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## DSM-III-R Anxiety Disorders in Children: Sociodemographic and Clinical Characteristics

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**Abstract.** This study investigated the characteristics of each of the specific *DSM-III-R* (American Psychiatric Association, 1987) anxiety disorders in a clinic sample of 188 anxiety disordered children. Characteristics examined included sociodemographic variables (age-at-intake, gender, and race of the child, and family marital and socioeconomic status) and clinical variables (disorder age-at-onset and severity, and history of additional disorders). Findings are discussed in light of the contemporary literature on childhood anxiety disorders. *J. Am. Acad. Child Adolesc. Psychiatry*, 1992, 31, 6:1070-1076. **Key Words:** children, anxiety disorders, *DSM-III-R*.

Very little empirical research has been conducted examining *DSM-III/DSM-III-R* (American Psychiatric Association, 1980; 1987) diagnosed anxiety disorders in children. *DSM-III-R* includes nine specific anxiety disorder diagnoses that may be applied to children and adolescents: separation anxiety, avoidant, and overanxious disorders, contained in the "child/adolescent" section of the manual, and panic, generalized anxiety, social phobia, simple phobia, posttraumatic stress, and obsessive-compulsive disorders, contained in the "adult" section of the manual.

A few reports have appeared on the characteristics of *DSM* diagnosed separation-anxiety disorder (Francis et al., 1987; Last et al., 1987a,b), overanxious disorder (Last et al., 1987b; Mattison and Bagnato, 1987; Strauss et al., 1988), panic disorder (Alessi and Magen, 1988; Last and Strauss, 1989a; Macaulay and Kleinknecht, 1989), and obsessive-compulsive disorder (Flament et al., 1988; Last and Strauss, 1989b; Riddle et al., 1990; Swedo and Rapoport, 1990) in children. To our knowledge, no data have been published on youngsters with simple or social phobias, generalized anxiety disorder, avoidant disorder, or posttraumatic stress disorder.

At our outpatient clinic for anxiety disordered children and adolescents, we collected detailed information on the sociodemographic and clinical characteristics of each of the childhood anxiety disorders in a large sample ( $N = 188$ ) of anxiety disordered youngsters. In this article, we present these data for each disorder and discuss our findings in light of the contemporary literature on childhood anxiety disorders.

### Method

#### Subjects

Subjects included 188 anxiety disordered children and

adolescents who were consecutive admissions to the Child and Adolescent Anxiety Disorder Clinic (CAADC) at Western Psychiatric Institute and Clinic, University of Pittsburgh School of Medicine, during 3 consecutive years. The CAADC is an outpatient clinic that evaluates and treats school age children (5 to 18 years) with anxiety disorders. Inclusion criteria for the study was a current *DSM-III-R* diagnosis of an anxiety disorder.

#### Procedure

At the time of study entry (intake), the child and at least one parent were interviewed separately by a clinical psychologist with a modified version of the *Schedule for Affective Disorders and Schizophrenia for School-Age Children* (Present Episode) (K-SADS) (Last, unpublished), and then the child was diagnosed for both current and past psychopathology according to *DSM-III-R* criteria. In addition to diagnostic information, information on certain sociodemographic and clinical variables (age-at-intake, gender, and race of child, family marital and socioeconomic status, disorder age-at-onset and severity) were obtained at this time. Severity of disorder was assessed by clinicians using two four-point scales (1 to 4), one measuring symptom severity and the other assessing level of impairment. Ratings from the two scales were averaged to provide an overall assessment of disorder severity, with higher scores indicating greater severity.

Of the 188 subjects, 65 had participated in an ongoing follow-up study of childhood anxiety disorders, the findings of which will be the subject of a future report. These 65 had additional K-SADS interviews (identical to that administered at study entry but conducted by "blind" interviewers) at 12 and/or 24 months after intake. Lifetime history of additional *DSM-III-R* disorders were based on information obtained at the last available assessment point, i.e., intake, for youngsters who did not participate in the follow-up study, and 12 or 24 months after intake, for youngsters who did participate in the follow-up study.

Interrater diagnostic agreement was obtained by having a second clinician independently review audiotapes of interviews. Reliability coefficients were computed for 99 of the 298 (188 intake and 110 follow-up) interviews conducted (33%). Kappa coefficients of agreement for specific anxiety disorders were: social phobia (SOC) = .91, simple phobia

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TABLE 1. Frequency of Specific DSM-III-R Anxiety Disorders

DSM-III-R Diagnosis	Primary at Intake <sup>a</sup>		Lifetime <sup>b</sup>	
	N	%	N	%
Separation anxiety disorder	51	27.1	84	44.7
Simple phobia	37	19.7	80	42.6
Social phobia	28	14.9	61	32.4
Overanxious disorder	25	13.3	51	27.1
Panic disorder	18	9.6	24	12.8
Obsessive-compulsive disorder	13	6.9	28	14.9
Posttraumatic stress disorder	6	3.2	7	3.7
Avoidant disorder	5	2.7	20	10.6
Generalized anxiety disorder	0	0.0	0	0.0

<sup>a</sup> Five children received primary anxiety disorder diagnoses that are not addressed in this report: anxiety disorder not otherwise specified (*N* = 3), agoraphobia without a history of panic disorder (*N* = 1), and adjustment disorder with anxious mood (*N* = 1).

<sup>b</sup> The number of diagnoses exceed the number of children (188) because most of the youngsters had a lifetime history of multiple anxiety disorders.

(SIM) = .84, separation anxiety disorder (SAD) = .92, overanxious disorder (OAD) = .94, posttraumatic stress disorder (PTSD) = .91, obsessive-compulsive disorder (OCD) = .89, avoidant disorder (AD) = 1.00, and panic disorder (PD) = .89. In the event of a diagnostic disagreement, the diagnosis given by the live interviewer was used.

Data Analysis

Because of the large number of diagnostic groups and variables examined, data are presented as descriptive only; i.e., statistical comparisons were not performed standardly to test for differences among the groups. However, a limited number of analyses were conducted to compare specific groups where a priori hypotheses had been generated. For these analyses, 2 × 2  $\chi^2$  tests with Yates correction for continuity were used for categorical variables, and *t* tests were used for continuous variables.

Results

The frequency of each of the nine specific DSM-III-R

anxiety-disorder diagnoses in respect to treatment-seeking behavior (primary diagnosis at intake) is summarized in Table 1. Separation anxiety disorder was the most common reason for referral to our clinic. Simple phobia, social phobia, and overanxious disorder also were common primary diagnoses at intake. Panic and obsessive-compulsive disorder were less common. PTSD and avoidant disorder very rarely were primary diagnoses in this sample, and generalized anxiety disorder never was given as a primary diagnosis. Of the children in our sample who had a primary diagnosis (at intake) of a phobic disorder, half (33/65, 50.8%) of these youngsters received such diagnoses because of phobia-related school refusal (i.e., "school phobia").

The lifetime frequency of each of the anxiety disorder subtypes in our sample of anxiety disordered children also is summarized in Table 1. The relative frequencies of the disorders were similar to those observed for primary diagnosis at intake. Separation anxiety disorder was the most frequent lifetime anxiety disorder diagnosis (45%). By contrast, a lifetime history of obsessive-compulsive, panic, avoidant, and posttraumatic stress disorders was relatively infrequent, ranging in prevalence from 4 to 15%. None of the 188 youngsters met DSM-III-R criteria for generalized anxiety disorder.

The sociodemographic and clinical characteristics of each of the specific anxiety disorders are presented in Table 2. Posttraumatic stress disorder is not included in the table because of small sample size (*N* = 7).

As indicated, age-at intake ranged from 10.3 years for SAD to 15.2 years for PD. The age-at-onset for the disorders followed a similar pattern, with SAD having the earliest age-at-onset (7.5 years) and PD having the latest age-at-onset (14.1 years). The gender distribution for each of the disorders was relatively equal, although the PD group had the lowest percentage of boys (41.7%) of all the groups. The majority of children in each of the groups were caucasian and came from intact families, with the exception of SAD children who more commonly came from single parent homes (63.1%). Most children came from middle to upper middle-class families, again with the exception of SAD youngsters, where slightly more than half (52.4%) came

TABLE 2. Sociodemographic and Clinical Characteristics of Specific DSM-III-R Anxiety Disorders

	Specific Anxiety Disorders <sup>a</sup>						
	Avoidant Disorder (AD) (N = 20)	Panic Disorder (PD) (N = 24)	Obsessive-Compulsive Disorder (OCD) (N = 28)	Overanxious Disorder (OAD) (N = 51)	Separation Anxiety Disorder (SAD) (N = 84)	Simple Phobia (SIM) (N = 80)	Social Phobia (SOC) (N = 61)
Age-at-intake ( $\bar{X}$ years)	12.7	15.2	12.8	13.6	10.3	12.1	14.4
Age-at-onset ( $\bar{X}$ years)	8.2	14.1	10.8	8.8	7.5	8.4	11.3
Sex (% male)	45.0	41.7	53.6	47.1	47.6	50.0	44.3
Race (% white)	85.0	95.8	92.9	86.3	79.8	77.5	85.2
Family status (% intact)	50.0	62.5	64.3	54.9	36.9	58.8	52.5
SES <sup>b</sup> (% low)	45.0	45.8	35.7	41.2	52.4	43.8	45.9
Severity of disorder ( $\bar{X}$ rating)	2.5	2.8	2.7	2.6	2.7	2.2	2.8

<sup>a</sup> The number of diagnoses exceed the number of children (188) because of multiple anxiety disorders.

<sup>b</sup> SES = socioeconomic status.

TABLE 3. *Lifetime History of Anxiety, Depressive, and Behavior Disorders*

	Specific Anxiety Disorders <sup>a</sup>						
	AD (N = 20)	PD (N = 24)	OCD (N = 28)	OAD (N = 51)	SAD (N = 84)	SIM (N = 80)	SOC (N = 61)
Any additional anxiety disorder	90.0 (N = 18)	62.5 (N = 15)	75.0 (N = 21)	96.1 (N = 49)	65.5 (N = 55)	75.0 (N = 60)	86.9 (N = 53)
Any depressive disorder <sup>b</sup>	35.0 (N = 7)	41.7 (N = 10)	25.0 (N = 7)	49.0 (N = 25)	29.8 (N = 25)	32.5 (N = 26)	55.7 (N = 34)
Any behavior disorder	15.0 (N = 3)	25.0 (N = 6)	17.9 (N = 5)	19.6 (N = 10)	27.4 (N = 23)	22.5 (N = 18)	8.2 (N = 5)

<sup>a</sup> The number of diagnoses exceed the number of children (188) because of multiple anxiety disorders. (See Table 2 for definitions of abbreviations.)

<sup>b</sup> Lifetime rates of major depression only were: AD = 30.0%, PD = 29.2%, OCD = 10.7%, OAD = 33.3%, SAD = 22.6%, SIM = 25.0%, and SOC = 44.3%.

from low socioeconomic status (SES) homes. Mean severity ratings for each of the groups were in the moderate to severe range (2.0 to 3.0). PD and SOC had the highest mean ratings (both 2.8); simple phobia had the lowest mean rating (2.2).

Lifetime history of additional *DSM-III-R* disorders is summarized in Table 3. As indicated, the majority of children in each of the diagnostic groups had a history of at least one additional anxiety disorder. This especially was true for the OAD group, where all but two (96.1%) of the youngsters had an additional anxiety disorder. Similar findings were obtained for the AD group, where 90% (18/20) of the youngsters had an additional anxiety disorder.

For lifetime depressive disorder (major depression, dysthymic disorder, and depressive disorder not otherwise specified), rates ranged from a low of 25.0% for OCD to a high of 55.7% for social phobia. The percentage of OAD youngsters with a history of a depressive disorder also was relatively high, with almost one-half (49%) of these children meeting diagnostic criteria for one of the disorders. For disruptive behavior disorders (attention-deficit hyperactivity disorder (ADHD), conduct disorder, and oppositional disorder ADHD), rates ranged from a low of 8.2% for social phobia to a high of 27.4% for SAD.

Lifetime history of additional, specific anxiety disorders is summarized in Table 4. For AD children, social phobia (65.0%) and OAD (60.0%) were present in greater than half the sample. Most of the AD children with a history of OAD also had a history of social phobia (10/12, 83%), that is, OAD and SOC tended to occur in the same avoidant disordered children. For PD children, OAD was the most frequent disorder (41.7%). Almost half the OCD children had a lifetime history of a simple phobia (46.4%). More than half the OAD youngsters showed social phobia (56.9%) as an additional anxiety disorder. For SAD children, simple phobia (36.9%) was the most frequent additional disorder, and for SIM children, separation anxiety disorder occurred most frequently (38.8%). For SOC children, OAD (47.5%) occurred in almost half the sample.

#### *Specific Comparisons between Diagnostic Groups*

A priori we had generated hypotheses regarding differences between specific diagnostic groups. These hypotheses, and the results of analyses to test them, are presented below:

*Avoidant Disorder versus Social Phobia:* Based on the similarity in content for the *DSM-III-R* criteria for both these disorders, we speculated that youngsters with these disorders would not significantly differ on any of the sociodemographic or clinical characteristics examined, with the exception of age-at-onset (we predicted AD would have an earlier age-at-onset than would SOC because of the typical early presentation of "stranger anxiety"). Analyses did not reveal any significant differences between the two groups for any of the variables examined, including age-at-onset.

*Simple versus Social Phobia:* Based on findings from previous studies of adult phobic patients (Emmelkamp, 1988), we speculated that these two disorders would differ significantly in age-at-onset, severity, and history of depressive disorder, with SOC youngsters showing a later age-at-onset, greater severity, and being more likely to have a history of a depressive disorder. Results of planned comparisons showed significant differences in the expected direction ( $p < .0001$ ,  $p < .0001$ , and  $p < .01$ , respectively.)

#### **Discussion**

The present study is the first, to our knowledge, to present information on the characteristics of each of the *DSM-III-R* childhood anxiety disorders in a large clinic-referred sample of anxiety disordered children. In addition to providing a descriptive database, findings from the investigation may be useful for generating hypotheses for future research in this area.

#### *Avoidant Disorder*

Avoidant disorder was the least frequent anxiety diagnosis received by our sample of children, both for primary diagnosis at intake (2.7%) and lifetime frequency (10.6%). Our findings suggest that the disorder is characterized by an early age-at-onset (8.2 years) and relatively equal sex distribution. Over half our sample had a lifetime history of both social phobia and overanxious disorder.

Investigators in this area have raised the issue of whether avoidant disorder and social phobia are distinct disorders, as opposed to avoidant disorder representing one particular type of social phobia (Klein and Last, 1989). Findings from the present study indicated that the two disorders did not differ significantly on any of the sociodemographic or clinical

TABLE 4. Lifetime History of Additional Specific Anxiety Disorders

	Specific Anxiety Disorders <sup>a</sup>						
	AD (N = 20)	PD (N = 24)	OCD (N = 28)	OAD (N = 51)	SAD (N = 84)	SIM (N = 80)	SOC (N = 61)
Avoidant disorder	—	12.5 (N = 3)	10.7 (N = 3)	23.5 (N = 12)	8.3 (N = 7)	5.0 (N = 4)	21.3 (N = 13)
Panic disorder	15.0 (N = 3)	—	10.7 (N = 3)	19.6 (N = 10)	3.6 (N = 3)	10.0 (N = 8)	8.2 (N = 5)
Obsessive-compulsive disorder	15.0 (N = 3)	12.5 (N = 3)	—	19.6 (N = 10)	7.1 (N = 6)	16.3 (N = 13)	13.1 (N = 8)
Overanxious disorder	60.0 (N = 12)	41.7 (N = 10)	35.7 (N = 10)	—	22.6 (N = 19)	27.5 (N = 22)	47.5 (N = 29)
Separation anxiety disorder	35.0 (N = 7)	12.5 (N = 3)	21.4 (N = 6)	37.3 (N = 19)	—	38.8 (N = 31)	26.2 (N = 16)
Simple phobia	20.0 (N = 4)	33.3 (N = 8)	46.4 (N = 13)	43.1 (N = 22)	36.9 (N = 31)	—	41.0 (N = 25)
Social phobia	65.0 (N = 13)	20.8 (N = 5)	28.6 (N = 8)	56.9 (N = 29)	19.0 (N = 16)	31.3 (N = 25)	—

<sup>a</sup> The number of diagnoses exceed the number of children (188) because of multiple anxiety disorders. (See Table 2 for definitions of abbreviations.)

cal variables examined. Moreover, further examination of those youngsters with a history of *both* avoidant and social phobic disorders ( $N = 13$ ) indicated that in all cases the two disorders either had the same onset (5/13) or overlapped temporally (8/13). The substantial comorbidity between the two disorders, in conjunction with the failure to show differences in their characteristic features, suggests to us that there is little empirical basis for retaining avoidant disorder as a separate diagnostic entity.

#### Panic Disorder

Panic disorder, like avoidant disorder, was relatively infrequent among our clinic sample, both for primary diagnosis at intake (9.6%) and lifetime frequency (12.8%). Findings indicate that these youngsters tend to have a late (adolescent) age-at-onset (14.1 years), which is consistent with previous findings from epidemiological and clinical samples (Last and Strauss, 1989a; Macaulay and Kleinknecht, 1989; Von Korff et al., 1985). Compared with previous reports on adolescents and adults with panic disorder (Alessi et al., 1987; Hoehn-Saric and McLeod, 1988; Last and Strauss, 1989a; Macaulay and Kleinknecht, 1989; Von Korff et al., 1985), our data do not suggest that the disorder is more frequent among girls than boys. Forty-two percent of the PD children had a lifetime history of OAD. Only three of the 24 children (12.5%) had a history of separation anxiety disorder, which does not support the previously hypothesized relationship between the two disorders (Gittelman and Klein, 1984; Zitrin and Ross, 1988).

PD youngsters with a history of OAD are interesting in light of the adult literature on the relationship between generalized anxiety disorder and panic disorder (Barlow et al., 1986). It may be postulated that childhood overanxious disorder, like adult generalized anxiety disorder, represents a chronic state of elevated arousal (anxiety) that increases the risk of developing panic attacks. Such a hypothesis would be consistent with the "threshold" model of panic

proposed over two decades ago by Lader and Mathews (1968). Closer examination of our PD youngsters who had a history of OAD supported this prediction: 90% (9/10) developed OAD before the onset of panic disorder.

#### Obsessive-Compulsive Disorder

OCD, like avoidant and panic disorders, was relatively infrequent among the youngsters, for both primary diagnosis at intake (6.9%) and lifetime frequency (14.9%). The children tend to have a moderate age-at-onset (10.8 years), which is consistent with age-at-onset data for other samples of OCD children (Flament and Rapoport, 1984; Last and Strauss, 1989a; Rasmussen and Tsuang, 1984). By contrast with previous research, our sample contained a relatively equal distribution of boys and girls (Adams, 1973; Despert, 1955; Hollingsworth et al., 1980; Last and Strauss, 1989a; Rapoport, 1986). Almost half these children had a history of simple phobia. Very few (14%) had a lifetime history of major depression, which supports previous findings for OCD children (Flament et al., 1988; Last and Strauss, 1989a; Rapoport, 1986; Swedo and Rapoport, 1990), but differs from findings for adult OCDs (Welner et al., 1976).

#### Overanxious Disorder

OAD was diagnosed at intake as a primary anxiety disorder in 13% of our sample and had a lifetime prevalence of 27%. The disorder tends to have an early age-at-onset (8.8 years) and a relatively equal gender distribution. Almost all (96%) of the OAD children had a lifetime history of at least one additional anxiety disorder; over half (57%) had a social phobia. Of the OAD children with a history of social phobia, more than half developed OAD before the onset of SOC (17/29, 59%), approximately one fifth developed SOC before the onset of OAD (6/29, 21%), and approximately one fifth developed both disorders concurrently (6/29, 21%). The prevalence of social fears/phobias in OAD youngsters is concordant with findings from our previous investigations

of this population (Last et al., 1987b; Last et al., 1989).

There has been some controversy in the childhood literature regarding whether overanxious disorder actually is a discrete and valid anxiety disorder (Beidel, 1991; Klein and Last, 1989). In a recent study comparing nonreferred children with social phobia ( $N = 18$ ), overanxious disorder ( $N = 11$ ), and normal controls ( $N = 18$ ), Beidel (1991) questioned whether overanxious disorder (as currently defined in *DSM-III-R*, is a clear clinical syndrome or rather a prodromal state that is a risk factor for the development of future anxiety disorders. Although her OAD sample showed increased anxiety (relative to normals), the anxiety did not appear to impede daily functioning. By contrast, the present findings for 51 clinic-referred OAD children suggest that these youngsters are as disturbed as children with other types of anxiety disorders. Clinician-assigned severity ratings, which were based on both symptom severity and level of impairment, were similar to those obtained for the other anxiety disorder subtypes. However, because over half our OAD sample had a lifetime history of social phobia, it may be that these youngsters represent a more impaired group than do youngsters with OAD without a history of social phobia. Comparison of these two groups on severity ratings showed no significant differences (OAD + SOC = 2.71, OAD - SOC = 2.41, NS). In addition to our findings, recent results from an epidemiological study of adolescents with OAD ( $N = 46$ ) suggest that OAD youngsters are as impaired as are depressed adolescents and youth with externalizing disorders (Bowen et al., 1990).

Almost all the OAD children had a lifetime history of at least one additional anxiety disorder. If OAD is a prodromal state that predisposes one to develop anxiety disorders, OAD should precede the development of the other anxiety disorders. Further inspection of our data did not support this "prodromal hypothesis": although 49% (24/49) of the OAD children did have OAD first, 51% (25/49) developed OAD either after onset of another anxiety disorder ( $N = 17$ ) or concurrently with another anxiety disorder ( $N = 8$ ).

#### Separation Anxiety Disorder

SAD was the most frequent anxiety disorder diagnosis received by our sample for both primary disorder at intake (27.1%) and lifetime prevalence (44.7%). The disorder tends to have an early age-at-onset (7.5 years) and a relatively equal gender distribution. The children tend to come from single parent homes. These findings are consistent with our previous findings for an independent sample of *DSM-III-R* diagnosed SAD children ( $N = 48$ ) (Last et al., 1987a). Simple phobia was the most frequent (37%) additional anxiety disorder for this group.

#### Simple Phobia

Simple phobia, diagnosed at intake as a primary disorder in 20% of the sample, had a lifetime prevalence of 43%. The children tended to have an early age-at-onset (8.4 years) and an equal gender distribution. Separation anxiety disorder was the most frequent (39%) additional anxiety disorder for this group.

#### Social Phobia

Social phobia, diagnosed at intake as a primary disorder in 15% of the sample, had a lifetime prevalence of 32%. The disorder tends to have a relatively late age-at-onset (11.3 years) and equal gender distribution. Overanxious disorder was the most frequent (48%) additional anxiety diagnosis received by social phobic children. Forty-four percent of these children had a lifetime history of major depressive disorder. Further examination of the temporal relationship between the onsets of SOC and major depression in these 27 children showed that SOC usually preceded the onset of major depression (20/27, 74.1%). Planned comparisons of the SIM and SOC groups indicated that social phobic children have a significantly lower age-at-onset, are more severely disturbed, and are more likely to have a history of depressive disorder than are simple phobic children.

A comment is warranted regarding the absence of youngsters diagnosed with generalized anxiety disorder (GAD). The phenomenological similarities between GAD and childhood/adolescent onset OAD have been discussed previously in the literature (Strauss, 1990). Despite these similarities, however, in our clinical and clinical research experience with anxiety disordered youngsters over the past years, we have found that most youngsters who qualify for a diagnosis of OAD do not also meet criteria for GAD. There appear to be two main reasons for this finding: First, the presence of multiple somatic complaints is required for the diagnosis of GAD but not for the diagnosis of OAD. More specifically, although somatic complaints and marked tension (inability to relax) are two of the seven diagnostic criteria for OAD, only four are required for a diagnosis. Thus, a child may receive the diagnosis *without* meeting either of these two specific criteria. Second, a diagnosis of GAD requires six of 18 specific somatic symptoms. In our experience it is very rare for children or adolescents to present with such a wide range or number of physical ailments; more typical is the youngster who presents with stomachaches, headaches, or both.

A comment also is warranted concerning the large "overlap" of anxiety disorders in our sample. More specifically, most of the children in our study had a history of at least two anxiety disorders, that is, in addition to the "primary" anxiety disorder that constituted the reason for referral (treatment-seeking behavior), in most instances the child had an additional (second) anxiety disorder that occurred before, simultaneously, or after the onset of the primary anxiety disorder. Such findings may raise questions concerning the significance or relevance of having a particular specific anxiety disorder. Longitudinal studies, which closely examine the course and temporal relationships among the various specific anxiety disorders, should prove helpful in further elucidating the usefulness of each of the present diagnostic categories. In this regard, it also should be noted that given that our sample is clinically referred, it is possible that a history of multiple anxiety disorders is specifically related to the greater severity of this referred population, rather than characteristic of anxiety disorders in children per se.

Epidemiological studies using community samples of children should help in clarifying this issue.

There are several limitations of the present study. First, our findings are based on a clinic-referred sample of children and thus are not a priori generalizable to nonreferred samples. Second, findings for some of the specific anxiety disorders (i.e., avoidant disorder, panic disorder) should be regarded as preliminary given their small sample sizes. Third, our examination of characteristics for each of the specific anxiety disorder subtypes is based on the assumption that the disorders are relatively independent with respect to the variables examined (e.g., panic disorder tends to have an adolescent age-at-onset, regardless of whether the child had a lifetime history of an additional anxiety disorder), although they may have existed during the same or different periods in the same child. This assumption may or may not be correct, and the data, thus, should be interpreted with this in mind.

This article has described the phenomenology of each of the specific *DSM-III-R* anxiety disorders in a clinically referred population of children. We have presented data that may be helpful in (1) providing an empirical basis for the further, future modification of the *DSM*, and (2) assisting clinicians by providing diagnostic "clues" for the assessment of specific anxiety disorders in children. In looking toward *DSM-IV*, our data suggest that the diagnosis of avoidant disorder of childhood or adolescence should be omitted, and that these youngsters instead should be assigned a diagnosis of social phobia. Alternatively, it appears that overanxious disorder should be retained; however, modification of the diagnostic criteria to exclude symptoms specifically related to social anxiety may be warranted. Finally, given the absence of youngsters who meet criteria for generalized anxiety disorders, excluding this diagnosis for persons younger than 18 years old would seem warranted (in these cases, a diagnosis of overanxious disorder, instead, should be considered).

In terms of diagnostic clues for clinicians in assessing specific anxiety disorders in children, our data provide a number of helpful points. Age at symptom onset may be helpful in aiding the clinician in differential diagnosis; for example, panic symptoms occurring before adolescence most typically will be an associated feature of another anxiety disorder (for instance, separation anxiety disorder) rather than the spontaneous attacks that are characteristic of panic disorder. Our data also suggest that of all the specific anxiety disorders, youngsters with social phobia may be at the greatest risk for developing a major depressive episode; alternatively, youngsters with obsessive-compulsive disorder, unlike their adult counterparts, are at very low risk for major depression. We must caution, however, that our findings need to be replicated in independent samples of anxiety disordered youngsters before implications for clinical practice can be firmly established.

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