Chapter – II
Review Literature

Akemi Tomoda, Teruhisa Miike, Noritaka Iwatani, Toshiro Ninomiya, Hiroyo Mabe, Toshiro Kageshita, Shosuke Ito (November 1999) Effect of long-term melatonin administration on school-phobic children and adolescents with sleep disturbances. Melatonin is effective in treating sleep disturbances, which are closely related to school phobia. However, side effects of melatonin in long-term administration have not been examined fully. In the present study melatonin was administered to 30 patients with school phobia (18 females, 12 males; mean age, 14.8 years) who had no physical, psychiatric, or social problems, but had sleep disturbances. Patients were compared with 27 healthy, age-matched controls. No changes in serum 5-S-cysteinyldopa levels, human skin pigmentation, or the state of puberty were observed in either group. Melatonin appeared to lead to improvements in sleep disturbances.

Andres G. Viana, Brian Rabian, Deborah C. Beidel (June 2008) Self-report measures in the study of comorbidity in children and adolescents with social phobia: Research and clinical utility. We examined differences in self-reported anxiety and depression according to the number and pattern of DSM-IV comorbid diagnoses in 172 children and adolescents (mean age = 11.87, S.D. = 2.67; range = 7–17) with a primary diagnosis of social phobia. Three hypotheses were tested: (1) children with comorbid anxiety disorders would show significantly higher scores than children with social phobia-only on self-report measures, (2) self-report measures would significantly differentiate between children with social phobia and comorbid internalizing versus externalizing disorders, and (3) self-report measures would significantly differentiate children according to the type of anxiety comorbidities present. Multinomial logistic regressions showed that children with three anxiety disorders scored significantly higher than children with one and two diagnoses on two of three self-report measures used. Logistic regressions revealed that children's scores on measures did not differ according to the nature of the comorbid diagnoses (internalizing vs. externalizing). Finally, ROC curves showed that the MASC and the SPAI-C accurately classified children with additional diagnoses of SAD and GAD,
respectively. The potential of self-report measures to further our understanding of childhood anxiety comorbidity and the clinical implications of their use to screen for comorbidity are discussed along with suggestions for further study.

Anthony C. Puliafico, Jonathan S. Comer, Philip C. Kendall (March 2007) Social Phobia in Youth: The Diagnostic Utility of Feared Social Situations. The present study evaluated the utility of parent- and child-reported social fears for reaching a diagnosis of social phobia in youth. The diagnostic utility of (a) the number of fears and (b) specific feared social situations was examined. The sample included 140 youth and their parents: youth diagnosed with social phobia (n = 50), youth diagnosed with generalized anxiety disorder or separation anxiety disorder but not social phobia (n = 49), and youth without an anxiety disorder (n = 41). Youth and their parents were interviewed separately using the Anxiety Disorders Interview Schedule for Children and Parents. Analyses indicate that a cut score of 4 parent-endorsed social fears optimally distinguished youth with and without social phobia. Analyses of child-reported fears did not identify a meaningful cut score. Conditional probability and odds ratio analyses indicated that several specific social fears have high diagnostic efficiency, and others were found to have limited diagnostic efficiency. Results are discussed with regard to informing diagnostic interviews and diagnostic systems for social phobia in youth.

Candice A. Alfano, Armando A. Pina, Ian K. Villalta, Deborah C. Beidel, Robert T. Ammerman, Lori E. Crosby (September 2009) Mediators and Moderators of Outcome in the Behavioral Treatment of Childhood Social Phobia. Objective The current study examined mediators and moderators of treatment response among children and adolescents (ages 7–17 years) with a primary diagnosis of social phobia. Method Participants were 88 youths participating in one of two randomized controlled treatment trials of Social Effectiveness Therapy for Children. Potential mediators included changes in observer-rated social skill and child-reported loneliness after 12 weeks of Social Effectiveness Therapy for Children. Age and depressive symptoms were examined as potential moderators. Results Loneliness scores and social effectiveness during a role-play task predicted changes in social anxiety and overall functioning at posttreatment. Changes in social anxiety were mediated by child-
reported loneliness. Outcomes were not moderated by age or depressive symptoms. Conclusions Findings support the role of loneliness as an important mechanism of change during treatment for childhood social phobia.

Carol J. M. van Velzen, Paul M. G. Emmelkamp, Agnes Scholing (July-August 2000) Generalized Social Phobia Versus Avoidant Personality Disorder: Differences in Psychopathology, Personality Traits, and Social and Occupational Functioning. Four groups of patients with social phobia (SP) were compared with regard to psychopathologic characteristics, personality traits, and social and occupational functioning. Fifteen persons with discrete social phobia without any personality disorder (DSP), 28 persons with generalized social phobia (GSP) without any personality disorder, 24 persons with GSP with a single diagnosis of avoidant personality disorder (APD), and 23 persons with GSP with more than one PD were included in the present study. APD had higher levels of social phobic avoidance, depressive symptoms, neuroticism, introversion, and social and occupational impairment as compared with GSP. DSP was found to be the least severe condition. OPD was the most impaired on nearly all variables. Logistic regression analyses revealed that introversion and depressive symptoms were able to predict correctly the presence or absence of an APD in 85% of those with social phobia. These findings are discussed in the light of the severity continuum hypothesis of social phobia and APD and recommendations for future research are given.

CATHERINE MANCINI, MICHAEL VAN AMERINGEN, PETER SZATMARI, CHRISTINA FUGERE, MICHAEL BOYLE (November 1996) A High-Risk Pilot Study of the Children of Adults with Social Phobia. Objective Children of patients with social phobia were studied to estimate their rates of psychiatric disorder. Method Twenty-six social-phobic outpatients who had at least one child between the ages of 4 and 18 years participated in the study. Information was collected from parents on all 47 children and from the children between 12 and 18 years of age. Diagnoses in the children were made based on DSM-III-R and were done by a best-estimate method, using parent and child reports from a modified Anxiety Disorders Interview Schedule for Children, the Survey Diagnostic Instrument, the Current Self-Report Childhood Inhibition Scale, and the Alcohol Dependence Survey. Results Of
the 47 children, 49% had at least one lifetime anxiety disorder diagnosis. The most common diagnoses were overanxious disorder (30%), social phobia (23%), and separation anxiety disorder (19%). Sixty-five percent had more than one anxiety disorder diagnosis. Lifetime major depression was found in 8.5% of the children. Parents whose children met criteria for an anxiety disorder had a greater mean number of comorbid diagnoses than did the parents of unaffected children. Conclusion This pilot study suggests that children of social-phobic parents may have increased rates of psychiatric disorder. Further studies incorporating a control group are needed.

CYNTHIA G. LAST, CHERI HANSEN, NATHALIE FRANCO (April 1998) Cognitive-Behavioral Treatment of School Phobia. Objective To conduct a controlled group outcome investigation of the efficacy of cognitive-behavioral treatment for school phobia. Method Fifty-six children with school phobia were randomly assigned to 12 weeks of cognitive-behavioral therapy or an attention-placebo control condition. Pre- and posttreatment school attendance, self-reported anxiety and depression, and diagnostic status were compared. Results Both the experimental and control treatments were equally effective at returning children to school. Both treatments also were effective in reducing children's anxiety and depressive symptoms. Follow-up revealed no differences between groups when the children reentered school the next school year. Conclusions Overall, results suggest that psychosocial treatments are effective at returning school-phobic children to school and that the highly structured cognitive-behavioral approach may not be superior to more traditional educational and supportive treatment methods. J. Am. Acad.

DEBORAH C. BEIDEL (July 1991) Social Phobia and Overanxious Disorder in School-Age Children. Epidemiological data indicate that, based on current diagnostic criteria, anxiety disorders are the most common childhood disorders. Furthermore, the comorbidity rate among the various diagnostic categories is quite high, and relatively little attention has been given to delineating the specific and distinct parameters of these disorders. The current study examined the characteristics of overanxious disorder and social phobia by comparing children who have these disorders to matched normal controls. The results indicated that children with social phobia could be differentiated from the other groups, based on self-report inventories,
daily diary data, and a psychophysiological assessment. However, there were few variables that distinguished overanxious children. The results provide strong support for the diagnostic validity of social phobia in children but lesser support for overanxious disorder as currently defined.

DEBORAH C. BEIDEL, SAMUEL M. TURNER, FLOYD R. SALLEE, ROBERT T. AMMERMAN, LORI A. CROSBY, SANJEEV PATHAK (December 2007) SET-C Versus Fluoxetine in the Treatment of Childhood Social Phobia. To determine the efficacy of fluoxetine, pill placebo, and Social Effectiveness Therapy for Children (SET-C) for children and adolescents with social phobia. Method Youths ages 7 to 17 were randomly assigned to one of the treatment conditions. Outcome was evaluated using self-reports, parent ratings, independent evaluator ratings, and behavioral assessment. Results Both fluoxetine and SET-C were more efficacious than placebo in reducing social distress and behavioral avoidance and increasing general functioning. SET-C was superior to fluoxetine on each of these measures and was the only treatment superior to placebo in terms of improving social skills, decreasing anxiety in specific social interactions, and enhancing ratings of social competence. Furthermore, whereas fluoxetine appears to exert maximum effect by 8 weeks, SET-C provides continued improvement through week 12.

DEBORAH C. BEIDEL, SAMUEL M. TURNER, TRACY L. MORRIS (June 1999) Psychopathology of Childhood Social Phobia. To describe the clinical syndrome of social phobia in preadolescent children. Method Fifty children with DSM-IV social phobia were assessed with semistructured diagnostic interviews, self-report instruments, parental and teacher ratings, a behavioral assessment, and daily diary recordings. In addition, the behaviors of these children were compared with those of a sample of normal peers. Results Children with social phobia had a high level of general emotional over-responsiveness, social fear and inhibition, dysphoria, loneliness, and general tearfulness. Sixty percent suffered from a second, concurrent disorder. Socially distressing events occurred quite frequently and were accompanied by maladaptive coping behaviors. In addition, children with social phobia had significantly poorer social skills. There were few differences based on gender or race. Conclusions Children with social phobia suffer pervasive and serious functional
impairment. In addition, the clinical presentation suggests specific avenues for psychosocial interventions.

Denise A. Chavira, Murray B. Stein, Vanessa L. Malcarne (2002) Scrutinizing the relationship between shyness and social phobia. The nature of the relationship between shyness and social phobia can be clarified by assessing rates of social phobia in highly shy and normative samples. In the present study, 2202 participants were screened and categorized on a shyness scale as highly shy (90th percentile) or “normatively” shy (40–60th percentile). The Composite International Diagnostic Interview and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II; Avoidant Personality Disorder module) were used to assign clinical diagnoses. Approximately 49% of individuals in the highly shy group had a social phobia diagnosis compared to 18% in the normatively shy group. Significantly more generalized social phobia (36% vs. 4%) and avoidant personality disorder (14% vs. 4%) diagnoses were present in the highly shy group compared to the normatively shy group. Equal rates of nongeneralized social phobia (i.e., 14% vs. 14%) were present in the highly shy and the normatively shy comparison group. Findings suggest that shyness and social phobia (especially the generalized type) are related constructs but not completely synonymous; an individual can be extremely shy yet not have a social phobia diagnosis.

Dirk van West, Stephan Claes, José Sulon, Dirk Deboutte (December 2008) Hypothalamic-pituitary-adrenal reactivity in prepubertal children with social phobia. The aim of this study was to investigate whether a different pattern of HPA axis activity is found between children with social phobia (SP) and healthy control children. Methods A total of 50 prepubertal subjects (25 children with SP and 25 healthy control subjects) were studied. The effects of stress were studied by comparing cortisol responses to a psychosocial stressor, consisting of a public speaking task. Results Children with SP showed an elevated cortisol response to the psychosocial stressor as compared with healthy controls. Trait but not state anxiety levels are associated with higher HPA axis activity. Limitations Limited sample size. Conclusions The results indicate that a higher cortisol responsivity to stress may be a
neurobiological marker for prepubertal children with SP. Directions for future research and clinical implications are discussed.

Donald L. Tasto (November 1969) Systematic desensitization, muscle relaxation and visual imagery in the counterconditioning of four-year-old phobic child. A four-year-old boy with a severe phobia for loud sudden noises was successfully treated with behavior modification utilizing muscle relaxation and in vivo conditioning in six sessions. The question of theoretical importance was whether muscle relaxation and systematic desensitization by imagining feared stimuli could successfully be employed to treat a phobia in a child this young. The literature does not, to the author's knowledge, contain any reports of the combined use of muscle relaxation and imagination of fear-producing stimuli for treating phobic children of such a young age.

Edward Hampe, Helen Noble, Lovick C. Miller, Curtis L. Barrett (December 1973) Phobic children one and two years posttreatment. Evaluated progress of 62 phobic children 1 and 2 yrs after termination of treatment or waiting period. 80% were either symptom free or significantly improved; only 7% still had a severe phobia. Successfully treated Ss tended to remain symptom free and to be free from other deviant behaviors as well. 60% of the failures at termination continued to receive treatment and most were symptom free 2 yrs later. After 2 yrs, the effects of the original psychotherapy and reciprocal inhibition therapy no longer were related to outcome. However, age, status at the end of treatment, and time were related to outcome. Results are discussed in terms of the nature of child phobia and implications for research.

Eric A. Storch, Carrie Masia-Warner, Heather C. Dent, Jonathan W. Roberti, Paige H. Fisher (2004) Psychometric evaluation of the Social Anxiety Scale for Adolescents and the Social Phobia and Anxiety Inventory for Children: construct validity and normative data. This study evaluated the psychometric properties of the Social Anxiety Scale for Adolescents (SAS-A) and Social Phobia and Anxiety Inventory for Children (SPAI-C) in a sample of 1147 adolescents aged 13–17 years. The fit indices of confirmatory factor analyses were comparable to those obtained in
prior studies and supported the hypothesized models of the SAS-A and SPAI-C. The internal consistency was good and 12-month test–retest reliability modest for both measures. A significant, positive correlation was found between the SAS-A and SPAI-C, showing that these measures assess related, but relatively independent constructs of social anxiety and phobia. These findings support the use of the SAS-A and SPAI-C with adolescents.

GAIL A. BERNSTEIN, PEDER H. SVINGEN, BARRY D. GARFINKEL (January 1990) School Phobia: Patterns of Family Functioning. Seventy-six families of children with school phobia were evaluated with the Family Assessment Measure. Mothers and fathers, as separate groups, rated clinically significant dysfunction in the parent-child relationship in the areas of role performance and values and norms. There were no significant differences between intact and single-parent families on ratings of family dysfunction. There was significantly less family dysfunction as rated by mothers and by children if the child had a diagnosis of pure anxiety disorder compared to families of school phobic children in other diagnostic categories.

Giulio Perugi, Stefano Nassini, Cristina Socci, Michele Lenzi, Cristina Toni, Elisa Simonini, Hagop S. Akiskal (August 1999) Avoidant personality in social phobia and panic–agoraphobic disorder: a comparison. Background: Avoidant personality disorder (APD) is generally believed to be related to social phobia (SP), especially to generalized subtype. However, it has also been reported to be prevalent in panic disorder–agoraphobia (PDA). In the present investigation, we wished to explore whether APD in each of these disorders has discriminatory features. Method: We studied 71 SP and 119 PDA patients with state-of-the-art clinical instruments based on DSM-III-R. Results: The pattern of social avoidance in SP was more pervasive: it was characterized by a higher level of interpersonal sensitivity and greater severity, associated with psychopathology as well as a higher rate of Axis I comorbidity. By contrast, avoidance of non-routine situations characterized APD occurring in the setting of PDA. Limitations: Differences in inclusion criteria and comorbidity rates, as well as overlap between different operational disorders, may have influenced our findings. Conclusion: ADP is operationally broad, and ‘avoidant’ as a specifier of a personality type is insufficiently precise. ADP captures avoidant
traits — which appear secondary to a core dimension such as interpersonal sensitivity — but is basically a homogeneous condition influenced by the nature of comorbid Axis I disorders.

GRETA FRANCIS, CYNTHIA G. LAST, CYD C. STRAUSS (November 1992) Avoidant Disorder and Social Phobia in Children and Adolescents. The diagnoses of avoidant disorder and social phobia in children have received little research attention. Although DSM-III-R describes avoidant disorder and social phobia as distinct disorders, no empirical data are available to support this notion. The current study examined characteristics of avoidant disorder and social phobia by comparing outpatient youngsters with avoidant disorder, social phobia, and avoidant disorder plus social phobia on demographic variables and patterns of comorbidity. The psychiatric groups were compared with matched normal controls on symptom measures of depression and fear. Findings indicated that the three psychiatric groups were strikingly similar on all but one variable, age at intake. These findings question the notion of avoidant disorder and social phobia as distinct disorders in children and adolescents.

Heather M. Gallagher, Brian A. Rabian, Michael S. McCloskey (2004) A brief group cognitive-behavioral intervention for social phobia in childhood. Twenty-three preadolescent children (ages 8–11) meeting criteria for social phobia were randomly assigned to either a 3-week cognitive-behavioral group intervention or a wait-list control group. The intervention consisted of psychoeducation, cognitive strategies, and behavioral exposure. Outcome measures included diagnostic interview as well as parent and child report measures of anxiety and depression. Improvements were observed at posttest, with results stronger for parent report and interviewer ratings than for child self-report. At 3-week follow-up, children receiving the intervention demonstrated significant improvements on the majority of child, parent, and interviewer reports of social anxiety and related symptoms relative to wait-list participants. Preliminary support is provided for the utility of a brief intervention for preadolescent children with social phobia. Limitations and implications for future research are discussed.
HERBERT A. SCHREIER, JUDITH A. LIBOW (July 1986) Acute Phobic Hallucinations in Very Young Children. Acute hallucinations in children aged 2–6 is not a rare occurrence. Emerging at times of stress, they are associated with severe anxiety and phobic behavior. The hallucinations are almost always visual and/or tactile. Contrary to reports of hallucinations at other ages, they tend to occur in bright, independent children. They are self-limited, with the acute hallucinatory phase over in a matter of several days and a subacute phobic phase which may last from weeks to months. In all of our cases there was a return to normal functioning. Hallucinations in this age group appear to be a different phenomenon from those occurring in older children, which are more frequently associated with more serious illnesses. These need to be understood in a developmental framework, but current knowledge does not permit a thorough explanation.

IRWIN J. MANSDORF, ELLEN LUKENS (March 1987) Cognitive-Behavioral Psychotherapy for Separation Anxious Children Exhibiting School Phobia. Two children—a 10-year-old boy and a 12-year-old girl—who exhibited severe school phobia (nonattendance for 6 consecutive weeks before referral), participated in an intervention program based on a psychodynamically oriented cognitive approach. The children were “nonresponders” both to imipramine therapy and to enrollment in a program to combat depression. The six-step program included the assessment of (a) cognitive analysis of the child; (b) environmental analysis; and (c) cognitive analysis of the parents; followed by (d) cognitive self-instructing of children; (e) cognitive restructuring of parents; and (f) environmental restructuring. Both children improved rapidly: subject 1 returned to school by week 4; subject 2 by week 2. The authors’ approach to combating school phobia is described; more rigid research designs to evaluate the program are suggested.

J Reich (May 2000) The relationship of social phobia to avoidant personality disorder: a proposal to reclassify avoidant personality disorder based on clinical empirical findings. In the DSM system social phobia and avoidant personality have been conceptualized as independent entities. Each had separate, if overlapping diagnostic criteria. The specific inclusion and exclusion criteria provided by DSM allowed empirical research to guide future revisions. This review evaluates the
empirical literature and evolution of the concepts of these diagnoses from DSM-III to DSM-IIR to DSM-IV. The empirical evidence leads us to the conclusion that there is no dividing line between social phobia and avoidant personality disorder. In addition to their being no dividing line diagnostically between the disorders, there appears to be no separation of the two by treatment techniques. This raises interesting questions about how we differentiate Axis I from Axis II disorders. Suggestions for revisions of the social phobia and avoidant personality disorder categories are given.

James A. Tahmisian, William T. McReynolds (May 1971) Use of parents as behavioral engineers in the treatment of a school-phobic girl. Reports a case study of a 13-yr-old school-phobic girl successfully treated by her parents with instrumental behavior-shaping treatment procedures. Excluding the therapist’s initial assessment with the child and an unsuccessful attempt with systematic desensitization, total treatment time was 3 wk. and total time expenditure of the therapist was approximately 2 hr. 90 min. for instruction and training of the parents and 10 min. for each of 3 subsequent follow-up telephone calls.

Kathleen Ries Merikangas, Shelli Avenevoli, Suddhasatta Acharyya, Heping Zhang, Jules Angst (January 2002) The spectrum of social phobia in the zurich cohort study of young adults. Background: The goals of the present study are to describe the prevalence, risk factors, course, and impact of social phobia in a 15-year prospective longitudinal community study; and to examine an expanded conceptualization of social phobia with respect to clinical indicators of severity, as well as gender differences, personality traits, and stability over 15 years. Methods: The sample is a cohort of 591 young adults aged 18–19 from the general population of Zurich, Switzerland at study entry who have been followed to age 35. Results: Six percent of participants met lifetime criteria for social phobia at the diagnostic level, 12% at the subthreshold level, and 24% had social phobia symptoms alone. Women had higher lifetime rates of diagnostic and subthreshold-level social phobia, whereas there was an equal gender ratio of social phobia symptoms. There was a direct association between strictness of the diagnostic threshold and severity, such that work impairment, social impairment, treatment rate, medication use, and subjective distress decreased from the diagnostic to the symptom level. Similarly, family history of phobias, autonomic
lability, and comorbidity decreased across the spectrum. Although there was a substantial degree of longitudinal stability at each level of the spectrum, significant oscillation across levels suggests that the spectrum concept better characterizes the longitudinal course of social phobia. Conclusions: These findings demonstrate the utility of the social phobia spectrum. Application of the spectrum concept provides coverage of treated but undiagnosed cases of social phobia as well as those who vacillate across the diagnostic threshold over time.

KENNETH J. ZWIER, UMA RAO (September 1994) Buspirone Use in an Adolescent with Social Phobia and Mixed Personality Disorder (Cluster A Type). The use of buspirone for the treatment of social phobia has been reported in some adult patients; however, to the authors' knowledge, there are no reports of its use in adolescents with this disorder. Use of buspirone in children and adolescents with anxiety disorders is reviewed. An unusual case study is presented of a 16-year-old male patient with social phobia and a mixed personality disorder predominantly with schizotypal features, who responded well to an open trial of buspirone for anxiety and “soft” psychotic symptoms.

LISSETTE M. SAAVEDRA, WENDY K. SILVERMAN (November 2002) Case Study: Disgust and a Specific Phobia of Buttons. The role of disgust in childhood phobias has received limited attention in the psychiatric literature. Available studies suggest that attention to the emotion of disgust is optimal for reduction of phobic symptoms given that the interaction between fear and disgust has been found to maintain and even exacerbate phobias. Disgust was targeted via imagery exposures as part of an exposure-based cognitive-behavioral intervention for a 9-year-old Hispanic American boy who presented with a specific phobia of buttons. Posttreatment, 6-month, and 12-month follow-up assessment results demonstrated maintenance of treatment gains. The role of disgust in treating specific phobias in children is discussed.

vicarious exposure (CAVE) for the treatment of spider phobia in children was evaluated in a single blind, randomised, controlled trial. Twenty-eight participants, aged 10–17 years, received three 45-min sessions of either Live graded exposure (LGE), CAVE or were assigned to a Waitlist. Phobic symptomatology was measured at pre- and post-treatment, and at one month follow-up on a range of behavioural and subjective assessments. The results showed the superiority of the LGE treatment over the CAVE and Waitlist conditions. Effect sizes support CAVE treatment as being superior to the Waitlist and resulting in reductions of phobic symptomatology.

LYNN T. SINGER, BRUCE AMBUEL, SHARI WADE, ARTHUR C. JAFFE (September 1992) Cognitive-Behavioral Treatment of Health-Impairing Food Phobias in Children. Three case reports describe assessment and treatment of three boys (ages 6 to 8 years) hospitalized because of weight loss and malnutrition, caused by severe dietary restriction and/or refusal to eat solid food. Psychological, behavioral, and medical assessments indicated that the boys were of average intelligence, without other significant psychological or medical disorders. Their eating disturbances were conceptualized as phobic disorders maintained by family factors reinforcing the children's avoidant behaviors. Cognitive-behavioral treatment consisted of an individualized combination of contingency management, shaping, desensitization, relaxation training, education, and cognitive restructuring. Generalization and maintenance were promoted by training parents to implement treatment at home before discharge. Treatment positively affected overall caloric intake, weight gain, number of solid foods accepted, and incidence of emesis.

M. Faytout, J. Tignol, J. Swendsen, D. Grabot, B. Aouizerate, J.P. Lépine (March 2007) Social phobia, fear of negative evaluation and harm avoidance. This naturalistic, prospective investigation examined the role of fear of negative evaluation and the personality trait of harm avoidance in the anxiety levels of treated social phobia patients. One hundred and fifty-seven patients with DSM-IV social phobia were assessed before starting treatment and were then followed for up to two years. As expected, greater fear of negative evaluation and higher scores of harm avoidance were associated with greater anxiety at the 6 month follow-up, and harm avoidance remained a significant predictor at 24 months. However, no evidence was found for
an interaction between the personality and cognitive variables examined. The findings are discussed in terms of the relative independence of these factors, as well as their potential implications for the treatment of this disorder.

Maria Tillfors, Tomas Furmark, Lisa Ekselius, Mats Fredrikson (March 2001) Social phobia and avoidant personality disorder as related to parental history of social anxiety: a general population study. Using a validated and DSM-IV compatible questionnaire, the present study related family history of excessive social anxiety to social phobia and avoidant personality disorder (APD) in epidemiologically identified probands in the general population. Probands met diagnostic criteria for social phobia with or without APD and APD with or without social phobia. A two- to three-fold increased relative risk of social anxiety was observed for all diagnostic groups. Increasing severity in probands by varying diagnostic criteria did not affect the relative risk. Because familial aggregation of social anxiety was not modulated by Axis I or II diagnosis or diagnostic cut-off levels, data imply that social phobia and APD may represent a dimension of social anxiety rather than separate disorders. Thus, having an affected family member is associated with a two- to three-fold risk increase for both social phobia and APD.

Marteinsdottir, T. Furmark, M. Tillfors, M. Fredrikson, L. Ekselius (April 2001) Personality traits in social phobia. The purpose was to assess personality traits in subjects with a DSM-IV diagnosis of social phobia. Thirty-two subjects were administered the Structured Clinical Interview for DSM-IV for Axes I and II disorders (SCID I and II). Personality traits were assessed by means of the Karolinska Scales of Personality (KSP). Current and lifetime axis I co-morbidity was diagnosed in 28% and 53% of the subjects, respectively. In total, 59% had at least one personality disorder and 47% were diagnosed with an avoidant personality disorder. The social phobics scored significantly higher than a Swedish normative sample on the KSP measuring anxiety proneness, irritability, detachment, and indirect aggression but lower on the scales for socialisation and social desirability. The presence as compared to absence of avoidant personality disorder in the social phobics was associated with significantly higher psychic anxiety and inhibition of aggression. In addition, symptom severity was higher in social phobics with an avoidant personality disorder.
Generally, the results support the view that social phobia and avoidant personality disorder reflect different aspects of a social anxiety spectrum.

Martin L. Boone, Daniel W. McNeil, Carrie L. Masia, Cynthia L. Turk, Leslie E. Carter, Barry J. Ries, Michael R. Lewin (May 1999) Multimodal Comparisons of Social Phobia Subtypes and Avoidant Personality Disorder. The purpose of the present study was to further clarify the behavioral, physiological, and verbal response of patients with circumscribed social (speech) phobia, generalized social phobia without avoidant personality disorder, and generalized social phobia with avoidant personality disorder. Patients completed a battery of verbal report instruments and participated in two behavioral assessment tests. Measures of avoidance/escape behavior, cardiac response, level of behavioral skill, state anxiety, and positive and negative self-statements during performance were collected. Significant differences across response domains were found between the circumscribed social phobia and the generalized groups. Most of the distinctions were between individuals with circumscribed social phobia and those with both generalized social phobia and avoidant personality disorder, with the former group having less overall psychopathology. In addition, there was substantial overlap of problems between generalized social phobia individuals with and without avoidant personality disorder. Implications for the conceptualization of social phobia are discussed in terms of the differences among social phobia subtypes.

Martin Obler, Robert F. Terwilliger (June 1970) Pilot study on the effectiveness of systematic desensitization with neurologically impaired children with phobic disorders. A modified version of J. Wolpe's systematic desensitization therapy involving direct confrontation with the fear-inducing stimulus was attempted with 30 neurologically impaired children with phobic symptoms. 2 hypotheses were tested: (a) a nonverbal therapeutic technique not requiring motivation will produce successful symptom reduction for these Ss, and (b) awareness of therapeutic procedure is not necessary for successful results. Both hypotheses were confirmed.

avoidant personality disorder and social phobia. The objective of this study was to ascertain the number of articles published per annum on the topics of avoidant personality disorder (APD) and social phobia (SP) in the period from 1973 to 2001. We hypothesized that while annual publication rates on SP would exhibit a sound growth, the number of scientific articles on APD published per annum would present a stagnant or declining trend. We performed a comprehensive literature review on APD and SP using the three largest existing databases for medical and psychological journals: MEDLINE, PsycINFO, and Web of Science. The references were gathered by means of the Reference Manager version 9.5 software and transferred to an SPSS version 10 database for statistical analysis. The data were then input into regression models with the goal of predicting future growth of the scientific literature in these areas. The number of journal articles published annually on SP has steadily increased in the period from 1973 (1 article) to 2001 (118 articles). In contrast, the production of scientific literature on APD peaked in 1986 (5 articles) and subsequently declined. During the last decade reviewed, an average of fewer than two articles on APD was published per annum. Given the declining trend identified in this study, we believe that it is unlikely that the publication of scientific articles on APD will provide the empirical evidence required to validate this disorder in a foreseeable future. The permanence of APD on the rolls of the personality disorders should therefore be reassessed.

Michael C. Ashton, Kibeom Lee, Beth A. Visser, Julie A. Pozzebon (June 2008) Phobic tendency within the Five-Factor and HEXACO models of personality structure. Recent research has indicated that the various specific phobias are only modestly correlated with the personality dimensions of the Big Five or Five-Factor Model (B5/FFM). We tested the hypothesis that the specific phobias would be more strongly associated with the dimensions of an alternative framework, the HEXACO model of personality structure. Self-reports on the Phobic Stimuli Response Scales (PSRS) were obtained along with self- and peer reports on measures of the B5/FFM and HEXACO dimensions from a sample of 248 non-clinical participants. The PSRS variables assessing specific phobias showed stronger correlations with the HEXACO Emotionality factor than with any B5/FFM dimension, and a stronger multiple correlation with the HEXACO factors than with the B5/FFM dimensions. Findings
were similar across self- and peer reports of the personality variables. The results suggest that phobic tendency can be understood in terms of normal personality variation as conceptualized in the HEXACO framework.

O. Joseph Bienvenu, Clayton Brown, Jack F. Samuels, Kung-Yee Liang, Paul T. Costa, William W. Eaton, Gerald Nestadt (May 2001) Normal personality traits and comorbidity among phobic, panic and major depressive disorders. High comorbidity among anxiety and depressive conditions is a consistent but not well-understood finding. The current study examines how normal personality traits relate to this comorbidity. In the Baltimore Epidemiologic Catchment Area Follow-up Study, psychiatrists administered the full Schedules for Clinical Assessment in Neuropsychiatry to 320 subjects, all of whom completed the Revised NEO Personality Inventory. The disorders of interest were simple phobia, social phobia, agoraphobia, panic disorder, and major depression. Analyses were carried out with second-order generalized estimating equations. The unadjusted summary odds ratio (SOR — or weighted mean odds ratio) for all five disorders was 1.72 (95% confidence INTERVAL=1.21–2.46). Neuroticism, introversion, younger age, and female gender were all significant predictors of prevalence of disorders. After adjustment for the relationships between these personality and demographic predictors and prevalence, the association among disorders was much weaker (SOR=1.11, 95% CI=0.79–1.56). However, subjects with high extraversion had a SOR 213% as high (95% CI=102–444%) as those with low extraversion (1.60 vs. 0.75). Therefore, neuroticism and introversion are associated with increased comorbidity in common with the prevalence of the different disorders. In contrast, extraversion is associated with increased comorbidity per se.

Peter Muris, Harald Merckelbach, Peter J. de Jong, Thomas H. Ollendick (February 2002) The etiology of specific fears and phobias in children: a critique of the non-associative account. The non-associative account of phobic etiology assumes that a number of specific fears (e.g., fear of heights, water, spiders, strangers, and separation) have an evolutionary background and may occur in the absence of learning experiences (e.g., conditioning). By this view, these specific fears pertain to stimuli that once posed a challenge to the survival of our prehistoric ancestors.
Accordingly, they would emerge spontaneously during the course of normal development and only in a minority of individuals, these specific fears would persist into adulthood. While the non-associative approach has generated interesting findings, several critical points can be raised. First, it capitalizes on negative findings, i.e., the failure to document learning experiences (e.g., conditioning, modeling) in the history of phobic children. Second, it largely ignores factors that have been found to be crucial for the acquisition of early childhood fears (e.g., the developmental level of the child, stimulus characteristics such as novelty, aversiveness, and unpredictability, and early experience with uncontrollable events). As an alternative to the non-associative account, we briefly describe a multifactorial model of childhood fears and phobias.

Peter Muris, Henk Schmidt, Harald Merckelbach (September 1999) The structure of specific phobia symptoms among children and adolescents. Previous research [Frederikson, M., Annas, P., Fisher, H. & Wik, G. (1996). Gender and age differences in the prevalence of specific fears and phobias. *Behaviour Research and Therapy, 34*, 33–39.] has shown that specific phobia symptoms of adults cluster into three subtypes: animal phobia, blood-injection-injury phobia and environmental–situational phobia. The present study examined whether these specific phobia subtypes can also be found in children. 996 children aged between 7 and 19 years completed a brief questionnaire regarding the frequency with which they experienced specific phobia symptoms. Confirmatory factor analysis was employed to examine the structure of these data. Results showed that childhood specific phobia symptoms indeed cluster into the three subtypes as described by Frederikson et al. and that these subtypes are either intercorrelated or the product of a single higher order factor. This structure appeared to be largely invariant across genders and age groups.

ROBIN YEGANEH, DEBORAH C. BEIDEL, SAMUEL M. TURNER, ARMANDO A. PINA, WENDY K. SILVERMAN (September 2003) Clinical Distinctions Between Selective Mutism and Social Phobia: An Investigation of Childhood Psychopathology. Objective To investigate the hypothesis that children with selective mutism are more socially anxious than children with social anxiety disorder but who are not selectively mute. Method Twenty-three children with
comorbid selective mutism and social phobia and 23 age-matched controls with social phobia alone and their parents participated in a comprehensive assessment of social anxiety and related aspects of psychopathology. Results The results do not uniformly support previous suggestions that children with selective mutism refuse speech because they are “frozen with fear.” Although clinician and observer ratings for children with selective mutism revealed higher ratings of social distress than for children with social phobia alone, self-report data do not support this conclusion. Furthermore, although there were no group differences on measures of trait anxiety, general fears, or scores on the Child Behavior Checklist broadband Internalizing or Externalizing scales, children with selective mutism scored higher than children with social phobia alone on the Child Behavior Checklist Delinquency subscale, suggesting the presence of a broader clinical syndrome. Conclusion It remains unclear whether children with selective mutism have extreme levels of social anxiety. Potential areas that might shed further light on this interesting disorder are discussed.

SCOTT N. COMPTON, AIMEE H. NELSON, JOHN S. MARCH (August 2000) Social Phobia and Separation Anxiety Symptoms in Community and Clinical Samples of Children and Adolescents. To examine the developmental progression and pattern of self-reported symptoms of social phobia (SP) and separation anxiety (SA) in community \( (n = 2,384) \) and clinical \( (n = 217) \) samples of children and adolescents, using a cross-sectional method. Method Subjects were cross-classified by age, gender, and race. Using mean scores on the SP and SA subscales of the Multidimensional Anxiety Scale for Children, 4 categories of children were established: HighSP/HighSA, HighSP/LowSA, LowSP/HighSA, and LowSP/LowSA. Data were analyzed using a generalized logit model. Results **Community sample:** Preadolescents and females reported more symptoms of HighSP/HighSA and LowSP/HighSA than adolescents and males. White children reported more symptoms of HighSP/LowSA, while the opposite pattern was found among African-American children. **Clinical sample:** Similar to the community sample, preadolescents reported more symptoms of HighSP/HighSA. However, clinical males reported more symptoms of LowSP/HighSA than clinical females. Conclusions In general, adolescents endorsed more symptoms of SP and fewer symptoms of SA than preadolescent children. Irrespective of age, white children endorsed more symptoms of SP and fewer
symptoms of SA than African-American children. In the community sample, preadolescent boys endorsed more symptoms of SA and fewer symptoms of SP, suggesting a possible referral bias.

Soo-Jin Kim, Bung-Nyun Kim, Soo-Churl Cho, Jae-Won Kim, Min-Sup Shin, Hee-Jung Yoo, Hyo Won Kim (August 2010) The prevalence of specific phobia and associated co-morbid features in children and adolescents. The aims of this study were to investigate the prevalence, associated co-morbid psychiatric disorders and behavioral/emotional problems associated with the subtypes of specific phobia in children and adolescents. Methods A total of 2673 randomly selected children and adolescents from Seoul, Korea were assessed using the parent version of the Diagnostic Interview Schedule for Children (DISC-IV) and Children's Behavior Checklist (CBCL). We analyzed differences in psychiatric co-morbidities and CBCL profiles among the subtypes of specific phobia. Results The 1-year prevalence of specific phobia was 7.9% (95% CI 7.63–8.17). Animal phobia was associated with anxiety disorder (OR 8.68, 95% CI 1.91–39.51) and oppositional defiant disorder (OR 2.55, 95% CI 1.27–5.12). Nature–environment phobia was associated with anxiety disorder (OR 25.70, 95% CI 6.16–107.10). Blood–injection–injury phobia showed associations with attention-deficit/hyperactivity disorder (ADHD: OR 6.74, 95% CI 2.81–16.15). Subjects with nature–environment phobia scored higher than did controls on the anxious/depressed, social problems, attention problems, and total behavioral problem profiles of the CBCL. Subjects with blood–injection–injury phobia scored significantly higher than did controls on the attention problems, aggressive behaviors, and externalizing problem profiles. Conclusions Contrary to animal phobias, nature–environment and blood–injection–injury phobias were associated with various behavioral and emotional problems and approximately correlated to their co-morbid psychiatric disorders. Among these subtypes, significant differences were found in demographic characteristics, co-morbid psychiatric disorders, and emotional/behavioral problems. These findings suggest that distinctive clinical characteristics might be related with different subtypes of specific phobia and clinician must consider psychiatric co-morbidities when treating children & adolescents with specific phobia.
Objective: A pilot study to evaluate the efficacy of a cognitive-behavioral group therapy program for adolescents with social phobia, simplified both in terms of time and labor intensity from a previously studied program (Social Effectiveness Therapy for Children and Adolescents) to be more appropriate for a community outpatient psychiatric setting. Method: Twelve adolescents with social phobia (ages 13-18), diagnosed by DSM-IV criteria and confirmed with Anxiety Disorders Interview Schedule for Children assessment, were randomly assigned to treatment (n = 6) and waitlist (n = 6) groups. The waitlist group was subsequently treated, and results were included in the data analysis. Assessments, including Anxiety Disorders Interview Schedule for Children interviews and self-report Social Phobia and Anxiety Inventory and Beck Depression Inventory II questionnaires, were performed at baseline and immediately after treatment or waitlist. Results: All subjects completed the treatment program. Compared with the waitlist group, treated subjects showed significantly greater improvement in both examiner-evaluated (Anxiety Disorders Interview Schedule for Children) and self-reported (Social Phobia and Anxiety Inventory) symptoms of social anxiety (effect sizes [d], 1.63 and 0.85, respectively). No significant change was seen in Beck Depression Inventory II scores for treatment or waitlist groups. Conclusions: This study provides support for the use of simplified cognitive-behavioral interventions for adolescents with social phobia that are practical for community psychiatric settings.

One-Session Treatment of Specific Phobias in Youth: A Randomized Clinical Trial in the United States and Sweden. One hundred and ninety-six youth, ages 7–16, who fulfilled Diagnostic and Statistical Manual of Mental Disorders (4th ed.) criteria for various specific phobias were randomized to a one-session exposure treatment, education support treatment, or a wait list control group. After the waiting period, the wait list participants were offered treatment and, if interested, rerandomized to 1 of the 2 active treatments. The phobias were assessed with semistructured diagnostic interviews, clinician severity ratings, and behavioral avoidance tests, whereas fears,
general anxiety, depression, and behavior problems were assessed with self- and parent report measures. Assessments were completed pretreatment, posttreatment, and at 6 months following treatment. Results showed that both treatment conditions were superior to the wait list control condition and that 1-session exposure treatment was superior to education support treatment on clinician ratings of phobic severity, percentage of participants who were diagnosis free, child ratings of anxiety during the behavioral avoidance test, and treatment satisfaction as reported by the youth and their parents. There were no differences on self-report measures. Treatment effects were maintained at follow-up. Implications of these findings are discussed.

Thompson E. Davis III, Anna May, Sara E. Whiting (June 2011) Evidence-based treatment of anxiety and phobia in children and adolescents: Current status and effects on the emotional response. Research on treatments for childhood anxiety disorders has increased greatly in recent decades. As a result, it has become increasingly necessary to synthesize the findings of these treatment studies into reviews in order to draw wider conclusions on the efficacy of treatments for childhood anxiety. Previous reviews of this literature have used varying criteria to determine the evidence base. For the current review, stricter criteria consistent with the original Task Force (1995) guidelines were used to select and evaluate studies. Studies were divided by anxiety disorder; however, many studies combine various anxiety disorders in their samples. As a result, these were included in a combined anxiety disorder group. Using more traditional guidelines, studies were assigned a status of well-established, probably efficacious, or experimental based on the available literature and the quality of the studies. While some treatments do meet the criteria for well-established status, it is clear from this examination that gaps remain and replication is necessary to establish many of these treatments as efficacious. In addition, there still appears to be a lack of research on the effects of treatment on the physiological and cognitive aspects of fear and anxiety.

Thompson E. Davis III, Patricia F. Kurtz, Andrew W. Gardner, Nicole B. Carman (November-December 2007) Cognitive-behavioral treatment for specific phobias with a child demonstrating severe problem behavior and developmental delays. Cognitive-behavioral treatments (CBTs) are widely used for anxiety disorders
in typically developing children; however, there has been no previous attempt to administer CBT for specific phobia (in this case study, one-session treatment) to developmentally or intellectually disabled children. This case study integrates both cognitive-behavioral and behavior analytic assessment techniques in the CBT of water and height phobia in a 7-year-old male with developmental delays and severe behavior problems. One-session treatment [Öst, L. G. (1989). One-session treatment for specific phobias. Behaviour Research and Therapy, 27, 1–7; Öst, L. G. (1997). Rapid treatment of specific phobias. In G. C. L. Davey (Ed.), Phobias: A handbook of theory, research, and treatment (pp. 227–247). New York: Wiley] was provided for water phobia and then 2 months later for height phobia. The massed exposure therapy sessions combined graduated in vivo exposure, participant modeling, cognitive challenges, reinforcement, and other techniques. Both indirect and direct observation measures were utilized to evaluate treatment efficacy. Results suggested CBT reduced or eliminated behavioral avoidance, specific phobia symptoms, and subjective fear. Negative vocalizations were reduced during height exposure following treatment. Vocalizations following treatment for water phobia were less clear and may have been indicative of typical 7-year-old protests during bath time. Findings indicate CBT can be effective for treating clinical fears in an individual with developmental disabilities and severe behavior. Future research in this population should examine CBT as an alternative to other techniques (e.g., forced exposure) for treating fears.

Tina In-Albon, Kathrin Dubi, Ronald M. Rapee, Silvia Schneider (December 2009) Forced choice reaction time paradigm in children with separation anxiety disorder, social phobia, and nonanxious controls. Cognitive distortions refer to cognitive processes that are biased and therefore yield dysfunctional and maladaptive products (e.g., interpretation bias). Automatic aspects of information processing need to be considered and investigating these aspects requires forms of assessment other than self-report. Studies focussing on the specificity of cognitive biases across different types of anxiety disorders in childhood are rare. Thus, a forced choice reaction time paradigm with picture stimuli was used to assess the interpretation bias in anxious children online. The study investigated disorder-specific interpretation bias in 71 children with separation anxiety disorder (SAD), 31 children with social phobia, and 42 children without mental disorders, aged 5–13 years. Results indicated that
children with SAD rated ambiguous separation pictures as significantly more unpleasant and more arousing than nonanxious children. However, no support was found that children with SAD and social phobia interpret ambiguous separation or social pictures in a more negative way than nonanxious children. Furthermore, no group differences were found in reaction times to all picture categories.

Tore Aune, Tore C. Stiles, Kyrre Svarva (August 2008) Psychometric properties of the Social Phobia and Anxiety Inventory for Children using a non-American population-based sample. Although previous studies have examined the factor structure of the SPAI-C, adequate factor analytic methodology has not been employed. This study explored the psychometric properties of the Social Phobia and Anxiety Inventory for Children (SPAI-C), using a non-American population-based sample of older children and young adolescents 11–14 years of age. Initially an exploratory factor analysis was conducted followed 1 year later by a confirmatory factor analysis. Five factors labeled Assertiveness, Public Performance, Physical/Cognitive Symptoms, Social Encounter, and Avoidance were retained and confirmed. The Public Performance and Assertiveness factors were the most stable and consistent factors or traits of social anxiety over a 1-year period. Results revealed adequate concurrent validity, internal consistency and moderate 12-month test–retest reliability of the SPAI-C total scale. The SPAI-C was found to assess levels of both social anxiety and social anxiety disorder according to DSM-IV criteria. Findings suggest that the SPAI-C is applicable in clinical treatment studies designed to assess sensitivity to change in various aspects of social anxiety disorder.

Verena Leutgeb, Axel Schäfer, Angelika Köchel, Wilfried Scharmüller, Anne Schienle (December 2010) Psychophysiology of spider phobia in 8- to 12-year-old girls. The present investigation focused on late event-related potentials (ERPs) and facial electromyographic (EMG) activity in response to symptom provocation in 8- to 12-year-old spider phobic girls and compared results to those in non-fearful controls. Fourteen patients and 14 controls were presented with phobia-relevant, generally fear-inducing, disgust-inducing and affectively neutral pictures in an EEG/EMG session. ERPs were extracted in the time-windows 340–500 ms (P300) and 550–770 ms (late positive potential, LPP). Relative to controls, phobics showed enhanced amplitudes of
P300 and LPP in response to spider pictures. This result is interpreted to reflect motivated attention to emotionally salient stimuli. Moreover, phobics showed enhanced average facial EMG activity of the levator labii and the corrugator supercilii in response to spider pictures, reflecting the negative valence and disgust relevance of spiders. Additionally, spider phobic girls relative to controls showed higher overall disgust proneness and heightened average facial EMG activity in both muscle regions in response to disgust stimuli, possibly revealing a disgust-based origin of spider phobia in children. These aspects should be considered in psychotherapeutic treatment of childhood spider phobia.

Wendy K. Silverman, Golda S. Ginsburg, William M. Kurtines (Summer 1995) Clinical issues in treating children with anxiety and phobic disorders. Issues involved in conducting cognitive behavioral treatment with children who present with anxiety and phobic disorders are discussed. The rationale for using cognitive behavioral treatment procedures is based on our premise that effective, long-term child behavior change depends on an adequate “transfer of control” from therapist to parent to child. The treatment involves separate and conjoint child and parent sessions and is implemented in three phases: education, application, and relapse prevention. Specific treatment strategies, common obstacles to implementing these strategies, and suggestions to address these obstacles are described for each phase of the treatment. A case vignette illustrates some of the treatment issues discussed.