Chapter 4: Psychosocial Interventions across the Lifespan

Michael Sweeney, Ph.D., Jessica Levitt, Ph.D., Robert Westerholm, Ph.D.,

Clare Gaskins, Ph.D. & Christina Lipinski, MA

The current chapter provides a review of psychosocial interventions for the treatment of anxiety with a particular emphasis on how the interventions are applied differently at various developmental stages. Provided in this introduction is an overview of the nature of anxiety and the interrelationship between anxiety and development as they pertain to psychosocial interventions. The subsequent sections will discuss the psychosocial interventions across all stages of development: with young children (ages 2 through 7), school-aged children (ages 8 through 12), adolescence (ages 13 through young adulthood) and lastly, adulthood. A conclusion section will complete the chapter with general recommendations for the application of psychosocial interventions at different developmental stages.

The Nature of Anxiety

Understanding the nature of anxiety in relation to psychosocial interventions requires an appreciation of several factors: (a) Anxiety is a complicated condition resulting from a dynamic interplay of many internal and external factors, (b) psychosocial treatments flow directly from one's understanding of anxiety, (c) the distinction between causal and maintaining factors is important for developing effective treatments, and (d) evidenced-based interventions for anxiety focus on altering cognitions and behavior as a means of reducing avoidance of the feared situation. Each of these factors is discussed below.

Anxiety is Complicated

Many factors contribute to the development and maintenance of anxiety. Extensive research has documented the contribution of genetics, physiological, neuroanatomical, developmental, attachment, cognitive, perceptual, behavioral, and learning among other factors in the etiology of anxiety (Norrholm & Ressler, 2009; Monk, Leight & Fang, 2007; O'Connor, Heron, Golding & Glover, 2003; Kinsella & Monk, 2009; Yehuda, Halligan & Bierer, 2001). Further complicating matters, anxiety has various presentations. Anxiety can present as a cognitive (anxious thoughts), affective (a feeling of fear), behavioral (an avoidance of situations) or physiological (headaches, stomachaches) event. Lastly, the focus of one's anxiety and the symptom presentation changes across the developmental spectrum. Young children, for whom the greatest developmental challenge is independence, are more likely to fear separation. Older children, who have become aware of the judgments of others, are more likely to have social or performance anxieties. For any given anxious individual, the causal pathway to their current state is best understood as a dynamic and fluid interplay of all of the above listed factors.

What One Believes about Anxiety and What One Does to Treat It are Intertwined

Psychosocial interventions evolve from one's assumptions about the nature of the condition. If one believes pathological anxiety results from childhood experiences, one develops a treatment that focuses on early life. With inaccurate, anxiety-laden beliefs as the cause, one constructs a treatment focused on challenging the anxious person's beliefs. If one believes that avoidance of feared situations is a paramount factor, the implication is to develop a smart way to expose the anxious person to feared situations. The interrelationship between one's beliefs about the nature of anxiety and the nuts and bolts of what one does to help the anxious individual makes it especially important that the clinician have an understanding of the nature of anxiety and the implications for psychosocial intervention (Wells, 2005).

Understanding the Distinction between Causal and Maintaining Factors is Important

The factors that led to development of an anxiety disorder (causal) may not be the same as the factors that are perpetuating the anxiety (maintaining). In broad terms, factors such as genetics and temperament are seen as causal. Factors such as cognition, learning, behavior, social pressures and avoidance may serve a causal role but garner the greatest attention for their function as maintaining factors. A treatment focused on altering the maintaining factors is thought to be the quickest route to change. Several examples illustrate this point. A young child fears sleeping alone and goes to the parent's bed. The causal factor of this fear of sleeping alone may well be an anxious temperament. The maintaining variable may be a parent who provides an easy opportunity for avoidance; thus unintentionally discouraging independent sleeping. The focus of this treatment might be cognitive (changing the mothers attitudes and expectations about the need to foster independence in this situation) and behavioral (having a reasonable plan for keeping the child in his/her room at night). An example from a later developmental stage would be the socially phobic young adult who avoids dating. Causal factors for the current social anxiety might include bad social experiences from high school. In contrast, the maintaining factors might include current beliefs about his/her social desirability and the avoidance of social setting that creates the possibility of positive feedback. The focus of the treatment would not be a review of the experiences of high school (causal). A focus would be challenging the person's current cognitions about social desirability and a plan for what social setting to engage in and how to engage in those settings (Hoffman, 2007).

Evidenced-based Interventions Focus on Altering Cognitions and Behavior

The focus on altering cognitions and behavior is in service of reducing the avoidance of feared situations - the treatment's ultimate endpoint. Concerning cognition, one can employ methods such as: thinking differently, holding more accurate and realistic expectations, keeping reassuring thoughts in mind, and anticipating the successful navigation of the anxious event. Cognitive interventions have many benefits; however, the interventions are premised on the individual's ability to think about what they are thinking (metacognition). Consequently, the interventions are most appropriately applied to individuals who have reached a formal operational stage of thinking, typically adolescence and older (see the following section on development). Concerning behavior, one can learn how to act differently, prepare for a situation, practice different skills, etc. Behavior interventions are very practical and have proven very effective. Importantly, behavioral interventions can be used with individuals at every stage of the developmental process. Consequently, behavioral interventions are the first line of treatment in younger and school aged children. It must be noted that the most important outcome is typically behavioral; the individual no longer avoids the feared situation(s) (Wells 1999).

Development is a Dynamic Process Comprised of Several Stages

Each developmental stage is marked by a new set of challenges, a new set of skills, and a new set of corresponding concerns. These challenges, skills and concerns evolve in a dynamic interplay known as a stage. At each stage, the interplay between challenge, skill and concern is intricately interwoven in a rich and detailed manner into every aspect of one's daily experience. The focus, expression and treatment of anxiety are different at each stage. The interchange between challenge, skill, and anxiety for 3 distinct developmental stages is illustrated below.

Childhood

An important developmental challenge of early childhood is the initial autonomy from caregivers. Examples of initial autonomy include the ability to sleep independently, stay with a baby-sitter while the parent(s) are at work, attend nursery school, etc. The developmental challenge of initial autonomy co-occurs with the development of the skill of object permanence. Object permanence is the knowledge that an object, most importantly primary attachment objects such as parents, continue to exist even when out of one's primary sensory experience (such as sight, sound, etc). The fears most common to this age turn on the challenge of independence and the ability to have an internalized object. The most common fears of this age are separation, strangers, animals, darkness, storms, and thunder. Treatments at this age are sensitive to the child's need for a secure object as a signal for safety: greater efforts are made to form a bonding relationship between child and babysitter or teacher who acts *in loco parentis.* Parents are gradually removed from the room of the child who is reluctant to sleep independently, as is demonstrated in the following case example of "Sally" and social phobia as demonstrated in the case of "Mark."

Adolescence

Important developmental milestones in adolescence include puberty, increasingly autonomous peer relationships, and the onset of dating. Many skills develop during adolescence. Social perspective taking is one such skill. Social perspective taking is the ability to anticipate the thoughts, feelings and motivation of others (Kolberg, 1969; Piaget, 1971). The increasing skill in thinking about what others are thinking contributes to the adolescent's interest in others and subjective experience of being under social scrutiny. Not surprisingly, an especially common fear during adolescence is being fearful of how one might be perceived by others, e.g., social phobia. A second developmental skill of adolescence is meta-cognition. Meta-cognition

is the ability to think about one's own thoughts - both what those thoughts are and the impact of those thoughts on ones mood. Psychosocial interventions in adolescence capitalize on these increasing cognitive capacities by asking the adolescent to notice and evaluate what s/he is thinking. Anxious individuals are plagued by anxious expectations. Adolescents, for the first time in their own development, have the capacity to challenge the accuracy and veracity of their own anxiogenic (anxiety-producing) thoughts. The therapeutic utility of challenging and replacing anxiogenic thoughts with coping thoughts is illustrated in the following case example of "Christopher."

Adulthood

 The transition into adulthood has many developmental challenges. Most often, one settles down, starts a family of their own, has children, and sets to the task of parenting. A successful navigation of middle adulthood is predicated on the acquisition of the skills from previous developmental stages. A developmental skill that is better developed with age is perspective taking. Perspective taking is the ability to take the long view of a situation. Based on one's years of previous experience one becomes more proficient in making estimates of the future and less tossed to and fro by the particulars of one's immediate circumstances. A psychosocial intervention that is dependent on the individual's capacity for perspective taking is mindfulness. Mindfulness is training in a highly focused, nonjudgmental awareness of one's experience of the current moment. Being aware of one's current thoughts, feelings and surroundings with a sense of curiosity and without an urgency to judge or react. The therapeutic utility of mindfulness is demonstrated in the case example of "Nicole."

The following sections review in greater detail the relationship between developmental status, the presentation of anxiety and the use of interventions appropriate to that age. Case examples are provided for each age to further illuminate the context and implementation of the treatment at different developmental stages.

Early Childhood

This section will review the prevalence, clinical presentation and psychosocial treatment of anxiety disorders in early childhood (ages 2-7). Early childhood is arguably the period of greatest developmental change. It is during this time that one learns to walk and talk and develops the fundamentals of relating to others. Separation anxiety disorder, a condition that is especially common to this age, will be presented in this section as well as case example to illustrate how the clinician uses developmental sensitivity to adapt evidenced- based principles to the demands of a particular child.

Anxiety is Common in Early Childhood

A normative stage of separation anxiety exists for all children and is developmentally appropriate. This normative stage ranges from eight to 24 months, peaking between 14 to 18 months of age, and decreases in severity and frequency during the preschool years. When concerns about separating from caregivers persist later into childhood, a separation anxiety disorder may emerge (Kagan, Reznick & Snidman, 1988; Kagan & Snidman, 1999). For most children the early childhood anxiety is transient; for others it presages a lifelong struggle.

The Tendency towards Anxiety is Part of a Child's Temperament

Kagan (1989) conducted seminal research on the influence of temperament. His research followed a large sample of children from age 4 months through middle childhood. Children were categorized as high or low reactive based on their response to novel stimuli; high reactive children would move vigorously, fret, and cry when presented with novel stimuli. The children who were high-reactive infants were more likely to be classified as shy and demonstrated fewer spontaneous comments and smiles at age four. At age seven, anxiety symptoms such as nightmares and fear of the dark, thunder, lightning, etc., were present in 45% of the children who were high reactive as infants but only 15% of children who were low-reactive as infants. Kagen's research demonstrates that a proclivity to anxiety can be identified in early childhood, and that early childhood high reactivity predicts a significantly higher rate of anxiety problems in later childhood.

Parents Play a Central Role in the Treatment of Anxiety in Early Childhood

There is growing, albeit limited, empirical support for behavioral and cognitive behavioral interventions for young children with anxiety (Comer et al., 2011; Hirshfeld-Becker et al., 2010; Pincus, Santucci, Ehrenreich & Eyberg, 2008). Central to all these treatments is the involvement of parents, because parents are the most influential agents in the life of a young child. The parents of an anxious child need to do several things. First, they must recognize that the anxiety is a problem that is limiting the child's life. Childhood anxiety is often easily minimized or rationalized as a passing stage. A minimized view of the problem provides insufficient motivation for the parent to push back against the child anxiety. Second, they must be thoughtful about any inadvertent ways they may be encouraging the anxiety. Examples include providing unnecessary warnings, allowing the child's anxious mood to be a mechanism by which he or she gains greater parental attention, and not holding the child to age appropriate

standards. Third, they can focus on and express pride in the occasions where the child acts in opposition to the fears. Fourth, they must help the child practice a plan for the occasions when they will be worried. Fifth, they can set out some system of rewards for the child for 'brave' behavior.

Separation Anxiety Disorder in Early Childhood

Epidemiology

Separation anxiety is the most common anxiety disorder in young children. The prevalence of Separation Anxiety Disorder (SAD) among children in early childhood (ages 2-5) is estimated to be 2.4% (Egger & Angold, 2006), occurring at higher rates in this stage than among any other age group. Notably, when prevalence rates are estimated strictly on DSM-IV-TR criteria which designate that a child must have three or more SAD symptoms which cause distress *or* impairment (as opposed to impairment alone), prevalence rates are as high as 8.6% (Egger & Angold, 2006) for preschool-aged children.

SAD is especially sensitive to family factors. Separation anxiety occurs in the context of a family and that family context will make itself known in the treatment in very practical ways. As it is a disorder of early childhood, the solution is undertaken by typically newer, less experienced parents. The treatment requires parents to be firm on occasions when the child is anxious. The need to be firm will expose the difference between parents in their belief in the need to be and in their ability to be firm. SAD youth often have young siblings. Homes with several young children can be very busy places at bedtime; children need to complete evening routines and be put to bed, children of different ages have differing bedtimes, etc. The additional

busyness of having several children complicates being calm, being prepared, and having the time to deal with the exceptional needs of the SAD youth.

Case Presentation

Sally is a typically developing five year-old. Also typical for the age, Sally could be expected to resist when asked to turn off the television, come to the dinner table, or stop a preferred game. Sally would sometimes tantrum but most often would comply after lots of cajoling and promises. Sally was, however, strident in her refusal of situations that required her to be apart from her mother. She would not sleep alone. She protested being home with a familiar sitter when the mother was out. Sally found cause to stay near the mother in the house, sometimes wanting to go into the bathroom with her mother. The mother made changes in her life as a result of the child's anxiety; lessening the occasions when Sally and the mother were apart and unintentionally enabling the anxiety. The plan of not pushing Sally to do things she was fearful of doing proved impractical when Sally became increasing resistant to attending school.

Treatment

Sally's behavior at the first meeting reflected her anxiety over separation. Sally sat curled up beside her mother on the couch, she would hide her face in her mother's side when asked a question. Attempts to engage Sally were unsuccessful. The ordinary process of spending some time alone with the child had to be skipped as it was clear that Sally would refuse to be without her at her side. Engaging Sally would be a trying process and much of the treatment would proceed with including the mother as a type of co-therapist.

Sally refused to meet one-on-one with the clinician. During the first parent meeting, Sally's mother admitted that she was uncertain about how to handle Sally's behavior when she refused to cooperate and would often give in when Sally became distressed as she hated to see her daughter so upset.

Most of the treatment was delivered by using the parent as co-therapist. First one ensures the mother has the right orientation to treatments. A brief discussion about the mother's family of origin, revealed an important fact. The mother experienced her parents as unpleasantly autocratic and had sworn to a more egalitarian approach in raising her children. It was explained to the parent that parenting in reaction to one's own childhood is not the best strategy; a better method was responding to the facts of the current situation in a thoughtful and planned out manner. It was further evident that the mother was more comfortable with a consensus building interpersonal style; she had difficulty asserting her authority. It was explained to the mother that raising children includes leading them and Sally was far too young to be part of every decision making process. Lastly, one makes sure the mother is sufficiently motivated for what will be at times difficult. Second, one provides the mother with an education about anxiety. Genetics and temperament are important. Life circumstances encourage or discourage the experience of anxiety in one's life. Parents must be careful not to amplify fears by overly attending to them, providing the child with too many fear based communications, or enabling by allowing the child to avoid fearful situations. Third, one provides the parents with specific plans for high and low anxious times. Low-anxious times offer the greatest opportunity to make therapeutic gains. One can talk to a child during low anxious times; teach them something about anxiety, encourage them to be brave and agreed on a plan to prepare for coming high-anxiety times. Lastly, the

therapist makes sure to provide the mother with emotional support for the arduous job of shepherding their child through a difficult educational process.

Sally's mother needed guidance on how to effectively respond to her daughter's anxious behavior. The clinician explained to Sally's mother that her tendency to pay particular attention to Sally when she was distressed and to remain home when Sally protested helped reinforce Sally's inclination to become unraveled and avoid separations. Together, the clinician and Sally's mother role-played ways to attend to and praise Sally's brave and independent behavior and to provide brief coaching statements when she appeared distressed or noncompliant.

Given Sally's noncompliance, her mother needed to implement clearer rules and expectations at home. Clinician worked with parent to script clear, simple and effective commands. In addition, they developed a behavior management program in which Sally could earn stickers and small rewards for complying with parent requests (e.g., clean up toys). Compliance is the ability to feel one way but act another. One wants to keep playing but is able to make oneself stop and clean up. The ability to push back against emotions in any one setting is practice for pushing back against emotions in another setting.

Sally and her mother must work as a team to practice brave behavior. In parent-child sessions, family began to work on progressively challenging exposures in session (e.g., Sally sitting on couch and mom on a chair across the room, Sally spending portion of session with therapist with mom outside the room, mom leaving clinic while Sally was in session, mom arriving late to pick up Sally) to practice independent behavior. The clinician continued to coach

Sally's mother on ways to attend to, praise and reward brave behavior and ignore avoidant and anxious behavior. The family extended this work to challenges at home (e.g., playing in different room for 30 minutes without calling or checking on mom, staying with relative while mother runs a quick errand, remaining with babysitter while mother goes out for progressively longer periods of time, falling asleep without mother in the room, going to a play-date without mother).

Anxiety in Middle Childhood

This section will review the prevalence, clinical presentation and psychosocial treatment of anxiety disorders in middle childhood (ages 8-12). As children emerge from early childhood into middle and late childhood, their cognitive abilities become increasingly sophisticated as they develop the ability to see things from others' perspectives, attend to multiple details and mentally sort and classify objects. Middle and later childhood are marked by a capacity for productive work and an increased ability to cooperate. Experiences at school and in peer groups play an increasingly important role in shaping children's sense of self. Specific phobia, a condition that commonly emerges during childhood will be presented in this section as well as case example to illustrate how the clinician uses developmental sensitivity to adapt evidenced based principles to the demands of a particular child.

Anxiety can Interfere with Developing a Sense of Mastery

According to Piaget, it is during middle childhood that youth develop a sense of industry and mastery in their work at school and in their interactions with peers and family. For anxious children who are fearful or withdrawn in one or more settings, it is often all the more challenging to develop confidence. Anxious children have been found to differ from non-anxious children in their levels of self-esteem, quality of peer relations, attention, social behavior and school

performance (Strauss, Frame, & Forehand, 1987). Comparatively, childhood anxiety has even stronger associations with problematic family processes such as parent-child discord (Ezpeleta, Keeler, Alaatin, Costello, & Angold, 2001).

Co-occurring Disorders are the Rule Not the Exception

Children who present with anxiety disorder often present with other difficulties. Estimates suggest that 40 to 60 percent of anxious children meet criteria for more than one anxiety disorder (Benjamin et al, 1990). Childhood anxiety also places youth at much greater risk for depression (Angold et al, 1999). Particularly troubling at a time when school plays such a central role in a child's identity, many anxious youth meet criteria for a learning or language disorder (Gregory et al., 2007).

CBT Treatments Have a Solid Empirical Foundation

Cognitive-behavioral treatment for anxious youth have been extensively investigated and found to be efficacious (Silverman, Pina, & Viswesvaran, 2008) when delivered in individual (Kendall, 1994, Kendall, Flannery-Schroeder, Panichelli-Mindel, Southam-Gerow, Henin, & Warman, 1997, Walkup et al, 2008) family (Kendall, Hudson, Gosch, Flannery-Schroeder, & Suveg, 2008) and group modalities (Hudson, Rapee, Deveney, Schniering, Lyneham, & Bovopoulous, 2009). Cognitive behavioral treatment for school-aged youth typically includes relaxation, cognitive restructuring, problem-solving, social skills and in vivo exposure.

<center>**Specific Phobia in Middle Childhood**</center>

Epidemiology

Specific fears are common among children. Among the most common fears in childhood are fears of animals, natural environments, as well as fear of the dark. The prevalence of Specific Phobia among youth in community samples is thought to range from 5 to 10% (Kessler et al., 2005). Retrospective studies of adults suggest that specific phobias commonly first emerge in early to middle childhood with lifetime prevalence rates of 12.5% (Kessler et al, 2005).

Specific phobias are linked to mood and anxiety problems in adulthood. A prospective follow-back investigation found that specific phobias in adulthood were often preceded by phobias in childhood but not by other anxiety or mood problems (Gregory et al, 2007). Additionally, adulthood mood and anxiety disorders in this sample were preceded by childhood phobias more than any other childhood anxiety or mood problem.

Presentation

Mark is a creative and athletic 11-year-old boy who loves to draw and play soccer. While he was confident in most settings: a good student, competitive on the soccer field, and outgoing with peers, Mark presented with a fear of the dark that interfered with his independence at home as well as his ability to engage in age-typical activities with his peers. Mark would generally separate easily from his parents and was compliant with requests to complete most chores, but no amount of coaxing could convince Mark to bring his dirty clothes to the dimly lit laundry room in the basement. In the evening he would refuse to walk upstairs on his own and would run between rooms when the lights were out. At bedtime, Mark would become uncharacteristically clingy. He would insist that his bedside lamp remain on, his door open and the hallway light on when falling asleep. Mark was only able to fall asleep when one of his parents read to him in bed

and when he awoke in the middle of the night he would run to his parents' bedroom. Most troubling to Mark was that his fear of the dark prevented him from attending sleep-away camp like his friends or staying the night when invited to sleepovers. After movies and video games were shut off and his friends were asleep, Mark would become upset and call home to ask his parents to pick him up. In session, Mark was eager to please and engaged easily with the clinician when discussing school and his favorite activities. He became more embarrassed when the topic of bedtime and fears of the dark were raised. His parents reported that Mark has always had a "vivid imagination" and shared that he describes, in great detail, the creatures that wander the hallways at night and hide in his bedroom closest. Mark reported that these images were especially frightening when he was lying in bed.

Treatment

Simplified cognitive strategies are effectively integrated into treatment with children. After explaining the link between anxious thoughts, feelings and behaviors, the clinician worked with Mark to identify the worried thoughts he had about being in the dark ("Bad things happen in the dark. Scary creatures hide in the dark. If I can't see, then I can't protect myself."). The clinician helped him to develop brave talk and cheerleading statements including "I am safe. Just because it is dark doesn't mean something bad is going to happen. Even if there were monsters hiding in the dark, they've never hurt me."

Children respond to challenges that replace fearful associations with fun or pleasant feelings and build a sense of mastery. Homework challenges were designed to promote new, positive associations with the dark (e.g., going on scavenger hunts in the house with a flashlight, playing with a glow-in-the-dark soccer ball in the basement) and to help Mark gain confidence

and independence in completing normal activities (e.g., running errand for mom upstairs, bringing clothes to the laundry room first in the daylight and then in the evening).

Fear associated with concerns about being alone often manifest in difficulties with independent sleep in childhood. As Mark developed greater confidence during the day and evening hours, the clinician worked with the family to eliminate safety behaviors (e.g., running between rooms, turning on lights). Independence at bedtime continued to be a challenge as Mark's imagination had a tendency to run wild when lying in bed. In session, Mark practiced a guided imagery exercise in which he imagined himself running down the field and scoring a soccer goal. He was encouraged to practice this exercise at bedtime. His parents were also coached to change their involvement in the bedtime routine. After reading one story together, his mother wished him goodnight and turned off the light and moved from the bed to the hallway and finally transitioned to her own room. Each step towards independence brought Mark closer to a final reward of hosting a sleepover with his closest friends.

Anxiety Disorders in Adolescence

Adolescence is a period of emerging cognitive maturity and increasing independence from parents. These developments can create a fertile ground for anxiety to take hold. However, they also create the possibility for the use of more mature coping strategies than were possible at earlier stages of development. This section will first discuss how the presentation and treatment of anxiety is influenced by developmental changes that occur during adolescence, and the epidemiology, presentation and treatment of social anxiety disorder in adolescence will be reviewed. Finally, a case example will be used to illustrate how developmental status intertwines

with the presentation, assessment and cognitive behavioral treatment of social anxiety disorder in adolescence.

Adolescence is an Especially Eventful Period of Development

If one is inclined to worry, perhaps no other developmental stage will offer such a rapid fire secession of potential foci of worry. Anxious concerns that are especially prevalent in adolescence can be divided into two categories: personal worries and worries that turn on the evaluation of others. Personal worries include the onset of puberty, the development of romantic attraction, concern with appearance, and increased autonomy. Evaluation worries include increasing social circle, a greater focus on popularity, dating ability, academic competence, and athletic performance. The clinician anticipates these worries in this age group precisely because they are the developmental concerns specific to the age. For an unlucky subset of adolescents, these ordinary concerns intermingle with their inclination for excessive worry forming the basis of a potential social anxiety or generalized anxiety disorder.

Cognitive Developments Greatly Enhance the Variety and Sophistication of Anxiety Management Strategies.

Cognitive developments in adolescence include an increased capacity for planning, focusing attention, social perspective taking, meta-cognition, and persistence in adhering to a plan. Therapists can build upon these emerging skills to help individuals cope with anxious feelings. For example, anxious individuals tend to perceive events in distorted and overly pessimistic ways. Planning is a useful mood-management tool. One can plan a stress relieving event to follow a long day of exams. One can plan to bring a friend or plan what to say at a social event. The allocation of one's attention is important for mood management. The

hypochondriac who feels compelled towards internet illness searches can intentionally divert his/her attention to a more adaptive topic. The development of meta-cognition is the capacity to think about one's own thinking. The capacity to identify when one's thinking has become distorted creates the opportunity for the adolescent to challenge his or her own thoughts about themselves, others and the future and to then develop a more helpful and realistic perspective. Therapists can teach adolescents how to mobilize these novel abilities in order to better cope with anxiety provoking experiences. Lastly, an increased ability to persist, changing something about one's self is hard; persistence is essential.

Parents Still Matter

Much attention is rightly paid to the adolescents' individuation from the family of origin; however, parents remain a primary influence. The therapist must carefully consider the role of the parent(s) in the treatment of the anxious adolescent. Parents contribute in ways good and bad. Many parents also suffer from anxiety. A parents' personal struggle with anxiety can be a bridge to understanding the experience of their anxious child. Anxious parents can also be overly sympathetic, finding it hard to push the anxious adolescent to face fears. Parents have to be mindful about the amount of reassurance they provide. Parent can provide too much reassurance; unintentionally facilitating a dependent child who has inadequate practice at reassuring themselves. Parents are most practically thought of as co-therapists. Parents can join with the therapist to clarify expectations, share personal experiences, and push for compliance with exposure to feared situations. The trajectory of adolescence is to evolve from being largely reliant upon one's parents toward more independent mood management. Becoming successful at independently managing one's anxiety is contingent upon a few factors; included in these factors

are the acquisition of skills, a bit of a push toward independence by parents, and the draw of the attractive elements of an independent life.

Social Phobia in Adolescence

Epidemiology

Social phobia in adolescence is common, persistent and impairing. Social phobia (Social Anxiety Disorder) is an enduring fear of embarrassment or negative feedback in a social or performance situation that results in significant limitation in social and school functioning (American Psychiatric Association, 1994). Lifetime prevalence rates of social anxiety disorder in adolescence range from 2% to 9% (Essau, Conradt, & Petermann, 1999; Fehm, Pelissolo, Furmark, & Wittchen, 2005) and social anxiety symptoms tend to be stable across the four years of high school (Hayward et al., 2008). Socially phobic adolescents lag behind peers in achieving developmental tasks such as the development of identity, independence from family, dating, or seeking employment (Albano, Chorpita, & Barlow, 2003). These youth typically have poor self-esteem, high self-critique, hypersensitivity to rejection and criticism, and often underachieve academically due to infrequent classroom participation, poor test performance, or school refusal (Albano & DiBartolo, 2007; Kearney, 2001).

Social evaluation fears increase in adolescence in lockstep with the development of perspective-taking and attending to ones' internal dialogue (Westenberg, Gullone, Bokhorst, Heyne, & King, 2007; Alfano, Beidel & Turner, 2002). Socially phobic adolescents have an internal dialogue fraught with apprehension and self-doubt, e.g., "I will forget what I am supposed to say," "Everyone will know I'm nervous," "The whole class will laugh at me if I make a mistake." The anxiogenic internal voice leads to increased anxiety as well as a greater

likelihood of perceived or actual poor performance. As described above, it is the adolescent's very ability to identify and attend to internal dialogue that forms the cornerstone cognitive intervention and makes it possible for the engage in cognitive restructuring of maladaptive cognitions.

Cognitive-Behavioral Therapy

There is considerable research documenting the efficacy of individual and group CBT for social phobia in adolescents (e.g., Hayward et al., 2000; Kashdan & Herbert, 2001; Garcia-Lopez, et al., 2006; Crawley, Beidas, Benjamin, Martin, & Kendall, 2008). CBT for social anxiety includes education about anxiety, practice in identifying and challenging one's anxiogenic cognitions, social skills training, and practice socializing with others. Parents are often utilized as "co-therapists" to facilitate skill development. Treatment begins by providing the adolescent with education about social phobia and constructing a hierarchy of anxiety-provoking social situations ordered from least to most anxiety-provoking. The cognitive component details the reciprocal interaction of anxious thoughts, anxious physiological feelings, and anxious behaviors, the nature of maladaptive automatic thoughts (e.g., overestimation of the severity and likelihood of negative social interactions), and cognitive restructuring. Cognitive restructuring is the CBT term for becoming thoughtful about one's thinking; noticing anxiogenic thoughts and replacing them with more rational and encouraging thoughts. The skills training component focuses on teaching the adolescent the necessary social skills and behavioral relaxation techniques to engage in successful social interactions via didactics and role-play/modeling. Finally, and often most important, the exposure component entails graduated exposure to both simulated and in-vivo anxiety-provoking social situations while the adolescent

utilizes their cognitive and behavioral skills to successfully cope with their anxiety and engage in adaptive social interaction.

Presentation

Christopher had always been somewhat anxious, but during his freshman year of high school it had become profoundly worse. He felt that he was losing friends and had no social options over the weekend. His increasing time alone was fertile opportunity to ruminate about his perceived social missteps. Although Christopher was apprehensive about his mother becoming overly-involved in the assessment, he agreed to her inclusion after it was explained that her alternate perspective and collaboration would facilitate opportunities for improved social activity. The mother detailed Christopher's difficult history of joining new circles of friends and finding reliable friendships. Although he stated that he has made close friends in the past, he has not recently had any close friendships and has never had a "best friend." In elementary school, Christopher was especially challenged by unstructured social situations. With high school, socializing had become increasing unstructured and things for Christopher had become progressively worse. Christopher was able to identify three main cognitions that increased his social anxiety: "People think I'm weird and don't want to talk to me," "People are embarrassed to be with me," and "Other people are looking at me and judging me."

Treatment

Christopher's anxious expectations and concordant social avoidance was a target of intervention. Turning on the adolescents' ability to think abstractly and take the perspective of another, the therapist engaged Christopher in a collaborative investigation of the origin and influence of his anxiogenic thoughts. Christopher began to track anxiety-provoking social

situations, his automatic thoughts, and the impact of the thoughts on his anxiety and avoidant behavior. The therapist assisted Christopher in examining the evidence for and against his automatic thoughts and calling attention to maladaptive beliefs that lacked credibility. Christopher and the therapist collaboratively challenged and restructured those beliefs in order to generate more accurate and adaptive explanations of the social situations. For example, when a classmate to whom Christopher was talking in the hall stated that they had to go, Christopher immediately thought, "They must be annoyed with me." However, through a process of collaborative empiricism, Christopher was able to see that this assumption lacked evidence and that he had been overlooking meaningful details that suggested the peer enjoyed the conversation but was late for an extracurricular activity. This discovery led to greater confidence that enabled Christopher to engage in similar and more frequent casual conversations rather than avoid these interactions all together. As treatment progressed, Christopher became better able to examine the evidence, challenge his anxious and often inaccurate expectations, and engage in increasingly difficult social situations.

Christopher also needed training in social skills. While much of Christopher's social difficulty was fueled by inaccurate and maladaptive cognitions, deficits in his social skills also played a significant role. Social skills needed for a high school freshman are particular to the demands of the age and gender of the individual. Initially, the therapist and Christopher focused on basic skills such as maintaining eye contact (rather than averting his gaze), having good posture (as opposed to slouching), conversational skills (e.g., ways to keep a conversation going), and assertiveness training. However, it was also important to ensure Christopher had an adequate fund of knowledge for topics considered "cool" by peers his age. This included knowledge of current music, sports, popular TV shows, and contemporary clothing. Christopher

developed conversation starters for the various groups with whom he could interact; sports questions for boys in gym class, TV topics for peers in study hall, and so on.

Christopher's parents were engaged in a co-therapist like role. Despite his initial desire for complete autonomy and discomfort with parental involvement, Christopher's parents provided much-needed support, encouragement, and feedback to facilitate improved socialization. The parents were able to remind and reinforce cognitive and behavioral skills learned during treatment in the home environment, where much of Christopher's social planning took place. They were also able to provide the therapist with helpful information to understand why certain aspects of treatment might not be going as planned (e.g., Christopher's initial attempts at peer interaction entailed posting vague messages on Facebook). However, it was also important for the therapist to work with Christopher's parents (who were both anxious themselves) to normalize Christopher's individuation from his family and increased influence of peers. In this way, his parents were better able to participate in the treatment without it feeling intrusive or infantilizing to Christopher. At times the parents were able to play a more active role in the treatment, such as when his father purchased three tickets to a football game and Christopher was allowed to bring a friend of his choice. In addition to setting the stage for an enjoyable social activity, the father used the opportunity to observe Christopher while he socialized and report helpful details to the therapist that were the focus of subsequent therapy sessions.

Anxiety in Adulthood

This section will review the epidemiology, presentation and cognitive-behavioral treatment of anxiety disorders in adulthood. A case example is provided to illustrate the

interrelationship between developmental status, illness presentation, and treatment of anxiety disorders in an adult.

Adulthood Encompasses Many Developmental Challenges

Young adults must contend with living away from home, dating, marriage, employment and career development. In middle adulthood, many focus on starting a family, parenting, balancing career and family life, caring for aging parents, and learning how to adjust to physical changes of middle age. Among seniors, the developmental challenge involves shifting one's orientation to life away from planning for the future and toward a more retrospective direction that involves building a sense of satisfaction with one's life and accomplishments. Anxiety is common in each of these stages. The focus and treatment of anxiety, however, may differ.

Adulthood is the culmination of acquired skills learned through the course of development. As discussed earlier, the psychosocial treatment options for young children are circumscribed by their capacity to participate in treatment. Young children have limited ability to plan, have trouble thinking about what they are thinking, can only persist for so long, and so on. Similar limitations extend, albeit to a lesser extent, into adolescence. Among mature adults the psychosocial therapist may unleash the full palate of interventions. By adulthood, most individuals are able to learn and apply information in sophisticated ways to meet the demands of specific situations. They should be able learn specific skills, engage in abstract reasoning, and look at problems from multiple perspectives. Adults typically have the capacity for metacognition such that they can learn to notice and challenge the veracity of their anxiogenic thoughts. Adults are also capable of mindfulness; including the emotional maturity to acknowledge ones feelings and push back against the impulse to judge or react.

<div align="center">**Panic Disorder with and without Agoraphobia in a Young Adult**</div>

Epidemiology

Panic disorder is common, persistent, and significantly impairing. Panic Disorder is diagnosed in 1%-2% of adults annually, with 1.5 to 3.5% of adults diagnosed with panic at some point during their lives (APA, 1994). Panic Disorder is a chronic problem with low rates of remission and high rates of relapse (APA, 1994; Keller et al., 1994; Pollack et al., 1990). Furthermore, it is associated with increased rates of death, mostly from cardiovascular disease and suicide (Coryell, Noyes, & Clancy, 1982; Coryell, Noyes, & House, 1986).

Panic is a disorder of adolescence and adulthood. Panic attacks are rarely seen in childhood. Panic has a bimodal distribution of onset: peeking between ages 15-24 and again between ages 45-54 (Eaton, Kessler, Wittchen, & Magee, 1994). The median age of onset is estimated at 24 years (Burke, Burke, Reiger, & Rae, 1990). Initial psychological or psychiatric treatment for panic disorder is usually sought around age 34 (Breier, Charney, & Heninger, 1986; Craske et al., 1990).

Panic has many physical symptoms which affects the path to treatment. The physical symptoms that accompany a panic attack (dizziness, shortness of breath, chest pains) lead many panic suffers to seek medical evaluations. Individuals with panic often first present for treatment at primary, specialty care, or emergency room settings (Markowitz et al., 1989; Spitzer et l., 1995; Sartorius, Ustun, Lecrubier, & Witcchen, 1996). Due to the symptom cluster, they are frequently referred to neurologists, otolaryngologists, and cardiologists (Kennedy & Schwab, 1997; Roy-Byrne & Katon, 2000). Individuals presenting at medical settings with

complaints of non-cardiac chest pain, palpitations, unexplained faintness, irritable bowel syndrome, vertigo and dizziness are highly likely meet criteria for panic disorder (Beitman, Lamberti, et al., 1987; Katon et al., 1988; Roy-Byrne & Katon, 2000).

Presentation

Nicole was married with two young children. Single life did not suit her and she very much wanted to be married. After a few failed relationships and significant time alone, she married at age 35 and two years later gave birth to twin boys. Nicole was a stay at home parent until her boys entered preschool at age three. She settled into a hectic schedule work, raising children and marriage. Over the last year, she had begun to experience panic attacks. She could not identify a reason for the attacks but they occurred on an increasingly regular basis, about 1-3 per week. The attacks were awful. Typically, the attacks were preceded by a feeling of dread that quickly culminated with an urgent feeling that she might faint or die. During the attacks, she had an overwhelming desire to flee. She worried constantly about the next attack. She was vigilant for any sensation she thought to be a harbinger of an attack. The fear of the attacks had become ever-present; the fear of the attacks had become more debilitating then the attacks themselves. Nicole limited her life in an attempt to avoid triggering an attack. She feared the potential social embarrassment of a public display of panic. She avoided spending time with friends or any other social engagement. She would go to work (mostly because she had to) and return home.

Although she was able to go to work by herself, she did not like to go anywhere else alone. She had difficulty going shopping for food or running errands on her own. Significantly, she was beginning to fear being alone with her children because she did not want to panic in

front of them. She also worried that she could become incapacitated by panic, leaving her unable to care for the children appropriately. Because the attacks seemed to occur without an obvious cause, she worried about the implications or possible consequence of the attacks. During attacks and afterward, she worried that she might have some unexplained medical problem. Over the past 6 months, she had visited several medical specialists only to go through multiple tests and procedures and then be told that no medical reason could be found to explain her symptoms. During the panic attacks, she also feared that she might be going crazy, or would lose control and not be able to do important things like make a decision or drive a car, or that she might do something embarrassing or run around screaming. She became reliant on her husband to drive her places and had generally limited her life.

Treatment

Nicole's treatment involved: education about the nature of panic and anxiety, acquisition of coping skills, exposure to feared sensations and situations, and a plan for relapse prevention.

Panic attacks are not harmful. Because adults have developed the intellectual capacity to comprehend complex, abstract information and to use advanced reasoning skills to apply information to real world phenomena, education about the nature of panic and anxiety is often an important intervention. Nicole was particularly receptive to psychoeducation as she had been a good student and was quick to take the information presented to her and apply it to her own situation. Nicole's therapist carefully explained that panic attacks are normal physical reactions to a feared event. These reactions serve to prepare the body to respond to the perceived danger. The preparations produce physical sensations that are meant to protect the individual from harm. When panic attacks occur in the absence of a real danger, they are merely just false alarms that

may feel uncomfortable but are harmless. Based on this information, Nicole came to understand that she had become afraid of the physical sensations themselves because she had believed that they truly signaled danger when they really did not. Armed with this new understanding, Nicole was ready to believe that the feared physical sensations were not likely to be as dangerous as she had previously thought and she was willing to learn how to tolerate them instead of avoid them.

Nicole learned coping skills to help her better respond to anxiety and its physical expression. Nicole was taught breathing and thinking skills to use when anxious thoughts, feelings, and physical sensations occur. The therapist taught Nicole to use slow, diaphragmatic breathing when feeling anxious. The plan was for Nicole to be able to regulate her breathing so that the anxiety symptoms did not intensify. The breathing skills were also meant to help her face the anxiety provoking sensations and situations as calmly as possible so that she could remain in them until the anxious feelings dissipated rather than escaping while feeling highly anxious. Escape and avoidance only serve to strengthen anxiety. In order to overcome anxiety, Nicole would need to respond to the feared situation calmly and remain there until her fear went away. It is only through this kind of experience that she could learn that her fears were unrealistic and that it is possible to deal with the situation.

The development of metacognition enables the identification of thought patterns that are likely to trigger or exacerbate panic. Metacognition also allows individuals to reflect upon and challenge those patterns, and then to develop alternative ways of thinking that are ultimately more rational and helpful. Thinking skills such as cognitive restructuring are based on this ability. Nicole identified that she held a number of erroneous beliefs that lead her to experience increased anxiety and could trigger the onset of a panic attack. In particular, she initially believed that physical sensations such an increased heart rate was an indication of some kind of rare and

serious heart problem or cancer that had yet to be diagnosed. The therapist helped Nicole to identify these anxiety provoking thoughts and to challenge them when they occurred. Then, they worked together to develop alternative thoughts that would be more helpful in reducing anxiety. For example, instead of believing the she could be about to have a heart attack, Nicole learned to remind herself that increased heart rate could occur for a number of other reasons, such as anxiety, hyperventilation, caffeine, exercise, or excitement. Additionally, Nicole also trained herself to remember that the odds were very low that she would have a heart attack and die, go crazy, or lose control. She generated other thoughts that she could use in the moment such as: It's normal for my heart rate to change sometimes; Maybe my heart isn't beating any faster than usual but I'm just paying too much attention to it, Even if my heart is beating quickly, it's not dangerous. Nicole further learned to tell herself that the less attention she paid to her increased heart rate, the faster it would probably go away. She developed the ability to change her thoughts away from the possible negative consequences of panic symptoms and onto strategies for coping with it.

Nicole gradually confronted anxiety provoking sensations and situations that she had associated with an increased risk of panic attacks. Nicole's drive toward autonomy and independence was being threatened by her fear of panic attacks. Nicole was extremely motivated to regain her confidence to go places and do things independently. Moreover, she wanted to feel comfortable being alone with her children, taking them to activities, and being fully involved in their lives. The therapist built upon this motivation by engaging Nicole in exposure exercises that allowed her to practice using her coping skills and learn that the feared negative consequences would not occur. They developed a fear hierarchy that included physical sensations as well as particular situations. They began by having Nicole do interoceptive exposures in the office. For

example, Nicole raised her heart rate by jogging in place and doing jumping jacks. Then, she practiced using her breathing and thinking skills to cope until the anxious feelings subsided. They did this exercise in the office many times until Nicole felt confident that she could tolerate the sensations and her anxiety levels stayed low throughout the entire exercise. Next, Nicole began to practice doing exposures outside the office. Initially, she began in the privacy of her apartment where she felt most safe. She replicated the office exposure by jogging in place to raise her heart rate and then used her coping skills while her anxiety level came down. After getting comfortable with this, she moved up her hierarchy and went jogging with her husband. As she became more comfortable, she continued to move up her hierarchy, eventually she went to places that she had been avoiding. Using her coping skills, she was able to make it through an entire dinner with friends at a big, popular restaurant, and on another occasion she was able to see an entire movie at the local movie theater. Finally, she went food shopping alone and spent an entire day caring for her children by herself.

Mindfulness training can help to prevent relapse. Through treatment, Nicole became more confident in her ability to tolerate her physical sensations and control her worries about panic attacks, and with this new confidence, she was able to regain her independence and her prior level of functioning. To prevent relapse, the therapist integrated mindfulness-based strategies into the treatment. Nicole learned how to be more aware of her automatic reactions to any particular situation that she experienced and to pay attention to her thoughts and feelings on a moment-to-moment basis without judging or reacting to them. She learned to accept her thoughts and feelings even when unpleasant and attend to them with an open and curious attitude. This allowed her to have a greater perspective on her experience and to better recognize how to help herself feel better and address her concerns in healthy ways. In this way, the

therapist trained Nicole to be her own therapist, so that she could maintain her gains even after the formal therapy had ended.

Conclusion

The psychosocial treatment of anxiety requires an appreciation of the complexity of the illness, the known evidence-based treatments, and the developmentally sensitive delivery of those treatments. Anxiety is a complicated illness. Anxiety originates from factors as wide ranging as physiology, cognition, attachment and learning. Anxiety has cognitive, affective and physiological expressions. Anxiety disorders coalesce with the challenges particular to one's developmental stage; with young children often have fears related to demands for autonomy while fears of social evaluation, and performance coming later in life.

There are well-documented evidenced based treatments for anxiety. The evidenced based anxiety treatments are comprised of different interventions: including psychoeducation, relaxation training, diaphragmatic breathing, systematic desensitization, positive self-talk, cognitive restructuring, and mindfulness, among others. Different interventions are indicated for different anxiety disorders. The end goal of all the interventions is the same, to lessen phobic avoidance.

Developmental considerations enter into the selection and delivery of interventions. People exist in a developmental context. Young children are dependent upon parents. Consequently the treatment of young children must address the anxiety of the parents and include the parents as co-therapists. Older children, adolescents, etc should become more

independent in managing their emotions. Consequently, parents are encouraged to play a less

prominent role.

Each of the interventions requires a different developmental skill of the patient. For

example, cognitive restructuring requires the person have the intellectual sophistication to think

about what they are thinking. Mindfulness requires both an intellectual sophistication and a level

of emotional maturity to attend but not respond. The successful psychosocial treatment of

anxiety requires the clinical juggle all of the above concerns.

References

Alfano, C. A., Beidel, D. C., & Turner, S. M. (2002). Cognition in childhood anxiety:
Conceptual, methodological, and developmental issues. *Clinical Psychology Review, 22*,

1209–1238.

Albano, A. M., Chorpita, B.F., & Barlow, D.H. (2003). Anxiety Disorders (2nd ed.). In E. J.
Mash & R. A. Barkley (Eds.), *Child Psychopathology*, 196-241. New York: Guilford Press.

Albano, A. M. & DiBartolo, P. M. (2007). Cognitive-behavioral therapy for social phobia in
adolescents: Stand up, speak out (therapist guide). New York: Oxford University Press, Inc.

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders
(4th ed.). Washington, DC.

Angold, A., Costello, E. J., & Erkanli, A. (1999). Comorbidity. *Journal of Child Psychology and
Psychiatry, 40,* 57–87.

Beitman, B. D., Lamberti, J. W., Mukerji, V., DeRosear, L., Basha, I., & Schmid, L. (1987).
Panic disoder in cardiology patients with atypical or non-anginal chest pain: A pilot study.
Journal of Anxiety Disorders, 1, 277-282.

Benjamin, R. S., Costello, E. J., & Warren, M. (1990). Anxiety disorders in a pediatric sample.
Journal of Anxiety Disorders, 4, 293-316.

Breier, A., Charney, D., & Heninger, G. R. (1986). Agoraphobia with panic attacks. *Archives of
General Psychiatry, 43,* 1029-1036.

Burke, K. C., Burke, J. D., Reiger, D. A., & Rae, D. S. (1990). Age at onset of selected mental disorders in five community populations. *Archives of General Psychiatry, 47*, 511-518.

Comer, J. S., Puliafico, A. C., Aschenbrand, S. G., McKnight, K., Robin, J. A., Goldfine, M. E., et al. (in press). A pilot feasibility evaluation of the CALM Program for anxiety disorders in early childhood. *Journal of Anxiety Disorders*, (2011), doi:10.1016/j.janxdis.2011.08.011.

Coryell, W., Noyes, R., & Clancy, J. (1982). Excess mortality in panic disorder: A comparison with unipolar depression. *Archives of General Psychiatry, 39*, 701-703.

Coryell, W., Noyes, R., & House, J. D. (1986). Mortality among outpatients with anxiety disorders. *American Journal of Psychiatry, 143*, 508-510.

Craske, M. G., Miller, P. P., Rotunda, R., & Barlow, D. H. (1990). A descriptive report of features of initial unexpected panic attacks in minimal and extensive avoiders. *Behavior Research and Therapy, 28*, 395-400.

Crawley, S., Beidas, R., Benjamin, C., Martin, E., & Kendall, P. C. (2008). Treating socially phobic youth with CBT: Differential outcomes and treatment considerations. *Behavioural and Cognitive Psychotherapy*, *36*, 379–389.

Eaton, W. W., Kessler, R. C., Wittchen, H. U., & Magee, W. J. (1994). Panic and panic disorder in the United States. *American Journal of Psychiatry, 151*, 413-420.

Egger, H. L., & Angold, A. (2006). Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. *Journal of Child Psychology and Psychiatry, 47*, 313–337.

Essau, C. A., Conradt, J., & Petermann, F. (1999). Frequency and comorbidity of social phobia and social fears in adolescents. *Behaviour Research and Therapy, 37*, 831–843.

Ezpeleta, L., Keeler, G., Alaatin E., Costello, E. J., & Angold, A.(2001). Epidemiology of psychiatric disability in childhood and adolescence. *Journal of Child Psychology and Psychiatry, 42*, 901-914.

Hayward, C., Varady, S., Albano, A. M., Thieneman, M., Henderson, L., & Schatzberg, A. F. (2000). Cognitive behavioral group therapy for female socially phobic adolescents: Results of a pilot study. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 721-726.

Hayward, C., Wilson, K. A., Lagle, K., Kraemer, H. C., Killen, J. D., & Taylor, C. B. (2008). The developmental psychopathology of social anxiety in adolescents. *Depression and Anxiety, 25*, 200-206.

Hirshfeld-Becker, D. R., Masek, B., Henin, A., Blakely, L. R., Pollock-Wurman, R. A., McQuade, J., et al. (2010). Cognitive behavioral therapy for 4- to 7-year-old children with anxiety disorders: A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 78*, 498–510.

Hoffman, S.G. (2007). Cognitive Factors that Maintain Social Anxiety Disorder: a Comprehensive Model and its Treatment Implications, *Cognitive Behaviour Therapy, 36*(4), 193-209.

Hudson, J. L., Rapee, R. M., Deveney, C., Schniering, C. A., Lyneham, H. J., & Bovopoulous, N. (2009). Cognitive-behavioral treatment versus an active control for children and adolescents with anxiety disorders: A randomized trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 48*, 533-544.

Fehm, L., Pelissolo, A., Furmark, T., & Wittchen, H.-U. (2005). Size and burden of social phobia in Europe. *European Neuropharmacology, 15*, 453-462.

Garcia-Lopez, L. J., Olivares, J., Beidel, D. C., Albano, A. M., Turner, S. M., & Rosa, A. I. (2006). Efficacy of three treatment protocols for adolescents with social anxiety disorder: A five-year follow up assessment. *Journal of Anxiety Disorders, 20*, 175-191.

Gregory, A. M., Caspi, A., Moffitt, T. E., Koenen, K., Eley, T. C., & Poulton, R. (2007). Juvenile mental health histories of adults with anxiety disorders. *American Journal of Psychiatry, 164,* 301–308.

Kagan, J., Reznick, J.S., & Snidman, N. (1988). Biological bases of childhood shyness. *Science, 240*, 167-171.

Kagan, J. (1989). Temperamental contributions to social behavior. *American Psychologist, 44*, 668-674.

Kagan, J. & Snidman, N. (1999). Early predictors of adult anxiety disorders. *Biological Psychiatry, 46*, 1536-1541.

Kashdan, T. B., & Herbert, J. D. (2001). Social anxiety disorder in childhood and adolescence: Current status and future directions. *Clinical Child and Family Psychology Review, 4*, 37–61.

Katon, W., Hall, M., Russo, J., Cormier, L., Hollifield, M., Vitaliano, P., & Beitman, B. (1988). Chest pain: Relationship of psychiatric illness to coronary arteriographic results. *American Journal of Medicine, 84*, 1-9.

Kearney, C. A. (2001). School refusal behavior. Washington, DC: American Psychological Association.

Keller, M. B., Yonkers, K. A., Warshaw, M. G., Pratt, L. A., Golan, J., Mathews, A. O., White, K., Swartz, A., Reich, J., & Lavori, P. (1994). Remission and relapse in subjects with panic disorder and agoraphobia: A prospective short interval naturalistic follow-up. *Journal of Nervous and Mental Disorders, 182*, 290-296.

Kendall, P. C. (1994). Treating anxiety disorders in children: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology, 62*, 100–110.

Kendall, P., Flannery-Schroeder, E., Panichelli-Mindel, S., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized trial. *Journal of Consulting and Clinical Psychology, 65*, 366–380.

Kendall, P. C., Hudson, J. L., Gosch, E., Flannery-Schroeder, E., & Suveg, C. (2008). Cognitive-behavioral therapy for anxiety disordered youth: A randomized clinical trial evaluating child and family modalities. *Journal of Consulting and Clinical Psychology, 76*, 282–297.

Kennedy, B., & Schwab, J. (1997). Utilization of medical specialists by anxiety disorder patients. *Psychosomatics, 38,* 109-112.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distribution of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*, 593–602.

Kinsella, M.T. & Monk, C. (2009). Impact of Maternal Stress, Depression and Anxiety on Fetal Neurobehavioral Development. *Clinical Obstetrics and Gynecology*, *52*(3), 425–440.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. Handbook of socialization theory and research, Volume 347, pp. 347-480, Rand McNally.

Markowitz, J. S., Weissman, M. M., Ouelltte, R., Lish, J. D., Klerman, G. L. (1989). Quality of life in panic disorder. *Archives of General Psychiatry, 46*, 984-992.

Monk, C., Leight, K.L., & Fang, Y. (2008). The relationship between women's attachment style and perinatal mood disturbance: implications for screening and treatment. *Archives of Women's Mental Health, 11*, 117–129.

Nesserholm, S.D. & Ressler, K.J. (2009). Genetics of anxiety and trauma-related disorders. *Neuroscience, 164*, 272–287.

O'Connor, T.G., Heron, J., Golding, J., Glover, V. & the ALSPAC Study Team. (2003), Maternal antenatal anxiety and behavioural/emotional problems in children: a test of a programming hypothesis. *Journal of Child Psychology and Psychiatry 44*(7), 1025–1036.

Piaget, J. (1971). The theory of stages in cognitive development. Measurement and Piaget. New York, NY: McGraw-Hill Green, ix, 283 pp.

Pincus, D., Santucci, L. C., Ehrenreich, J. T., & Eyberg, S. M. (2008). The implementation of modified Parent–Child Interaction Therapy for Youth with separation anxiety disorder. *Cognitive and Behavioral Practice, 15*, 118–125.

Pollack, M. H., Otto, M. W., Rosenbaum, J. F., Sachs, G., O'Neil, C., Asher, R., & Meltzer-Brody, S. (1990). Longitudinal course of panic disorder: Findings from the Massachusetts General Hospital naturalistic study. *Journal of Clinical Psychiatry, 51*, 12-16.

Roy-Byrne, P. P. & Katon, W. (2000). Anxiety management in the medical settin: Rationale, barriers to diagnosis and treatment, and proposed solutions. In D. I. Mostofsky & D. H. Barlow (Eds.). The management of stress and anxiety in medical disorders. Boston. Allyn & Bacon.

Sartorius, N., Ustun, T., Lecrubier, Y., & Witcchen, H. U. (1996). Depression comorbid with anxiety: Results from the WHO Study on Psychiological Disorders in Primary Health Care. *British Journal of Psychiatry, 168*(Suppl. 30), 38-43.

Silverman, W. K., Pina, A. A., & Viswesvaran, C. (2008). Evidence-based psychosocial treatments for phobic and anxiety disorders in children and adolescents. *Journal of Clinical Child and Adolescent Psychology, 37*, 105–130.

Spitzer, R. L., Kroenke, K., Linzer, M., Hahn, S. R., Williams, J. B. W., deGruy, F V., III, Brody, D., & Davies, M. (19950. Health related quality of life in primary care patients with mental disorders: Results from the PRIME MD 1000 Study. *Journal of American Medical Association, 274*(19), 1511-1517.

Strauss, C. C., Frame, C. L., Forehand, R., (1987). Psychosocial impairment associated with anxiety in children. *Journal of Clinical Child Psychology, 16*, 235–39.

Wells, Adrian (2005). Generalized Anxiety Disorder. Encyclopedia of Cognitive Behavior Therapy, Part 7, 195-198, DOI: 10.1007/0-306-48581-8_56

Walkup, J. T., Albano, A. M., Piacentini, J., Birmaher, B., Compton, S. N., Sherrill, J. T., Kendall, P. C. (2008). Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. *New England Journal of Medicine, 359*, 2753–2766.

Wells, A. (1999), A metacognitive model and therapy for generalized anxiety disorder. *Clinical Psychology & Psychotherapy, 6*: 86–95.

Westenberg, P. M., Gullone, E., Bokhorst, C. L., Heyne, D. A., & King, N. J. (2007). Social evaluation fear in childhood and adolescence: Normative developmental course and continuity of individual differences. *British Journal of Developmental Psychology, 25*, 471–483.

Yehuda, R., Halligan, S.L. & Bierer, L.M. (2001) Relationship of parental trauma exposure and PTSD to PTSD, depressive and anxiety disorders in offspring. *Journal of Psychiatric Research 35*, 261–270.

Clinical Points to Remember

1. Empathy is an essential ingredient in treatment. The anxious patient is in a difficult position. At any given moment, it is easier to give in to the anxiety and stay with the well-worn habits of avoidance. To push back against one's fears requires that you summon your courage and push aside feelings of shame, inadequacy, hopelessness, and depression,. The situation is even more difficult for a child, who must confront all of these issues without the benefit of intellectual and emotional maturity that is ordinarily the province of adulthood.

2. Anxiety is complicated. Many factors contribute to the development and maintenance of anxiety: genetic, physiological, neuroanatomical, developmental, attachment, cognitive, perceptual, behavioral, learning, etc. Additionally, anxiety presents with affective, cognitive, behavioral, and somatic features. A good assessment is mindful of the combined impact of all of these factors.

3. Anxiety is influenced by developmental factors. Anxiety disorders exist throughout the lifespan from early childhood through the end of life. The experience, presentation and treatment of anxiety change as one develops. The clinician must be sensitive to the role of development to appropriately assess and treat anxiety.

4. There are well-established psychosocial treatments for anxiety disorders. No longer must a clinician grope through the empirical wilderness of just a generation ago; today, known evidenced based treatments exist. Clinical trial data now provide the clinician with a roadmap of proven interventions.

5. Psychosocial treatments are based on skill acquisition. The premise of psychosocial treatments is to teach the individual skills to better manage anxiety. The clinician must select a skill that is sensitive to the developmental status of the patient. Intellectually and emotionally sophisticated individuals can make good use of the most sophisticated skills, while younger patients must utilize simpler skills. For the youngest of patients, skills are often taught to the parents, who act as co-therapists.

6. Avoidance is anxiety's best friend. Avoiding feared situations permits the anxiety to further develop and become more fully integrated into one's life. The skills taught in psychosocial treatments are in service of facilitating the individual's engagement of the feared situation in order to neutralize and extinguish the fear.