value of 0.05, one-sided with female < male, and use formulas from a medical statistics text (Colton, 1974).

Results

The sample contained 11 males and 30 females who met PDQ criteria for dependent PD. (This is higher than but not significantly different from our overall population female:male ratio of approximately 2:1, power = 0.90.) Mean age was 37.5 (SD 13.2) years for males and 35.2 (SD 10.4) for females (not significantly different, power = 0.62). The mean Global Assessment Scale score for those for whom it was available (6 males and 12 females) was 58.3 (11.5) for males and 53.7 (6.9) for females (NS, power = 0.81). For those for whom information was available (8 males and 18 females), the males had a larger, but not significantly different, social network as measured by the McFarlane scale (McFarlane et al., 1981); 7 (2.8) vs. 4.9 (4.0), power > 0.90. Table 1 provides lifetime history of Axis I disorders in the sample. As can be seen, there are no significant differences. There are also no significant differences in current Axis I diagnoses.

Table 2 lists personality disorder diagnoses for the PDQ. No significant differences are found, although there is a trend toward having more histrionic

Table 1. Lifetime Axis I diagnosis for male and female dependent personality disorders

Diagnosis	Males (n = 11)		Females (n = 30)		Significance
	No.	%	No.	%	
Panic disorder	4	36.4	10	33.3	NS
Generalized anxiety	1	9.1	2	6.7	NS
Major depressive disorder	6	54.6	15	50.0	NS
Bipolar disorder (type 1)	0		1	3.3	NS
Alcohol abuse	0		1	3.3	NS
Drug abuse	0		1	3.3	NS

Note. Personality diagnoses by the Personality Diagnostic Questionnaire. Statistical analysis by Fisher's exact test, power > 0.90 for all analyses.

Table 2. Comparison of males and females with dependent personality on DSM-III personality disorders

Personality disorder	Males (n = 11)		Females (n = 30)		Significance
	No.	%	No.	%	
Schizoid cluster					
Paranoid	0		1	3.3	NS
Schizoid	0		1	3.3	NS
Schizotypal	8	72.7	16	53.3	NS
Dramatic cluster					
Histrionic	2	18.2	16	53.3	NS
Narcissistic	0		1	3.3	NS
Antisocial	0		1	3.3	NS
Borderline	3	27.3	15	50.0	NS
Anxious cluster					
Avoidant	4	36.7	7	23.3	NS
Dependent	11	100.0	30	100.0	NS
Compulsive	7	63.6	11	36.7	NS
Passive/aggressive	2	18.2	2	6.7	NS
Self-defeating	4	36.6	8	26.7	NS

Note. Personality diagnoses by the Personality Diagnostic Questionnaire. Statistical analysis by Fisher's exact test ($p < 0.01$ was required for significance).

personality disorders in females ($p = 0.047$, Fisher's exact test, power > 0.90). The total PDQ score (the sum of all pathological answers on the PDQ) does not differ for males and females; 52.6 (SD 20.6) vs. 51.9 (SD 16.4), respectively, power > 0.90.

The FHRDC and FHPD identified 65 relatives of males and 193 relatives of females. There was no difference in the sex ratio of relatives in the two groups or in the age of the relative groups: 31.2 (SD 25.8) years vs. 32.9 (SD 22.6) years for males and females, respectively. Table 3 presents the results of the family history comparisons. In addition, family history of suicide did not differ between the two groups (relatives of males 1.5%, relatives of females 1%).

Table 3. Family history of males and females with dependent personality

Diagnosis	Relatives of males (n = 65) No.	%	Relatives of females (n = 193) No.	%	Significance (direct)	Significance (extrapolated)
Axis I						
Schizophrenia	0		0		NS	—
Major depression	4	6.2	3	1.6	NS (p = 0.07)	p < 0.01
Bipolar illness	0		1	0.05	NS	—
Generalized anxiety	2	3.1	8	4.2	NS	—
Panic disorder	0		12	6.2	NS (p = 0.04)	p < 0.005
Social phobia	0		0		NS	
Simple phobia	2	3.1	2	1.0	NS	—
Alcohol abuse	2	3.1	7	3.6	NS	—
Drug abuse	0		0		NS	—
Axis II						
Schizoid cluster	3	4.6	8	4.2	NS	—
Dramatic cluster	3	4.6	6	2.3	NS	—
Anxious cluster	9	13.9	12	6.2	NS (p = 0.07)	p < 0.005

Note. Family measures by Family History Research Diagnostic Criteria and Family History for *DSM-III* Anxiety and Personality Disorders. Significance levels are determined by Fisher's exact test. Please see the analysis section of **Methods** for a description of the extrapolated analyses.

Discussion

If dependent PD were overdiagnosed in females on the basis of nonpathological criteria, I would expect to find increased psychopathology in males diagnosed as having the disorder (as compared to females) and probably demographic differences as well. I would also expect increased familial psychopathology in relatives of males as opposed to relatives of females. This study does not support this expectation in an outpatient psychiatric population. There was no significant difference in age or in Axis I or Axis II disorders in males and females with dependent PD. The total PDQ score also indicated that total personality pathology did not differ in males and females. These findings are in agreement with previous reports (Pilkonis, 1988; Reich, 1987). The only finding that approached significance, an increased percentage of histrionic personality disorders, is in line with previous findings of an increased prevalence of this disorder in females. Although a hypothesis cannot be disproved by the null finding, the power analyses reveal a relatively small chance of accidentally missing a true difference. This report gives no evidence of gender bias in diagnoses of dependent PD in females.

The most interesting findings are in the family history data. Relatives of males have an increased incidence of major depression and *DSM-III* anxious personality disorder cluster, while relatives of females have an increased incidence of panic disorder. This finding does not appear to be due to a different level of these disorders in proband groups. (Table 1 indicates these levels are the same.) Thus, although the presenting illnesses are similar, predisposing factors may be different in males and

females. This finding also adds to a previous finding. Not only may anxious personality disorders run in families (Reich, 1989a), but it is possible that this familiality may be modified by the sex of the proband.

The assessment instrument in this study used *DSM-III* criteria for dependent PD as opposed to the current *DSM-III-R* criteria. Therefore, it is pertinent to examine how *DSM-III* and *DSM-III-R* criteria differ. *DSM-III* was categorical, requiring all criteria to be met for a diagnosis, while *DSM-III-R* is polythetic, requiring a certain number drawn from a list of criteria. *DSM-III* has only three criteria, whereas *DSM-III-R* has nine. If we examine which realm the criteria fell into (behavioral, cognitive, or emotional), we also see differences, which are summarized in Table 4. It appears that *DSM-III* was a narrower version of the phenomena described in *DSM-III-R*. Morey (1988) examined this question empirically for the *DSM-III* vs. *DSM-III-R* personality disorders. He also found that *DSM-III-R* dependent personality

Table 4. Comparison of *DSM-III* and *DSM-III-R* criteria for dependent personality disorder

	DSM-III	DSM-III-R
1. Categorical organization	Yes	No
2. Polythetic organization	No	Yes
3. Number of criteria	3	9
4. Total number of criteria needed to make a diagnosis	3	5
5. Total number of combinations of criteria that can make a diagnosis	1	126
6. Number of criteria in the following categories:		
(a) Behavioral	2 (a, b)	5 (#1-5)
(b) Cognitive	1 (c)	0
(c) Emotional	0	5 (#3, 6, 7, 8, 9)

disorder was less restrictive than *DSM-III*, although there was still significant agreement between the two systems. Thus, it seems that while *DSM-III* and *DSM-III-R* are measuring the same entity, *DSM-III* is a "purer," more restricted form. Such forms are often of value in epidemiological and other empirical research since they are less likely to be diluted by phenotypes and marginal cases, and are therefore more likely to reveal important associations. It is reasonable to expect that there will be some generalization from the *DSM-III* criteria used here to *DSM-III-R* criteria.

The strengths of this study are that it is apparently the first empirical study of its kind in the literature, it focuses on a clearly defined psychiatric outpatient population, and it uses a standardized measure of personality. Its limitations include the measurement difficulties inherent to all *DSM-III* personality measures. Future studies need to replicate these pilot findings on different populations, examine possible influential environmental variables, and perform direct interview studies on relatives of patients with dependent PD.

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