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Specific Phobia in Youth: Phenomenology and Psychological Characteristics

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Sociodemographic and psychological characteristics of 62 youth with animal and natural environment types of specific phobia were examined in a treatment-seeking sample. Differences due to age, sex, ethnicity, family structure, and family socioeconomic status were not found between youth with the two types of specific phobia. Moreover, differences were not obtained between the two groups in the clinical severity of their phobias, the perceived dangerousness of the feared outcomes associated with their phobias, the perceived levels of coping with their phobias, or overall fearfulness. However, differences between youth with the two types of specific phobias were found on somatic/anxious symptoms, depressive symptoms, and life satisfaction. In addition, differences were noted on withdrawn, somatic complaints, anxious/depressed symptoms, and social problems as reported by the mothers of these youngsters. Finally, differences in the percent of co-occurring anxiety disorders between youth with the two types of specific phobia were found. On all of the domains in which differences were found, youth with the natural environment type fared more poorly than those with the animal type. These findings converge with those obtained in treatment studies which indicate that youth with the natural environment type are more difficult to treat than youth with the animal type.

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According to the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-IV*; American Psychiatric Association, 1994), a specific phobia is defined as a persistent fear that is excessive or unreasonable and that is cued by the presence of a specific object or situation. Specific phobias are classified into five major types: animal (e.g., insects, snakes, dogs), natural environment (e.g., darkness, storms, heights), situational (e.g., enclosed spaces, elevators, flying), blood-injection-injury (BII) (e.g., seeing blood, receiving shots or injections), and other (e.g., choking, loud sounds, costumed characters). The limited research available with adults suggests that these phobia types may possess relatively distinct features. For example, Antony, Brown, and Barlow (1997) indicated that BII phobias are associated with reduced physiological arousal whereas other phobia types

are characterized by heightened physiological arousal. However, the clinical features of specific phobia types in children have not been examined heretofore. The primary purpose of the present study was to examine such differences in two major types of phobia in children and adolescents: animal and natural environment types.

To date, only a few investigations have reported on sociodemographic characteristics of children with specific phobias in community and clinical samples. Milne et al. (1995) examined these characteristics in a large community sample of 3,283 adolescents in seventh through ninth grades. Approximately 80% of the adolescents were Caucasian, about 50% resided in dual-parent homes, and most were from middle-to upper-socioeconomic-status families. In one of the first clinical studies, Last, Perrin, Hersen, and Kazdin (1992) examined sociodemographic characteristics in 80 youth between 7 and 16 years of age who were diagnosed with simple (i.e., specific) phobias. Over 50% of their clinical sample was male, 77.5% was Caucasian, and 58.8% came from intact families. In another clinical sample of 104 youth with specific phobia (Silverman et al., 1999), 54 were boys and 50 were girls. Moreover, of the 6-to 16-year-old youth in this sample, 62% were Caucasian, 37% were Hispanic Americans, and 2% were of other ethnic backgrounds. The majority of the families were from lower-to middle-class backgrounds. As is evident, considerable variability in sociodemographic characteristics exists in both community and clinical samples, with a mixed pattern in terms of age, sex, socioeconomic status, and family structure. As such, specific phobias appear to be present across a widely varying set of sociodemographic characteristics.

Although sociodemographic differences are evident in these clinical and community samples, the most commonly occurring phobia types across these investigations are largely congruent. Specifically, the most common phobia types across both community and clinical samples are the animal and natural environment types (Last et al., 1992; Milne et al., 1995; Silverman et al., 1999). For example, Milne and colleagues reported that heights, insects, and dogs were the most common phobias in their community sample. Thunderstorms, the dark, dogs, and insects also constituted the majority of phobias in the Last et al. and Silverman et al. clinical studies.

There is limited research that examines comorbidity in samples of youth with specific phobia. In community samples, comorbidity with other specific phobias occurs in about 50% of cases and with other psychiatric disorders in about 25% of cases (Costello, Egger, & Angold, 2004). In clinical samples, co-occurrence with other phobic disorders is also about 50%, but co-occurrence with other psychiatric disorders is considerably higher than that observed in community samples (Ollendick, King, & Muris, 2002). For example, in Silverman et al. (1999), 72% of the sample had at least one comorbid diagnosis. The most commonly occurring comorbid diagnoses (in addition to other specific phobias) were separation anxiety disorder, over-anxious disorder (i.e., generalized anxiety disorder), and attention-deficit/hyperactivity disorder (ADHD). In addition, about 50% of participants in the Last et al. (1992) sample had comorbid disorders (in addition to other specific phobias), with the most common being major depressive disorder, ADHD, and oppositional-defiant disorder (ODD). Quite obviously, comorbidity of other psychiatric disorders varies in these clinical studies and exceeds those in community studies. Unfortunately, neither community nor clinical studies have examined comorbidity according to type of specific phobia. As a result, more research is needed to evaluate the comorbidity of specific phobia subtypes with other psychiatric disorders in clinical samples of youth with specific phobias.

Additionally, more research is needed to understand the extent of impairment and quality of life in youth with specific phobia. Several studies of adults with specific phobias suggest increased levels of impairment and reduced quality of life. For example, Mogotski, Kaminer, and Stein (2000) reported that adults with specific phobias in the National Comorbidity Study were likely to experience impairments in education, employment, and overall quality of life—even in the absence of significant comorbidity. Furthermore, Alonso et al. (2004) found that adults with specific phobias have more work loss days, poorer physical quality of life, and poorer mental quality of life than those with no disorder at all. Although relations between specific phobias and impairment have not been explicitly examined in children and adolescents, several investigations with other childhood anxiety disorders have reported that the heightened presence of somatic symptoms is associated with greater severity of anxiety and impairment (Ginsburg, Riddle, & Davies, 2006; Kingery, Ginsburg, & Alfano, 2007). The number and type of somatic symptoms were negatively related to perceived academic and social competence in these studies. Unfortunately, these studies have not examined these relations in youth with specific phobia or in youth with specific types of phobias.

Given the limitations in the previous research, the current study examined sociodemographic and clinical characteristics of youth with specific pho-

bias in a well-characterized, clinical sample who presented to an anxiety disorder clinic specializing in specific phobias. Clinical and sociodemographic characteristics, phobia types, physical and somatic symptoms, other forms of psychopathology, and overall functioning as reflected in quality of life were examined. Characteristics of the two most common types of phobia (e.g., animal, natural environment) were examined. It was hypothesized that both types of phobia would be judged by clinicians as equally and highly impairing based on semistructured diagnostic interviews and that the youth would report dysfunctional beliefs of a similar magnitude in both types of phobias. However, based on the adult literature (Antony et al., 1997; Mogotsi et al., 2000), it was hypothesized that youth with the natural environment type would possess more comorbidity, heightened somatic arousal, increased anxiety and depression, and lower quality of life than youth with the animal type.

Method

PARTICIPANTS

Participants were enrolled in a NIMH-funded clinical trial investigating the efficacy of one-session exposure treatment for specific phobias in children and adolescents (Ollendick et al., 2009). They included 95 youth from southwestern Virginia who were between 7 and 14 years of age with a *DSM-IV* diagnosis of a specific phobia and their parent(s) or guardian. Seventy-one of the 95 participants (75%) had a primary phobia that was of the animal (e.g., dogs, insects, snakes) or natural environment type (e.g., dark, storms, heights), with the remaining 24 (25%), having situational or "other" types (e.g., vomiting, costumed characters). BII type was specifically excluded from the clinical trial due to differences in physiological presentation (i.e., dizziness and fainting) and the probable need for a different type of treatment. Of the 71 youth with a phobia of the animal or natural environment type, 31 had an animal phobia but not a natural environment phobia, 31 had a natural environment phobia but not an animal type, and 9 had co-occurring animal and natural environment types. These 9 participants were excluded from further consideration as the focus of the present study was on potential differences between the two types of phobias and there were an insufficient number of participants with both types to study the combination. Thus, 62 children and adolescents with a specific phobia of either the animal (n = 31) or environment type (n = 31), but not both, were included. For the animal type, primary phobias consisted of dogs (n = 16, 51.61%), spiders (n = 11, 35.5%), bees (n = 1, 3.2%), cats (n = 1, 3.2%), squirrels (n = 1, 3.2%), and worms (n = 1, 3.2%); for the natural environment type, primary phobias consisted of thunderstorms (n = 13, 41.9%), dark (n = 12, 38.7%), heights (n = 3, 9.7%), and water (n = 3, 9.7%).

The clinical sample was recruited from contacts with mental health treatment clinics, pediatricians, family practice physicians, and school systems, as well as newspaper articles and television and radio advertisements. Demographic information (i.e., age, sex, race, and ethnicity) for the sample of youth as a whole and for the youth with animal and environmental phobia types is presented in Table 1. Participants completed informed consent and assent and the investigation was approved by the university IRB.

MEASURES

The Anxiety Disorders Interview Schedule for DSM-IV-Child and Parent Versions (ADIS-IV-C/P; Silverman & Albano, 1996)

The ADIS-IV-C (child version) and ADIS-IV-P (parent version) are semistructured diagnostic interviews designed to facilitate diagnosis of anxiety and mood disorders and other disorders in children and adolescents between 6 and 17 years of age.

Table 1
Sociodemographic Characteristics for the Total Sample and by Phobia Type

	Total (N = 62)	Animal (n = 31)	Natural Environment (n = 31)	$F/t/\chi^2$	p
Age M (SD)	9.42 (2.11)	9.00 (2.13)	9.84 (2.03)	2.51	.12
Gender n (% male)	34 (54.84)	14 (45.16)	20 (64.52)	2.35	.13
Race n (%)				1.29	.26
Caucasian	54 (87.10)	25 (80.65)	29 (93.55)		
Other	8 (12.90)	6 (19.35)	2 (6.45)		
Family Structure n (%)				2.43	.12
Parents Together	46 (74.19)	26 (83.87)	20 (64.52)		
Parents Not Together	15 (24.19)	5 (16.13)	10 (32.26)		
Family Income M (SD)	62368 (29133)	67600 (26848)	57136 (30903)	1.63	.21

Note. For race, Fisher's Exact Test was performed.

Using an interviewer-observer paradigm, Silverman and Nelles (1988) found adequate clinician agreement for the original child version of the ADIS with *DSM-III* categories (overall $\kappa = .84$ child interview alone, overall $\kappa = .83$ for the parent interview alone, and overall $\kappa = .78$ for composite diagnosis). Silverman and Eisen (1992) investigated the reliability of *DSM-III-R* anxiety diagnoses using the child ADIS. Using a test-retest paradigm with a 10–14 day interval, they reported adequate reliability for an overall diagnosis of an anxiety disorder based on a composite of parent and child interviews ($\kappa = .75$). Rapee, Barrett, Dadds, and Evans (1994) also investigated interrater reliability, as well as parent-child agreement on the ADIS. Again, an overall kappa of .75 was found when both parent and child information was used to arrive at diagnoses. Kappa coefficients in our clinic exceed .70 for all major disorders and .85 for specific phobias (see Grills & Ollendick, 2003) and were .72 and .87, respectively, in the current sample. Separate clinicians administered the ADIS-C and ADIS-P to the child and parent, respectively. Clinicians were trained to criterion.

Following the assessment, a clinical consensus diagnosis was determined by discussing the findings of the ADIS-C and ADIS-P. The clinicians involved in administration of the interviews and a licensed clinical psychologist with over 35 years of clinical experience attended the consensus meeting and arrived at consensual diagnoses. Only information obtained from the diagnostic interviews was used to arrive at clinical consensus diagnoses.

Phobic Beliefs

The clinician interviewed the child to solicit specific beliefs associated with the phobia (e.g., "I might fall off the ladder and break my leg," "The dog might bite me and I will need to go to the hospital," "The thunderstorm will make a tornado and our house will be destroyed"). Then, the child was asked to indicate how likely the belief was to occur (probability), how bad it would be if it actually occurred (danger), and how sure the child would be that he/she could cope with the event were it to occur (self-efficacy). Each facet of the belief was rated on a 9-point scale (0–8) by the child using an expectancy thermometer. Two phobic beliefs were solicited from each youth.

Multidimensional Anxiety Scale for Children (MASC; March, Parker, Sullivan, Stallings, & Conner, 1997)

The MASC is a 45-item self-report questionnaire designed for children and adolescents between 7 and 16 years of age. For each item, respondents are asked to indicate which of four responses characterize them. For example, to the item "I get scared riding in the car or on the bus," the individual is asked to indicate whether this is "Never true about me," "Rarely true about me," "Sometimes true about me," or "Often true about me." Initial findings suggest the instrument is psychometrically sound with high test-retest reliability, high internal consistency, and acceptable convergent and discriminant validity (March et al., 1997; March & Sullivan, 1999). The Somatic/Anxious and Physiological Symptoms subscales were examined in the present study. Internal consistency for these subscales was .85 and .89, respectively, for the current sample.

Child Depression Inventory (CDI; Kovacs, 1985)

The CDI is a 27-item paper-and-pencil questionnaire designed for children and adolescents between 7 and 16 years of age. For each item, the individual is presented with three statements representing varying levels of symptoms and asked to choose the statement that best describes him/her. Smucker, Craighead, Craighead, and Green (1986) found adequate reliability for the CDI for both boys and girls across several age groups (coefficient alphas ranging from .83 to .89). The total score was examined in the current study. Internal consistency was .87.

Fear Survey Schedule for Children–Revised (FSSC-R; Ollendick, 1983)

The FSSC-R is an 80-item questionnaire designed for children and adolescents between 7 and 16 years of age. For each stimulus item, the individual is asked to indicate his/her level of fear on a 3-point scale: *none*, *some*, or *a lot*. Factor analyses of the FSSC-R have yielded five subscales: fear of the unknown, fear of failure and criticism, fear of minor injury and small animals, fear of danger and death, and medical fears. The validity of the FSSC-R has been demonstrated through correlations with anxiety measures and the instrument has been shown to discriminate among phobia types (Weems, Silverman, Saavedra, Pina, & Lumpkin, 1999). In addition, excellent internal consistency has been found for the subscales and the total fear score ($\alpha = .94$ and $\alpha = .95$ in two separate samples; Ollendick, 1983; Ollendick, King, & Frary, 1989). To examine overall level of fearfulness in the current sample, the total score was used. Internal consistency was .94.

Quality of Life Inventory (QOL; Ollendick & Davis, 2001)

A 10-item quality of life instrument entitled "How I Feel About Things" was developed for this study and modeled after that of Frisch, Cornell, Villanueva,

and Retzlaff (1992). The 10 items relate to parents, siblings, cousins, home, school, teachers, friends, play, health, and self-esteem. Youth were asked to indicate how important certain things/people were for their happiness and how satisfied they were with each of these things/people. The satisfaction scale was used for study purposes (internal consistency was .71). Reduced quality of life has been associated with various psychiatric disorders in children and adolescents (Bastiaansen, Koot, Bongers, Varni, & Verhulst, 2004). Studies with adults have shown that individuals with anxiety disorders, including social phobia and specific phobia, report lower levels of life satisfaction than their normal counterparts (see Bech & Angst, 1996; Hollifield et al., 1997; Mogotsi et al., 2000).

Child Behavior Checklist (CBCL; Achenbach, 1991) The CBCL is a 113-item paper-and-pencil checklist designed to be completed by parents. Parents are asked to indicate how often the behavior described in each item is true of their child or adolescent using a 3-point scale (*often/always true*, *sometimes true*, and *not true*). The validity of the CBCL has been established through repeated factor analyses and associations with other variables of interest (see Achenbach, 2001). The CBCL results in Total, Internalizing, and Externalizing scores, as well as eight subscale scores. For present purposes, the Withdrawn, Somatic, Anxious/Depressed, and Social Problems subscales were examined to explore group differences. Reports of mothers were obtained. Achenbach (1991) reports test-retest reliability over a 1-week interval to be .99 for the competence subscales and .95 for the problem subscales.

PROCEDURE

Data were collected during two assessment sessions, each lasting approximately 2 hours. During these sessions, children completed self-report questionnaires and the diagnostic interview (ADIS-C) while parents completed several questionnaires about themselves and their family and a structured diagnostic interview regarding their child (ADIS-P). Presence of a specific phobia (and other disorders) was determined during a clinical consensus meeting, based solely on the child and parent diagnostic interviews. From the information provided during the ADIS interviews, examiners provided clinician severity ratings (CSRs) of the child's phobia.

Table 2
Overall Functioning by Phobia Type

	Animal (n = 31)		Natural Environment (n = 31)		*F*	*p*
	M	*SD*	*M*	*SD*		
Primary CSR	5.74	1.06	6.16	1.24	2.04	.16
Primary Phobic Beliefs						
How likely to happen?	4.61	2.06	3.42	2.23	4.78	.03*
How bad would it be?	6.03	2.01	6.29	2.33	0.22	.64
How to handle it?	2.94	2.38	3.32	2.47	0.40	.53
Secondary Phobic Beliefs						
How likely to happen?	4.13	1.76	4.04	2.48	0.03	.87
How bad would it be?	5.23	2.06	5.71	2.29	0.64	.43
How to handle it?	2.97	2.60	3.75	2.67	1.17	.29
MASC (*T*-score)						
Somatic/Anxious	42.64	7.15	47.90	10.08	4.74	.03*
Physical Symptoms	43.56	7.55	48.48	11.41	3.38	.07
CDI (*T*-score)						
Total Score	40.36	4.90	44.00	7.19	4.96	.03*
FSSC-R						
Total Score	126.72	29.96	121.93	29.31	0.35	.56
CBCL (*T*-score)						
Withdrawn	53.04	3.98	57.77	9.62	4.90	.03*
Somatic Complaints	53.04	4.90	59.36	7.33	12.00	<.00**
Anxious/Depressed	55.63	6.82	63.41	7.65	13.31	<.00**
Social Problems	53.13	4.86	58.32	7.25	8.28	.01*
QOL						
Satisfaction	2.45	0.51	2.11	0.69	5.02	.03*

Note. CSR = Clinician Severity Rating; MASC = Multidimensional Anxiety Scale for Children; CDI = Children's Depression Inventory; FSSC-R = Fear Survey Schedule for Children-Revised; CBCL = Child Behavior Checklist; QOL = Quality of Life.
*$p < .05$; **$p < .01$.

Results

SOCIODEMOGRAPHIC DIFFERENCES

Table 1 reports sociodemographic characteristics for the total sample of youth and for the youth with animal and natural environment types of specific phobias. There were no significant differences in age, sex, race, family structure, or family income between youth with the animal and natural environment types.

OVERALL FUNCTIONING BY PHOBIA TYPE

Table 2 reports means and standard deviations for the study variables separately for youth with animal and natural environment phobia types. An analysis of variance (ANOVA) revealed no significant differences between youth with the animal and natural environment types in CSRs, indicating that the two phobia types were judged by the clinicians to be equally severe on the ADIS C/P. Additional ANOVAs conducted on the primary and secondary beliefs associated with the phobias failed to reveal phobia type differences, with one exception. For the primary belief, those with the natural environment type reported that what they feared would happen was *less* likely to happen than did those youth with the animal type; otherwise, youth of both types believed their fears were highly dangerous and that they possessed low levels of efficacy to deal with them.

A MANOVA was conducted on the five self-report measures and found to be significant [Wilks' Lambda F (5, 43) = 2.58, p = .04]. Subsequent univariate analyses revealed significance on three of the five measures: the somatic/anxious symptom subscale of the MASC, the total level of depression on the CDI, and the quality of life satisfaction measure (all $ps < .05$). Specifically, youth with the natural environment type reported more somatic/anxious symptoms and more depressive symptoms but lower quality of life than those with the animal type. Although a significant difference was not obtained for the physical symptoms subscale of the MASC, a trend ($p < .10$) was observed, indicating that youth with the natural environment type tended to report more physical symptoms of anxiety than youth with the animal type. The youth did not differ on overall level of fearfulness as assessed by the FSSC-R.

Next, a multivariate ANOVA was conducted on the four problem subscales of the CBCL and found to be significant, $F(4, 41) = 3.66$, $p = .012$. Subsequent univariate analyses revealed that youth with the natural environment type had significantly more withdrawn, somatic, anxious/depressed, and social problems than youth with the animal type (all $ps < .05$).

COMORBIDITY WITH ADDITIONAL PHOBIAS AND OTHER PSYCHIATRIC DISORDERS

Comorbidity for the total sample and for youth with the animal and natural environment types is presented in Table 3. Overall, one third of the sample had at least one co-occurring specific phobia. Moreover, the presence of additional psychiatric disorders was relatively common in this treatment-seeking sample. The most commonly co-occurring disorders were generalized anxiety disorder (GAD), social phobia (SoP), separation anxiety disorder (SAD), and ADHD. Group differences between youth with the animal and environmental types were examined via chi-squared analyses: youth with the natural environment type were more likely to meet criteria for co-occurring GAD and SAD than youth with the animal type. The two types did not differ on presence of other disorders, however.

Discussion

Our findings indicate important differences between youth with the animal and natural

Table 3
Comorbidity Within Total Sample and by Phobia Type

	Total (N = 62)		Animal (n = 31)		Natural Environment (n = 31)		χ^2/t	p
	n	%	n	%	n	%		
Phobia	21	33.87	11	35.48	10	32.26	0.07	.39
GAD	21	33.87	7	22.58	14	45.16	3.53	.03*
SoP	14	22.58	9	29.03	5	16.13	1.48	.11
SAD	12	19.35	2	6.45	10	32.26	6.61	.01*
OCD	3	4.84	1	3.23	2	6.45	0.35	.28
ADHD	10	16.13	6	19.35	4	12.90	0.48	.25
ODD	2	3.23	0	0.00	2	6.45	2.07	.08

Note. GAD = generalized anxiety disorder; SoP = social phobia; SAD = separation anxiety disorder; OCD = obsessive compulsive disorder; ADHD = attention deficit hyperactivity disorder; ODD = oppositional defiant disorder. * $p < .05$.

environment types of specific phobia, even though the two groups of youth did not differ on sociodemographic characteristics (age, sex, ethnicity, family structure, and family income), the severity of their phobias as judged by clinicians, or dysfunctional cognitions associated with their phobias. That is, youth with both types reported high danger expectancies, elevated certainty that the events they feared would "really" occur, and low expectancies for dealing with the phobic situations or events should they occur. Thus, youth with both types reported faulty and exaggerated cognitions, as well as low self-efficacy expectancies, as suggested by Beck (1976), Bandura (1977), and others. Finally, youth with both types reported similar levels of fearfulness.

Still, differences between youth with the two types were noted in a number of important areas. Youth with the natural environment type reported higher levels of somatic symptoms of anxiety and their mothers reported higher levels of social problems and internalizing problems including withdrawn, anxious/depressed, and somatic complaints. Youth with the natural environment type also reported significantly more symptoms of depression and marginally significant more physical symptoms of anxiety than those with animal type phobias. Moreover, children and adolescents with the natural environment type were found to have more comorbid GAD and SAD diagnoses than youth with the animal type. Finally, youngsters with the natural environment type reported less overall satisfaction with their quality of life than those with the animal type. Thus, on a number of indices, youth with the natural environment type were found to be more clinically impaired and less satisfied with life than those with the animal type.

It is difficult to sort out exactly why these differences might be present since both types were viewed by clinicians as equally severe in their level of interference and distress and the youth themselves reported equally dysfunctional cognitions and overall fearfulness. We speculate as follows and view the presence of heightened somatic and physical symptoms in the natural environment type as being pivotal. The presence of heightened physical/somatic symptoms in the natural environment type might, for example, lead to more generalized symptoms of anxiety and depression which, in turn, may be related to other co-occurring disorders such as GAD and SAD and, in turn, result in reduced quality of life. We are struck by the similarity in our findings and those of Ginsburg et al. (2006) and Kingery et al. (2007) for other childhood anxiety disorders. These authors reported that heightened physical and somatic symptoms were associated with greater impairment, social problems, and poorer overall adjustment. This is congruent with what we found in the present study with youth with specific phobias. Of course, these speculations await prospective inquiry that examines the developmental trajectory of different types of specific phobia in children and adolescents.

Of additional importance, in the treatment literature, children with natural environment phobias have been shown to have poorer treatment response than children with animal phobias (Silverman et al., 1999). Again, though speculative, two possibilities present themselves. First, it is possible that it is simply easier to treat children with animal phobias because it is easier to expose the children to the phobic stimuli (e.g., dogs, snakes, spiders) and to test their distorted cognitions than it is to expose children with natural environment phobia to stimuli such as the dark, thunderstorms, and deep water. Assuming adequate treatment response is related to successful exposure and the testing of distorted cognitions via behavioral experiments with the phobic stimuli (cf. Ollendick et al., 2004), such outcomes seem understandable. Equally plausible, however, is the possibility that natural environment phobias are simply more difficult to treat because of co-occurring psychiatric disorders and the heightened physiological/somatic arousal associated with them. As suggested by Davis and Ollendick (2005), it might be the case that phobias associated with heightened physiological and somatic cues require additional treatment procedures either before or concurrent with systematic exposure and testing of faulty cognitions. Again, such possibilities await systematic inquiry.

Our study is of course not without limitations. Quite obviously, youth in our sample were referred to a specialty clinic and their phobias might be qualitatively different from phobias in community samples of youth. It is possible that youth with natural environment and animal phobias would be more similar in community samples. If so, differences noted in this study would be evident only in clinic-referred and treatment-seeking samples. Second, our sample was largely Caucasian, medium in income, and from intact families; as a result, we are unsure whether such differences between youth with the natural environment and animal types would be observed in children and adolescents from other ethnicities or family backgrounds. Third, our sample was relatively small and limited to youth with natural environment and animal types of phobias. Youngsters with other types of specific phobias (e.g., situational, blood-injection-injury) also need to be examined. Based on findings with adults who have situational (e.g., public

transportation, tunnels, bridges) and BII (e.g., seeing blood, receiving an injection) phobias, we might expect additional impairment and perhaps even poorer quality of life (Antony et al., 1997; Öst, 1997). To date, these types have not been systematically explored or compared to one another in child and adolescent samples.

These limitations notwithstanding, our findings are of import for clinic-referred and treatment-seeking youth. Important differences between youth with the natural environment and animal types of phobias were evident as reported by clinicians, parents, and the youth themselves. These differences suggest that specific phobias in youth are complex and not at all "simple," as suggested in earlier versions of the *DSM* in which specific phobias were referred to as "simple" phobias. These differences appear to have significant implications for both assessment and treatment.

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