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SPECIFYING CHILD ANXIETY DISORDERS NOT OTHERWISE SPECIFIED IN THE DSM-IV

Jonathan S. Comer, Ph.D.^{1,*}, Kaitlin P. Gallo, M.A.¹, Priya Korathu-Larson, B.A.², Donna B. Pincus, Ph.D.¹, and Timothy A. Brown, Ph.D.¹

¹Department of Psychology, Center for Anxiety and Related Disorders, Boston University, Boston, Massachusetts

²Department of Psychology, University of California, Los Angeles, California

Abstract

Background—Anxiety disorder not otherwise specified (ADNOS) is one of the more common and impairing DSM-IV diagnoses assigned in child practice settings, but it is not clear what percentage of these assignments simply reflect poor diagnostic practices.

Methods—The present study evaluated patterns and correlates of child ADNOS in a large outpatient treatment seeking sample of anxious youth (N = 650), utilizing structured diagnostic interviewing procedures.

Results—Roughly, 15% of youth met diagnostic criteria for ADNOS. Overall, these youth exhibited comparable levels of clinical problems relative to youth with DSM-IV–specified anxiety disorders (AD), and roughly two-thirds of ADNOS cases exhibited symptom presentations closely resembling generalized anxiety disorder (GAD). Among ADNOS presentations resembling GAD, those failing to meet the “worries more days than not” or “worries across multiple domains” criteria showed lower internalizing symptoms than GAD youth, but comparable anxious/depressed symptoms, somatic symptoms, social problems, externalizing problems, and total problems as measured by the Child Behavior Checklist.

Conclusions—Childhood ADNOS cases are prevalent and warrant clinical attention. In many cases there are only a couple, if any, clinical differences between these disorders and the ADs they closely resemble. Future work is needed to improve upon the current taxonomy of childhood ADs to specify a larger proportion of affected youth needing care.

Keywords

anxiety disorders; children; classification; diagnosis; diagnostic and statistical manual of mental disorders; DSM-5

INTRODUCTION

Anxiety disorders (ADs) are the most prevalent category of psychiatric problems in the general population, collectively affecting up to 18% of individuals in a given year and 25% over a lifetime.^[1–5] Onset occurs mainly during childhood^[1, 2, 5] and is associated with considerable impairments.^[6] Children with ADs are at elevated risk for the development of depression, sleep disturbance, peer dysfunction, and substance use^[7–10] When left untreated, childhood anxiety can persist into adulthood, during which time it is associated with the presence of other psychiatric conditions,^[1, 11, 12] physical comorbidities,^[13] reduced health-related quality of life,^[14] and suicidality.^[15–17] Further evidence of the burden of ADs is portrayed in reports of high health care utilization and costs^[18–21] and losses of worker productivity.^[22] Earlier onset is associated with more intractable forms of psychopathology in later life,^[1] underscoring the public health importance of treating ADs in childhood.

Accurate assessment of childhood ADs constitutes the critical first step in effective intervention. At present, it is not clear that the current iteration of the *Diagnostic and Statistical Manual*^[23] is the optimal classification system with which to define ADs in youth. In addition to very high rates of comorbidity,^[24] overlapping symptom presentations,^[25] and a failure to incorporate a developmental perspective,^[26] the current diagnostic system does not adequately specify considerable numbers of children with clinical impairments seeking care.^[27]

Within the current nosology, children who experience clinically significant symptoms of anxiety, but who do not meet criteria for a formal DSM-IV diagnosis, are assigned a diagnosis of AD not otherwise specified (ADNOS; DSM-IV-TR: 300.00). Along with generalized anxiety disorder (GAD), ADNOS is among the top two most frequently assigned anxiety diagnoses in primary care settings,^[28, 29] with roughly 9% of primary care patients^[30] and 13–16% of child psychiatric patients^[31, 32] given the diagnosis. Rates of AD-NOS are as high as 30–40% among specific patient populations.^[33–38] In selected samples, a diagnosis of ADNOS is associated with poorer health-related quality of life relative to primary care patients without a mental disorder,^[39] and is a marker for elevated suicide risk.^[40]

Despite the high prevalence, impairment, and service utilization among individuals with ADNOS, we know very little about the diagnosis when assigned in youth. To date, child anxiety research has either failed to include ADNOS cases or has included such cases in the absence of structured diagnostic interviewing, limiting confidence in the sample's diagnostic validity. To optimize internal validity, rigorous studies conducted as part of clinical trials typically require a DSM-IV–specified diagnosis for study inclusion^[41] and thus cannot speak to ADNOS youth. Studies that have included child AD-NOS cases have typically been conducted in practice settings relying on clinical diagnoses generated without structured interviews, and have not addressed questions related to ADNOS.^[31, 32]

Much remains to be learned about ADNOS in youth. Although a proportion of assigned child ADNOS cases may simply reflect poor diagnostic practices in various service settings (e.g., practitioners assigning ADNOS without a thorough assessment of DSM-IV symptoms

and appropriate rule-outs of specified anxiety diagnoses), research in adult samples utilizing structured diagnostic interviews suggests that considerable numbers of verifiable ADNOS cases (i.e., those diagnosed after conducting a structured diagnostic interview) exist.^[42] Many of these adult ADNOS cases share considerable phenomenological overlap with GAD, and research shows that roughly 75% of adult ADNOS cases closely resembling GAD simply missed formal GAD diagnosis by a single diagnostic criterion.^[42] In this work, although these ADNOS cases resembling GAD were associated with less worry, depression, and impairment than DSM-IV GAD cases, differences across each of these dimensions varied depending on how many and which specific GAD symptoms were “missed.” Some research suggests that judiciously broadening specific AD definitions, such as GAD, will better specify the range of anxious individuals who are not captured in the current diagnostic system, but who nonetheless exhibit comparable disability and treatment-seeking to individuals meeting formal criteria for DSM-IV–specified ADs.^[1, 43, 44] To date, no study has evaluated patterns and correlates of ADNOS in child samples, which can meaningfully guide an improved classification of child ADs in future DSM iterations.

The present study evaluated patterns and correlates of child ADNOS in the context of the DSM-IV–specified ADs in a large outpatient treatment-seeking sample of anxious youth ($N = 650$), utilizing structured diagnostic interviewing procedures. We evaluated the rate and demographic correlates of ADNOS ($n = 95$), relative to cases of DSM-IV–specified ADs ($n = 555$), as well as the percentage of DSM-IV–specified ADs closely resembled among ADNOS cases. We further evaluated the percentage of unmet diagnostic criteria categories preventing AD diagnoses among ADNOS youth, as well as clinical differences between ADNOS and AD youth by unmet classes of specified symptom criteria. Given adult work demonstrating phenomenological overlap between many ADNOS cases and GAD,^[42] follow-up analyses compared GAD youth and ADNOS youth closely resembling GAD.

METHOD

PARTICIPANTS

Participants included 650 consecutive treatment-seeking youth with an AD or ADNOS diagnosis, and their mothers, presenting for services at a university-affiliated center for the treatment of anxiety and related disorders in New England (2004–2010). Children (46.2% males) ranged in age from 5 to 19 ($M_{\text{age}} = 12.14$, $SD_{\text{age}} = 3.26$); 81.7% self-identified as non-Hispanic Caucasian. Families ranged in resources: 20.8% were at or below 300% of the national poverty line for their year (e.g., in 2007 \$63,609 for a family of four; \$75,240 for a family of five) whereas 13.2% of households earned at least 600% of the national poverty line at their year of assessment (e.g., in 2007 \$127,218 for a family of four; \$150,480 for a family of five). Parents of the majority of children were married or cohabitating (82.3%); 11.2% of children’s parents were previously but no longer married, and 2.9% were never married. Regarding psychotropic medications, 20.2% of youth were taking antidepressant medication, 8% were taking stimulant or other ADHD medication, 4.5% were on taking a sedative or hypnotic medication, 4.3% were taking an antipsychotic medication, and 2.3% were taking a mood stabilizer. Among the 650 youth, 555 met formal diagnostic criteria for at least one DSM-IV–specified AD in their diagnostic profile (either as a principal or

subprincipal diagnosis), including GAD (42.3%), social anxiety disorder (SocAD; 34.8%), separation anxiety disorder (SepAD; 21.4%), panic disorder with or without agoraphobia (PDA; 12.3%), obsessive-compulsive disorder (OCD; 19.8%), specific phobia (SP; 31.7%), or posttraumatic stress disorder (PTSD; 1.1%), and were not assigned a diagnosis of ADNOS elsewhere in the diagnostic profile (group memberships across the ADs overlap due to comorbidity). Ninety-five youth exhibited clinically significant symptoms of anxiety, but did not meet full criteria for a specified DSM-IV AD, and were assigned a diagnosis of ADNOS, as per DSM-IV.

MEASURES

Anxiety Disorders Interview Schedule for Children and Parents for DSM-IV (ADIS-C/P)—The ADIS-C/P^[45] is a semistructured diagnostic interview that assesses child psychopathology in accordance with DSM-IV criteria, with particularly thorough coverage of the internalizing disorders. The ADIS-C (child version) and the ADIS-P (parent version) collect data on children's and parents' reports of child anxiety, respectively. Child and parent diagnostic profiles are integrated into a composite diagnostic profile using the "or rule" at the diagnostic level, in which a diagnosis is included in the composite profile if either the parent(s) *or* child endorsed sufficient diagnostic criteria for that disorder. The ADIS-C/P has been the most widely used diagnostic interview in clinical research evaluating child anxiety, likely due to its strong reliability, validity, and sensitivity to change.^[46, 47] In age ranges comparable to those of the present sample, the interview has demonstrated good reliability for parent (κ range from 0.65 to 0.88) and child diagnostic profiles (κ range from 0.63 to 0.88).^[46, 48]

Child Behavior Checklist (CBCL)—The CBCL^[49] is a standardized instrument for assessing behavioral and emotional problems and competencies, demonstrating excellent psychometric properties. The instrument assesses 120 emotional, behavioral, and social problems reported by parents of children ages 6–18. Parents rate each item for the past 6 months as 0 (*not true*), 1 (*somewhat or sometimes true*), or 2 (*very true or often true*). Empirically based syndrome scales, normed for age and gender, are generated, including three broadband dimensions: internalizing problems, externalizing problems, and total problems, as well as eight syndrome scales and six DSM-oriented scales. *t*-scores below 65 fall in the normative range. The following subscales have been linked to diagnosed ADs in previous empirical work,^[41, 50–52] and accordingly were included in the present analysis: internalizing problems, externalizing problems, total problems, anxious/depressed symptoms, somatic complaints, and social problems.

PROCEDURE

Participants were recruited at the Center for Anxiety and Related Disorders, a university-affiliated outpatient center for the treatment of emotional disorders in New England. Families completed an initial telephone screening as part of clinic procedures. Children were excluded with current psychotic symptoms, suicidal or homicidal risk requiring crisis intervention, two or more hospitalizations for severe psychopathology (e.g., psychosis) within the previous 5 years, or moderate to severe intellectual impairments. Children on psychotropic medications were required to be stabilized at least 1 month on current dose

prior to participation. Participating families were administered the ADIS-C/P and mothers completed the CBCL as part of a prescreening battery for treatment. After obtaining informed consent, a diagnostician conducted separate child and parent interviews, and then integrated diagnostic profiles using the “or rule” to generate a composite diagnostic profile. For each case, interview material was presented and reviewed at a weekly diagnostician staff meeting, during which time symptoms were reviewed and a team consensus on the diagnostic profile was obtained. Consistent with ADIS-C/P guidelines, diagnoses were generated in strict accordance with DSM-IV. Diagnosticians included a panel of 22 clinical psychologists, postdoctoral associates, and doctoral candidates specializing in the assessment and treatment of pediatric ADs. All diagnosticians met internal certification and reliability procedures, developed in collaboration with one of the ADIS-C/P authors: observing three complete interviews, collaboratively administering three interviews with a trained diagnostician, and conducting supervised interviews until achieving the reliability criterion (i.e., full diagnostic profile agreement on three of five consecutive supervised assessments). Demographic information was obtained from parent report. As in previous research,^[22] household income was used to compute a poverty index ratio (i.e., household income divided by US poverty threshold in the interview year), resulting in four index ratio categories: <1.5; 1.5 to < 3.0; 3.0 to < 6.0; and ≥ 6.0.

ADNOS Classification—As per DSM-IV, children who exhibited clinically significant symptoms of anxiety, but who did not meet criteria for a formal DSM-IV diagnosis, were assigned a diagnosis of ADNOS (DSM-IV-TR: 300.00). On the composite diagnostic profile, diagnosticians also specified which AD diagnosis the AD-NOS case most closely resembled. For the purposes of this study, the notations ADNOS(GAD), ADNOS(SepAD), ADNOS(OCD), AD-NOS(SocAD), ADNOS(PDA), ADNOS(SP), and ADNOS(PTSD) are used to identify ADNOS cases that closely resemble but do not meet full criteria for GAD, SepAD, OCD, SocAD, PDA, SP, or PTSD, respectively.

Symptom Criteria Categories—For analyses evaluating patterns and correlates of unmet symptom criteria among ADNOS cases, symptom criteria across the DSM-IV–specified ADs were classified into the following five categories: (1) core disorder symptom criteria; (2) duration criteria, (3) core symptom frequency criteria, (4) pervasiveness criteria, and (5) associated symptom criteria. DSM-IV criteria from each specific AD included in each of these five broad categories are presented in the Appendix. Given heterogeneity across DSM-IV AD criteria, not every AD is represented within each of the five criteria categories. Clinical significance and diagnostic rule-out criteria were met among all ADNOS cases and thus are not considered in the present analyses.

DATA ANALYSIS

First, we evaluated demographic differences between the AD and ADNOS samples via chi-square tests and *t*-tests. Among ADNOS youth, we then computed the percentage of DSM-IV–specified ADs closely resembled, followed by the percentage of each unmet diagnostic criteria category preventing a formal AD diagnosis. Third, we evaluated clinical differences, as measured by the CBCL, between AD and ADNOS youth by each unmet symptom criteria class (e.g., for symptom criteria class 2—duration—we compared ADNOS youth who failed

to meet the duration criteria for the disorder most closely resembled to the full sample of AD youth). Fourth, we evaluated clinical differences between ADNOS cases and the specific disorders they most closely resembled for all ADNOS diagnostic groups with sample sizes

15. Specifically, ADNOS(GAD) and ADNOS(SepAD) were compared to GAD and SepAD cases, respectively, across CBCL scales. For ADNOS(GAD) cases, we then computed the percentage of each unmet GAD diagnostic criteria category preventing a formal GAD diagnosis, and then evaluated clinical differences between GAD and ADNOS(GAD) youth by each unmet symptom criteria class. The same procedure was followed comparing ADNOS(SepAD) youth and SepAD youth. Statistical significance across tests was evaluated via analyses of variance. To account for multiple comparisons, Holm–Bonferroni corrections^[53] were applied within each family of tests to ensure family-wise error rates of .05 when identifying statistical significance.

RESULTS

DEMOGRAPHIC AND DIAGNOSTIC PATTERNS ASSOCIATED WITH ADNOS DIAGNOSIS

Across treatment-seeking anxious youth, the prevalence of ADNOS was 14.6%. Distributions across gender, race/ethnicity, poverty income ratios, and parental marital status were comparable across AD and ADNOS youth. Similarly, AD and ADNOS youth were similar in age and both samples exhibited an average of two mental disorders across diagnostic profiles (Table 1). Distributions of youth taking psychotropic medications did not differ across AD and ADNOS youth ($P_s > .05$). Roughly two-thirds of ADNOS youth exhibited symptom presentations closely resembling GAD (Table 2). The percentage of ADNOS presentations closely resembling the remaining DSM-IV–specified ADs ranged from separation AD (15.8%) to PTSD (2.1%).

PATTERNS AND CLINICAL CORRELATES OF UNMET DIAGNOSTIC CRITERIA PREVENTING AD CASENESS AMONG ADNOS YOUTH

Roughly half of ADNOS symptom presentations were not assigned a DSM-IV–specified AD because core symptom frequency criteria were not met (Table 2). Un-met core disorder symptom criteria and duration criteria also each accounted for a sizable percentage of ADNOS presentations. In contrast, ADNOS presentations rarely “missed” a formal diagnosis due to a failure to meet associated symptom criteria (e.g., in GAD: sleep disturbance, difficulty concentrating, restlessness, irritability, fatigue, or muscle tension; in PDA: persistent concern about additional attacks, worry about implications, and/or attack-related disruption). Evaluations of CBCL subscale means across AD youth and ADNOS youth who “missed” formal diagnostic criteria for an AD due to each of the five broad diagnostic criterion categories revealed no clinical differences achieving statistical significance (data available upon request).

Follow-up analyses specifically evaluated patterns and clinical correlates of unmet diagnostic criteria preventing caseness among the two most prevalent ADNOS diagnostic groups: ADNOS(GAD) youth and ADNOS(SepAD) youth. Other ADNOS diagnostic groups were too small to afford statistical comparisons.

GAD youth showed significantly higher internalizing problems than ADNOS(GAD) youth, $t(299) = 6.01, P < .0001$. No other differences were found across the other five CBCL subscales. Roughly one-third of ADNOS(GAD) cases missed formal GAD diagnosis by only one criterion (32.3%); another 16.1% missed formal GAD diagnosis by two criteria. Half of AD-NOS(GAD) cases did not worry more days than not (50.0%), whereas roughly one-fourth of ADNOS(GAD) cases did not show multiple spheres of worry (25.8%) or did not worry for at least 6 months (25.8%). One-fifth of ADNOS(GAD) cases did not exhibit worry that was difficult to control (21.0%). A small percentage of ADNOS(GAD) cases failed to exhibit excessive worry (4.8%), and no ADNOS(GAD) cases failed to meet the GAD associated symptom criterion, clinical impairment criterion, or diagnostic rule-out criterion.

No statistically significant differences were found between GAD youth and ADNOS(GAD) youth who missed only one or two GAD diagnostic criteria (Table 3). Evaluations comparing CBCL subscale means across GAD youth and ADNOS(GAD) youth who missed each of the GAD diagnostic criteria revealed only two differences. GAD youth exhibited significantly higher internalizing problems than ADNOS(GAD) youth who did not worry more days than not and AD-NOS(GAD) youth who did not exhibit multiple spheres of worry. Of these statistically significant differences, only differences in internalizing problems between GAD youth and ADNOS(GAD) youth who did not exhibit multiple spheres of worry achieved clinical significance. There were no clinical differences between GAD youth and ADNOS(GAD) youth who did not have difficulty controlling their worry and ADNOS(GAD) youth who did not worry for at least 6 months. Too few AD-NOS(GAD) youth failed to meet the worry excessiveness criterion to permit statistical analyses on this unmet criterion category. Among ADNOS(GAD) youth, failing to meet any of the GAD criteria did not result in any fewer somatic problems, social problems, externalizing problems, or total problems.

SepAD youth showed no greater symptoms or problems than youth assigned ADNOS(SepAD; all P s $> .05$). Over half of ADNOS(SepAD) youth missed formal SepAD diagnosis by only one criterion (60.0%). Two-thirds of ADNOS(SepAD) did not endorse at least three DSM-IV–specified separation anxiety symptoms (66.7%), as required by DSM-IV for SepAD diagnosis. Forty percent did not endorse at least a 4-week duration of symptoms, and no ADNOS(SepAD) cases failed to meet the SepAD clinical impairment or diagnostic rule-out criteria.

DISCUSSION

The present analysis offers a rare portrait of patterns and correlates of childhood ADs not otherwise specified in DSM-IV. Roughly one in seven youth seeking treatment for anxiety presented with clinically significant symptoms of anxiety, but did not meet full criteria for a DSM-IV AD. These findings suggest that a considerable proportion of ADNOS diagnoses assigned in service settings may not simply reflect poor diagnostic practices (e.g., practitioners assigning ADNOS without a thorough assessment of DSM-IV symptoms and appropriate rule-outs of specified anxiety diagnoses), and many such cases exhibit comparable levels of child symptomatology and problems to the DSM-IV–specified ADs.

Among ADNOS cases, core symptom frequency requirements were the most commonly unmet diagnostic criteria (roughly half of all ADNOS cases).

Consistent with adult literature supporting phenomenological overlap between many GAD and AD-NOS cases,^[42] the symptom presentations of roughly two out of every three ADNOS cases closely resembled GAD. Overall, ADNOS(GAD) cases showed comparable anxious/depressed symptoms, somatic symptoms, social problems, externalizing problems, and total problems to GAD cases, although ADNOS(GAD) cases did show lower overall internalizing problems than their GAD counterparts. Further examination of specific un-met GAD criteria among ADNOS(GAD) cases suggests that the lower internalizing problems among AD-NOS(GAD) youth may be concentrated among cases failing to show worry about multiple domains and/or who do not worry more days than not, underscoring the clinical relevance of these criteria. Research conducted with adult samples has suggested there may be diagnostic utility in retaining the multiple domains and more days than not worry criteria, but relaxing the 6-month duration criteria in DSM-5.^[54] Given the absence of significant differences between ADNOS(GAD) youth failing to meet the 6-month duration criterion and GAD youth, the present findings suggest that such proposed modifications to the DSM GAD taxonomy would retain clinically meaningful distinctions when applied to children, whereas at the same time maximizing the inclusion of cases “just missing” DSM-IV GAD diagnosis but who show comparable difficulties. In the adult literature, the validity of the worry excessiveness GAD criterion has been called into question.^[44] In the present sample, only 5% of ADNOS(GAD) cases failed to meet the excessiveness criterion, suggesting that removing this criterion may have a negligible impact on diagnosed GAD rates in child treatment-seeking samples.

Beyond GAD, the prevalence rates of other DSM-IV ADs closely resembled by ADNOS cases were substantially lower. Among ADNOS cases, SepAD was the second most common AD resembled (just below one in every six ADNOS cases). It is possible that the dimensional conceptualization being incorporation into DSM-5 may be particularly well suited to the assessment of childhood SepAD.

Lumping all cases that meet criteria for DSM-IV ADNOS into one heterogeneous category has serious implications for research and practice. Clinical trials for childhood anxiety typically require a DSM-IV–specified AD for study inclusion,^[55] and as such there is at present limited evidence supporting how best to intervene with children presenting with these common and interfering symptom presentations. For maximal clinical relevance, future clinical trials would do well to include these “subsyndromal” child anxiety presentations, and to examine whether treatment response differs across AD and ADNOS presentations.

Diagnostic assessment provides an important communication function. Hours of psychological evaluation are often distilled into diagnostic labels and/or numeric codes as shorthands to succinctly convey key information to other providers, payers, and review panels charged with evaluating quality of care. Evidence-based treatment strategies vary in meaningful ways across the child ADs, including whether or not there is strong support for the use of selective serotonin reuptake inhibitors (SS-RIs), which SSRI is most supported for

which ADs, and what the specific focus of cognitive-behavioral therapy should entail.^[56–59] Despite the prevalence of ADNOS in treatment-seeking populations, an ADNOS diagnosis or a 300.00 code does little to communicate information suggesting an indicated treatment course. Rather than relying on one broad, heterogeneous category for each diagnostic class in which to lump all clinically significant cases not meeting full diagnostic criteria for any of several disorders, future DSM iterations may do well to consider adding a code to the end of each diagnosis to indicate whether a symptom presentation meets criteria or is subsyndromal.

The present findings should be interpreted in light of several limitations. First, because this research was conducted in an outpatient specialty clinic for the treatment of ADs, results may not generalize to the general child population, to other treatment settings where children receive mental health care, or to outpatient specialty settings of different sociodemographic make-up. Second, limited numbers of ADNOS cases resembling ADs other than GAD and SepAD precluded statistical investigation of clinical differences between these cases and the disorders they closely resembled. Future work is needed to examine the extent to which subsyndromal but clinically impairing variants of OCD, SP, PDA, So-cAD, and PTSD are comparable to presentations meeting full diagnostic criteria for these conditions. Third, the present sample included children as young as five. Although the validity and reliability of anxiety diagnoses in young children have been well supported,^[47, 60] many of the most rigorous psychometric evaluations of the diagnostic instrument presently used have been confined to samples of children aged 7 and above.^[47] Thus, it is possible that diagnostic imprecision in younger children influenced findings. In particular, younger children may struggle self-reporting on the concept of worry, and parents of younger children may at times mistakenly report the presence of child worry and related internal phenomena based on external indicators such as excessive reassurance seeking. Importantly, however, analyses did not find child age to be associated with ADNOS versus AD categorization. Finally, it is possible that some of the differences that did not reach statistical significance would have in the context of a sample larger than 650 participants.

CONCLUSIONS

Despite these limitations, the present analysis suggests that childhood ADNOS cases are prevalent in treatment-seeking settings and warrant clinical attention. In many cases there are only a couple of, if any, clinical differences between these disorders and the ADs that they closely resemble. Future work is needed to improve upon the current taxonomy of childhood ADs to specify a larger proportion of affected youth needing care. The present findings indicate several key areas for focused consideration in evidence-based efforts to improve the specification of childhood ADs. First, it appears that the dimensional conceptualization being incorporated into DSM-5 may be particularly well suited to the assessment of childhood ADs, given the minimal clinical distinctions presently identified between AD and ADNOS youth. In the case of GAD, whereas the multiple domains of worry criterion and the worrying more days than not criterion both appear to hold clinical relevance, removal of the 6-month duration criterion may favorably increase the sensitivity of GAD diagnosis to include a larger proportion of affected youth in need. Retaining the worry excessiveness criterion may have a negligible impact upon rates of GAD in treatment-

seeking youth, and so in the interest of parsimony the field may do well to remove this criterion in the specification of GAD. Finally, rather than relying on one broad, heterogeneous category for each diagnostic class in which to lump all clinically significant cases not meeting full diagnostic criteria for any of several disorders, future DSM iterations may do well to consider adding a code to the end of each diagnosis to indicate whether a symptom presentation meets criteria or is subsyndromal. An ADNOS diagnosis or a 300.00 code does little to communicate information suggesting an indicated treatment course—including whether or not an SSRI is warranted, which SSRI may be most indicated, or what the focus of a supported CBT should be. Relative to the DSM-IV ADNOS diagnosis, the current DSM-5 proposal to include a broad “Anxiety Disorder Not Elsewhere Categorized” diagnosis offers little improvement in this regard.

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APPENDIX: DSM-IV DIAGNOSTIC CRITERION CATEGORY DEFINITIONS

Criterion category		Diagnostic criteria included by anxiety disorder
1. Core disorder symptom criteria	GAD	Excessive anxiety and worry; worry difficult to control
	SepAD	3 core developmentally inappropriate separation anxiety symptoms
	SocAD	Marked/persistent fear 1 social or performance situations; fears humiliation/embarrassment; anxiety in peer settings; feared situation(s) avoided or endures with distress
	SP	Marked persistent fear that is excessive or unreasonable, cued by specific object or situation; exposure almost invariably provokes anxiety; feared situation[s] are avoided or endured with distress
	OCD	Presence of either obsessions or compulsions as defined in DSM-IV
	PDA	4 panic symptoms reaching peak within 10 min; anxiety about being in places or situations from which escape might be difficult or embarrassing; situations are avoided or else endured with marked distress
	PTSD	Experienced/witnessed/confronted with event of actual/threatened death or serious injury, or a threat to the physical integrity of oneself or others; >1 reexperiencing symptom; 3 avoidance symptoms; 2 hyperarousal symptoms
2. Duration criteria	GAD	6-month duration
	SepAD	4-week duration
	SocAD	6-month duration
	SP	6-month duration
	PDA	1-month duration
	PTSD	1-month duration
3. Core symptom frequency criteria	GAD	Worry more days than not
	SocAD	Exposure almost invariably produces anxiety
	PDA	Panic attack recurrence
4. Pervasiveness criteria	GAD	Worry across multiple spheres
5. Associated symptom criteria	GAD	1 associated symptom
	PDA	Persistent concern about additional attacks, worry about implications, and/or attack-related behavior change

Note: GAD, generalized anxiety disorder; SepAD, separation anxiety disorder; SocAD, social anxiety disorder; OCD, obsessive-compulsive disorder; SP, specific phobia; PDA, panic disorder with or without agoraphobia; PTSD, posttraumatic stress disorder. AD, anxiety disorder; ADNOS, anxiety disorder not otherwise specified. Clinical significance and diagnostic rule-out criteria were met for all AD and ADNOS diagnoses and are not included here.

TABLE 1

Demographic characteristics associated with DSM-IV anxiety disorders not otherwise specified and DSM-IV-specified anxiety disorders in a child anxiety treatment-seeking sample ($N = 650$)

	DSM-IV-specified anxiety disorders ($n = 555$), 85.4%		DSM-IV anxiety disorders not otherwise specified ($n = 95$), 14.6%		Significance test
	<i>n</i>	%	<i>n</i>	%	
Gender					
Male	252	45.4	48	50.5	$\chi^2(1, N = 650) = 0.86, P = .36$
Female	303	54.6	47	49.5	
Race/ethnicity					
Minority	105	18.9	14	14.7	$\chi^2(1, N = 650) = 0.95, P = .33$
White	450	81.1	81	85.3	
Poverty/income ratio					
<1.5	25	6.7	3	5.2	$\chi^2(3, N = 435) = 2.40, P = .49$
1.5 to < 3.0	95	25.2	12	20.7	
3.0 to < 6.0	180	47.7	34	58.6	
6.0	77	20.4	9	15.5	
Parental marital status					
Married/cohabitating	449	84.2%	86	91.5%	$\chi^2(2, N = 627) = 3.58, P = .17$
Previously married	66	12.4%	7	7.4%	
Never married	18	3.2%	1	1.1%	
	Mean	SD	Mean	SD	
Child age, years	12.23	3.30	11.61	2.96	$t(137.03) = 1.86; P = .06$
No. of mental disorders	2.0	1.1	2.0 ^d	1.1	$t(648) = 0.23; P = .82$

^dIncludes diagnoses of AD/OS.

TABLE 2

Number and percentage of DSM-IV–specified anxiety disorders closely resembled, and unmet diagnostic criteria preventing anxiety disorder caseness, among treatment-seeking youth diagnosed with ADNOS ($N = 95$)

Number and percentage of DSM-IV– specified anxiety disorders most closely resembled among ADNOS youth		
	<i>n</i>	%
Generalized anxiety disorder	62	65.3
Separation anxiety disorder	15	15.8
Obsessive-compulsive disorder	11	11.6
Specific phobia	10	10.5
Panic disorder and/or agoraphobia	9	9.5
Social anxiety disorder	9	9.5
PTSD	2	2.1

Number and percentage of unmet diagnostic criteria categories preventing anxiety disorder caseness among ADNOS youth		
	<i>n</i>	%
Core disorder symptom criterion	42	44.2
Duration criterion	29	30.5
Core symptom frequency criterion	46	48.4
Pervasiveness criteria	16	16.8
Associated symptom criterion	4	4.2

Note: ADNOS, anxiety disorder not otherwise specified. All ADNOS youth met clinical significance and diagnostic rule-out criteria.

TABLE 3

Clinical differences between DSM-IV–specified generalized anxiety disorder (GAD) and ADNOS resembling GAD ($N = 301$)

ADNOS resembling GAD ($n = 62$)																						
DSM-IV–specified generalized anxiety disorder ($n = 239$)		Unmet criteria ^a																				
		Excessive worry ($n = 3$) ^b			Worry more days than not (n $= 31$)			Worry difficult to control ($n =$ 13)			Multiple spheres of worry ($n =$ 16)			6 month duration ($n =$ 16)			Missing GAD by one criterion ($n =$ 20)			Missing GAD by two criteria ($n =$ 10)		
		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>	
Child Behavior Checklist Scale																						
Internalizing problems		70.6	7.6	69.5	14.8	65.5 ^c	8.1	65.2	7.9	64.0 ^c	8.9	65.7	7.7	65.5	7.1	64.1	6.5					
Anxious/depressed symptoms		70.7	9.9	70.0	14.1	67.0	7.3	68.8	8.2	66.9	8.9	69.1	7.5	66.4	6.1	68.5	7.5					
Somatic symptoms		63.6	9.3	66.5	7.8	62.3	8.5	60.5	8.1	60.3	8.0	62.8	9.2	62.6	8.4	59.0	7.9					
Social problems		58.1	7.8	59.6	7.8	57.2	5.7	56.3	4.2	57.8	5.1	56.6	5.2	57.2	7.1	56.1	4.5					
Externalizing problems		54.1	9.7	55.8	9.3	52.0	8.6	55.8	6.8	54.6	9.8	55.3	6.0	51.6	9.3	54.6	6.0					
Total problems		62.0	8.5	64.4	7.6	60.4	7.3	59.8	7.6	60.4	8.6	60.7	7.2	60.3	7.8	59.3	5.7					

Note: ADNOS, anxiety disorder not otherwise specified. Means reflect *t*-scores, normed for age and gender. No cases of ADNOS resembling GAD failed to meet associated symptom criterion or diagnostic rule-out criterion. GAD youth included those with principal and subprincipal GAD within the diagnostic profile.

^a Group membership overlaps across five unmet criteria categories among individuals with anxiety disorders NOS resembling GAD.

^b Too few ADNOS cases failed to meet excessive worry criterion to permit statistical comparisons between these cases and GAD youth.

^c Mean significantly differs from mean associated with DSM-IV–specified GAD.