

Childhood Anxiety Disorders

Anne Marie Albano
Bruce F. Chorpita
David H. Barlow

Anxiety disorders are widely recognized as the most common class of psychiatric disorders affecting children and adolescents (Anderson, Williams, McGee, & Silva, 1987; Bell-Dolan & Brazeal, 1993; Kashani & Orvaschel, 1988; Orvaschel & Weissman, 1986). Although transient fears and anxieties are considered part of normal development, for a significant proportion of children, the anxiety experience becomes a stable negative force in their lives. Anxiety is associated with severe impairment in functioning, expressed in its most disabling form through a child's avoidance of activities such as school, peer involvement, and autonomous activities (Bell-Dolan & Brazeal, 1993; Kendall et al., 1992). Since the publication of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association, 1980), a multitude of studies have documented the incidence and prevalence of anxiety disorders in children and adolescents. Advances in child psychopathology research focused on these anxiety disorders have resulted in the recent nosological changes evident in DSM's fourth edition (DSM-IV; American Psychiatric Association, 1994). Although separation anxiety disorder (SAD) is the only remaining childhood anxiety disorder per se, the criteria of the "adult" anxiety disorders have been modified to include devel-

opmentally appropriate descriptors for accurate diagnosis in children. The present chapter examines the prevalence, expression, and developmental patterns of specific anxiety disorders in children and adolescents. Attention is directed toward clinical variables (e.g., age at onset, severity, comorbidity) and sociodemographic variables (e.g., gender, race, socioeconomic status) relative to each disorder. Clinical impairment in functioning is specified within a developmental context. These issues are discussed in terms of the course of childhood anxiety disorders. The chapter concludes with a review of current issues in the study of childhood anxiety and future directions.

BRIEF HISTORICAL CONTEXT

The study of children's anxieties and fears has been described in the literature for decades (see Barrios & O'Dell, 1989, for a review). Case studies of childhood fears formed the foundation for the development of both psychoanalytic and behavioral theory. In the classic case study of "Little Hans," Freud (1909/1955) defined and described several key unconscious processes operating in the development of phobia, such as the ego defense mechanisms of repression and displacement. Further, this case provided Freud with rich

clinical data for the explication of the "oedipal stage," perhaps the most controversial and critical stage of psychosexual development. Although the study of Little Hans has since been reformulated beyond Freud's initial conceptualization (e.g., A. Freud, 1965), its value and place in psychoanalytic theory remain firmly ingrained. Similarly, the conditioned fear of a white laboratory rat in young Albert provided early support for the classical conditioning of anxiety and behavioral theory (Harris, 1979; Watson & Rayner, 1920). Repeated pairings of a neutral stimulus (rat) and an aversive stimulus (loud noise), and the subsequent reaction of fear of the rat in 1-year-old Albert, provided Watson and Rayner with empirical support for behavioral theory. Additional support for the theory was soon to follow in yet another case study of a child, as Jones (1924a, 1924b) validated the behavioral tenet that all behavior is learned and hence can also be unlearned. Utilizing techniques incorporating modeling and desensitization, Jones described the treatment of 3-year-old Peter's fear of rabbits, which was successfully resolved.

Although these and similar case studies of children served to further the interest and support for specific theoretical models and related therapeutic interventions, the study of pathological anxiety conditions in children was (until relatively recently) essentially ignored. There exists a wealth of information and research spanning several decades on the developmental progression of children's fears and phobias, and several comprehensive reviews outline the historical progression of this research (Barrios & Hartmann, 1988; Barrios & O'Dell, 1989; King, Hamilton, & Ollendick, 1988; Ollendick & King, 1991). To summarize, prior to the publication of DSM-III (American Psychiatric Association, 1980), fears and anxiety reactions in children were classified according to etiology (Hebb, 1946) or empirically based factor groupings (Scherer & Nakamura, 1968; Miller, Barrett, Hampe, & Noble, 1972; Ollendick, 1983a). Such research has demonstrated that subclinical fears are common in children (e.g., Miller, 1983; Ollendick, 1983a), the number of fears reported by children declines with age (MacFarlane, Allen, & Honzik, 1954), and the focus of the fear changes over time (e.g., Bauer, 1976). In addition, across studies, girls consistently endorse a greater number of fears than boys (Abe & Masui, 1981; Lapouse & Monk, 1958, 1959).

In contrast to the wealth of studies examining subclinical fears in children, formal psychiatric

classification systems have acknowledged the presence of pathological phobic reactions for only the past four decades. The publication of DSM's first edition (American Psychiatric Association, 1952) first identified phobias as psychoneurotic reactions, and subsequently in DSM-II (American Psychiatric Association, 1968), the diagnostic category changed to phobic neuroses. DSM-II introduced overanxious reaction as a distinct diagnostic category for children and adolescents. These early DSM systems were heavily tied to psychoanalytic theory, purporting an unconscious process or conflict as the etiological mechanism for the phobic or overanxious reaction (Barlow, 1988). The inclusion of overanxious reaction in the psychiatric nomenclature marked the beginning, albeit meager, of attention to anxious children and adolescents.

Over the past two decades, clinically significant phobias and anxiety conditions in childhood have begun to receive serious attention by clinicians and researchers alike. The failure to attend to childhood anxiety conditions may be due, in part, to long-standing disagreements within the field as to what constituted a clinical anxiety state from transient developmental fears and anxieties (Barrios & Hartmann, 1988; Strauss & Last, 1993). DSM-III (American Psychiatric Association, 1980) and DSM-III-R (American Psychiatric Association, 1987) represent the first attempts in the history of modern classification systems of psychopathology to delineate developmentally appropriate diagnostic criteria for anxiety and phobic disorders in children and adolescents. Separation anxiety disorder, avoidant disorder of childhood and adolescence, and overanxious disorder earned notoriety as the three distinct anxiety disorders of childhood. In total, children could be diagnosed with these three anxiety disorders in addition to adult anxiety disorders such as phobic disorder, obsessive-compulsive disorder, and posttraumatic stress disorder. Thus the DSM-III and subsequent DSM-III-R sparked a legion of studies examining the epidemiology and clinical characteristics of anxiety disorders in childhood (e.g., Flament et al., 1988; Francis, Last, & Strauss, 1987; Last, Francis, Hersen, Kazdin, & Strauss, 1987; Last, Hersen, Kazdin, Finkelstein, & Strauss, 1987; Last & Strauss, 1989a). Consequently, such studies have culminated in the recent changes and revisions in criteria for diagnosing anxiety disorders evidenced in DSM-IV (American Psychiatric Association, 1994) and the tenth edition of the *International Classification of Diseases* (World Health

Organization, 1992). These changes are discussed throughout this chapter.

Researchers over the past 20 years have witnessed a plethora of studies in the broad area of anxiety disorders, attending to both children and adults. The systematic examination of anxiety disorders in children continues to lag far behind adult psychopathology research, and several pressing issues underscore the crucial necessity for ongoing study in this area.

First, anxiety disorders are the most common and most prevalent category of psychiatric disorders in youth (Bernstein & Borchardt, 1991) and the primary reason for the referral of children and adolescents for mental health services (Beidel, 1991). Yet, fewer than 20% of all children requiring mental health services actually receive the necessary intervention (Kendall, 1994; Tuma, 1989). This underutilization of mental health services may partially result from a failure to identify adequately psychiatric disorders in children, particularly internalizing disorders such as anxiety. Children presenting with externalizing conditions such as conduct disorder (CD) and attention-deficit/hyperactivity disorder (ADHD) are more easily recognized by adult caretakers, particularly when the symptoms of these disorders begin to interfere with daily functioning and cause disruption in school and familial activities. Children with internalizing disorders, however, suffer for the most part in silence and are not easily identified as problematic. The limited utilization of mental health services in response to anxiety disorders in children and adolescents may well reflect the limited knowledge of what constitutes this type of mental health problem in children. Consequently, the result is a failure to recognize and intervene early in the development of these disorders.

Contributing to the problem of identifying pathological anxiety conditions in children is our inadequate understanding of what constitutes normal, developmentally appropriate anxiety reactions. Because all children are expected to display separation anxiety or specific fears at various times in their young lives, the intensity and duration of these developmentally appropriate episodes have not been adequately studied in comparison to pathological anxiety states. Early studies on the prevalence of fears, worries, and anxieties in children and adolescents reported estimates ranging from 3% to 18% (e.g., Abe & Masui, 1981; Orvaschel & Weissman, 1986; Werry & Quay, 1971). More recently, Bell-Dolan, Last, and

Strauss (1990) examined the prevalence of anxiety symptoms in a sample of 62 never psychiatrically ill children and adolescents. A variety of anxiety symptoms, particularly fears of heights, public speaking, and somatic complaints were endorsed by approximately 20% of the subjects. These findings were higher than previous estimates reported in the literature, suggesting that anxiety symptoms at subclinical or clinical levels may occur with greater frequency in youth than previously expected. Overall, the authors called for a greater attention toward examining the patterns of expression of anxiety symptoms in children and for investigations into developmental and situational factors impacting upon these symptoms.

Second, research has demonstrated the negative impact of childhood anxiety on a broad range of psychosocial factors including academic performance (e.g., Dweck & Wortman, 1982) and social functioning (e.g., Strauss, Frame, & Forehand, 1987; Turner, Beidel, & Costello, 1987). Impairment in functioning may be adversely affected by the consistent finding of high comorbidity among the anxiety disorders and of anxiety with disorders such as depression and attention-deficit disorder (Keller et al., 1992). In such cases where anxiety is comorbid with an externalizing disorder or depression of sufficient intensity, it is likely that the latter disorder will become the focus of treatment and overshadow the anxiety disorder. Given that the impairment experienced by anxious children and adolescents cuts across a wide range of activities and situations, and that the diagnostic picture may be complicated by anxiety comorbidity, ongoing studies are sorely needed to evaluate fully the impact and course of these disorders on youth.

Finally, empirical data consistently support the findings that anxiety disorders have an early onset in childhood and adolescence and run a chronic course well into adulthood (cf. Barlow, 1988). Thus, the impairment associated with anxiety in youth hold long-term implications for adult functioning (Kendall, 1992), with research suggesting that anxiety symptoms may actually worsen over time (cf. Kendall, 1994) and possibly lead to depression (e.g., Alloy, Kelly, Mineka, & Clements, 1990). Attention to basic psychopathology research serves to advance our understanding of the nature and course of such disorders, but more importantly, it holds implications for the development of empirically based and efficacious prescriptive treatment protocols for the range of anxiety disorders in youth.