Treatment of Separation Anxiety Disorder and School Refusal: A Comprehensive Review of the Literature

Nicole Petersen
Utah State University

Follow this and additional works at: https://digitalcommons.usu.edu/gradreports
Part of the Psychology Commons

Recommended Citation
https://digitalcommons.usu.edu/gradreports/990

This Report is brought to you for free and open access by the Graduate Studies at DigitalCommons@USU. It has been accepted for inclusion in All Graduate Plan B and other Reports by an authorized administrator of DigitalCommons@USU. For more information, please contact rebecca.nelson@usu.edu.
TREATMENT OF SEPARATION ANXIETY DISORDER
AND SCHOOL REFUSAL: A COMPREHENSIVE REVIEW
OF THE LITERATURE

by

Nicole Petersen

A plan B paper submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

School Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

2000
Abstract

Separation anxiety disorder is a condition in which a child or adolescent experiences severe anxiety when separation from a parent or caregiver is imminent. A possible symptom of separation anxiety disorder or other psychological conditions is that the child may refuse to attend school or run away from school during the day, an occurrence commonly referred to as school refusal. Children with separation anxiety disorder or school refusal may, as a result, be limited in their social and educational opportunities. Therefore, a review of published studies on the treatment of separation anxiety disorder and school refusal was completed. To adequately manage these disorders, proper assessment and treatment are key. Common assessment strategies include various self-report instruments and functional assessment. Despite the obstacles and challenges associated with separation anxiety disorder and school refusal, very few empirical studies have examined treatments for these conditions. Cognitive-behavioral treatments for school refusal and separation anxiety disorder, however, have been supported by the research, though the efficacy of such strategies may be influenced by the acceptability of the treatment to families and teachers and by the integrity with which treatment methods are implemented. Psychopharmacological approaches, however, have not been validated empirically. More research on both treatment strategies is necessary to confirm current findings. The implications of the present research on the practice of school psychologists is considered.
# CONTENTS

<table>
<thead>
<tr>
<th>Abstract</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>iv</td>
</tr>
<tr>
<td>Overview of Separation Anxiety Disorder and School Refusal</td>
<td>1</td>
</tr>
<tr>
<td>Assessment</td>
<td>5</td>
</tr>
<tr>
<td>Purpose of Current Paper</td>
<td>10</td>
</tr>
<tr>
<td>Inclusion and Exclusion Criteria for Studies Reviewed</td>
<td>10</td>
</tr>
<tr>
<td>Cognitive-Behavioral Treatment Strategies</td>
<td>11</td>
</tr>
<tr>
<td>Review of Cognitive-Behavioral Treatment Studies of Separation Anxiety Disorder</td>
<td>15</td>
</tr>
<tr>
<td>Review of Psychopharmacological Treatment Studies of Separation Anxiety Disorder</td>
<td>21</td>
</tr>
<tr>
<td>Review of Cognitive-Behavioral Treatment Studies of School Refusal</td>
<td>23</td>
</tr>
<tr>
<td>Review of Psychopharmacological Treatment Studies of School Refusal</td>
<td>28</td>
</tr>
<tr>
<td>Treatment Acceptability and Integrity</td>
<td>30</td>
</tr>
<tr>
<td>Implications of this Research for School Psychologists</td>
<td>33</td>
</tr>
<tr>
<td>Conclusion</td>
<td>40</td>
</tr>
<tr>
<td>References</td>
<td>42</td>
</tr>
</tbody>
</table>
Acknowledgments

I would especially like to thank Dr. Gretchen Gimpel for her feedback, suggestions, and encouragement throughout the writing of this paper. I would also like to thank my committee members, Drs. Kathy Hoff and Pat Truhn, for their support and assistance.

I give a special thanks to my family and friends for their encouragement and moral support throughout this process. I could not have completed this without your support.

Nicole Petersen
Overview of Separation Anxiety Disorder and School Refusal

Separation anxiety disorder, as defined by the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), is the only anxiety disorder that exclusively affects children and adolescents. Prevalence rates of separation anxiety disorder range from 2% to 4% of children, making it the most frequent anxiety disorder among pre-adolescent children. The prevalence rate of separation anxiety disorder among adolescents is lower (Albano & Chorpita, 1995). This disorder is characterized by the child or adolescent's fear and avoidance of separation, generally from a parent or caregiver. Children diagnosed with this disorder will often exhibit this fear by tantrumming when separation is imminent, making somatic complaints, or acting aggressively in an attempt to delay or halt parting. Adolescents with separation anxiety disorder more commonly make somatic complaints or exhibit school refusal (Bernstein & Borchardt, 1991). When questioned about their behavior, children with separation anxiety disorder may express concern over their parents' safety or well-being in their absence. Worry for their own safety may also be a symptom of this disorder. Nightmares about separation and refusal to sleep apart from the parent are also features of separation anxiety (APA, 1994; Levin, Ashmore-Callahan, Kendall, & Ichii, 1995). Because the child fears separation, school absenteeism may also be a problem. To qualify for a DSM-IV diagnosis of separation anxiety disorder, these symptoms must remain for at least four weeks, be developmentally inappropriate, and begin before the age of 18.

Separation anxiety is a normal developmental phenomenon among toddlers and preschoolers. Generally, by the age of four or five though, children are able to leave their caregivers with minimal anxiety and distress. In some cases, children may experience a
traumatic event that leads to a seeming re-emergence of separation anxiety (Thyer & Sowers-Hoag, 1988). Children faced with a parent’s serious illness, natural disasters, or war may develop separation anxiety that would be expected based on the trauma of the child’s circumstances (Bowler, 1996; Gittelman & Klein, 1984; Ronen, 1996). If these expected separation anxiety symptoms persist once the immediate threat to a parent’s safety has passed, last for longer than four weeks, and interfere with the child’s normal functioning, a diagnosis of separation anxiety disorder may be appropriate. Also, children who experience or witness physical or sexual abuse may be at an increased risk for problematic separation anxiety symptoms (Dykman et al., 1997; Warner & Weist, 1996). Furthermore, children of parents who experience panic attacks or agoraphobia along with depression are more likely to exhibit separation anxiety disorder than children of parents with no known psychological disorders and children of parents with depression alone (Berg, 1976). Researchers have also noted that many adults with panic disorder or agoraphobia report experiencing separation anxiety when they were children, although this link may not apply to both males and females. Gittelman and Klein (1984) report that adult males with agoraphobia do not report experiencing separation anxiety as a child any more often than other adult clients with phobias. Females with agoraphobia, however, do report childhood separation anxiety significantly more often than other female phobic patients.

Some also believe that family characteristics such as overly permissive parenting styles may lead to separation anxiety disorder (Hsia, 1984). Other theorists suggest that separation anxiety disorder simply results from reinforcement for those behaviors
associated with separation anxiety (Thyer & Sowers-Hoag, 1988). For instance, the child may have learned that if he or she makes somatic complaints, then he or she will not have to attend school (negative reinforcement), and tangible reinforcers at home such as toys and games will be available along with attention from a parent (positive reinforcement). It should be noted that research addressing these theories is lacking. In a review of the research on the etiology of separation anxiety disorder, Thyer and Sowers-Hoag (1988) found little empirical evidence to support or refute these theories.

School phobia, which is often related to separation anxiety disorder, was first recognized in 1941 (Last, Francis, Hersen, Kazdin, & Strauss, 1987). It was identified as a childhood disorder characterized by anxiety associated with school attendance, often resulting in absenteeism. Researchers often associated separation anxiety with school phobia, but in some cases of school phobia, it was recognized that the phobia resulted from a specific anxiety related to the school environment, such as test or performance anxiety or anxiety associated with social interaction (Last et al., 1987). In the DSM-III (APA, 1980), separation anxiety disorder was first designated as a childhood anxiety disorder, which may or may not involve school refusal. The terms school refusal and school phobia, however, continue to be used to refer to students with anxiety due to the school environment or students exhibiting separation anxiety. Though school refusal is a frequent symptom of separation anxiety disorder, it is not an exclusive feature. For example, school refusal may also be a result of social phobia, specific phobia, or generalized anxiety disorder (Last et al., 1987). Children with school refusal may not exhibit any problems in other areas in which separation may occur. With separation
anxiety disorder, however, any imminent separation from a caregiver may result in difficulty for the child. In studies of school refusal or school phobia, the reason for the student’s school refusal behavior generally is not delineated. Thus it is difficult to determine what, if any, anxiety disorders a child with school absenteeism difficulty may have.

Some theorists suggest that school refusal may occur initially to avoid a certain aversive stimuli, but then when the child is at home, positive reinforcement in the form of access to tangible reinforcers and attention from caregivers serves to maintain the school refusal behavior (King et al., 1998). Another distinction between separation anxiety disorder and school refusal is that a link between separation anxiety and later development of panic disorder and agoraphobia has been hypothesized (Casat, 1988; Gittelman & Klein, 1984). Since separation anxiety disorder was not formally recognized until 1980, some researchers used the literature on school phobia available prior to 1980 in determining if the link between separation anxiety and panic disorder and agoraphobia exists (Gittelman & Klein, 1984). When reviewing these studies, however, the authors were looking specifically for separation anxiety symptoms to support the hypothesis. Therefore, it is not known if a link between school phobia and adult panic disorder and agoraphobia exists.

Despite the differences between school phobia and separation anxiety disorder, Gittelman and Klein (1984) estimate that in 80% of all school phobia cases, children would qualify for a diagnosis of separation anxiety disorder. Other researchers disagree with this statement, however. Last et al. (1987) compared a group of children diagnosed
with separation anxiety disorder to those diagnosed with a specific phobia of school and found that children diagnosed with separation anxiety disorder are more likely to be female, pre-adolescent, and from families of lower socioeconomic class. Children diagnosed with a specific phobia of school were more likely to be male, adolescent, and from families of higher socioeconomic class. Children diagnosed with separation anxiety disorder were also significantly more likely to receive another comorbid diagnosis, indicating more severe disturbance in children with separation anxiety disorder. Also, the rate of separation anxiety disorder was nearly two and a half times the rate of school phobia (Last et al., 1987).

Despite the distinct characteristics of separation anxiety disorder, little research has been conducted with a primary focus on its treatment. The methods commonly used to treat other anxiety disorders, which afflict a wider age range and present with different symptomatology, are generally utilized in the treatment of separation anxiety. Clearly, the distress of separation anxiety coupled with the loss of learning and social opportunities resulting from this disorder warrant further investigation into treatment. In order to determine the efficacy of various treatment approaches for separation anxiety disorder specifically, it is necessary that this disorder be considered as a discrete construct. Because of the lack of research addressing separation anxiety disorder, an examination of the research literature on school refusal may also lend valuable information concerning treatment options for separation anxiety disorder.

Assessment

Before effective treatment of either separation anxiety disorder or school refusal
can be instituted, assessment must be conducted. The assessment methods used in cases of school refusal and separation anxiety disorder often may be quite similar. There are few measures that relate solely to either disorder, and many of the assessment instruments and methods used are the same for both disorders as well as for other suspected anxiety disorders in children. There are several self-report instruments designed for students with suspected anxiety disorders. No research has been conducted specifically examining the use of these scales with children with separation anxiety disorder or school refusal, but these scales are frequently used in the treatment research. These norm-referenced instruments may be helpful in comparing the levels of the child's anxiety to peers. In addition, these instruments may, in some cases, be sensitive enough to show change in a child's anxiety levels before and after an intervention is instituted. Examples of norm-referenced measures are the Fear Survey Schedule for Children-II (FSSC-II), the Revised-Children's Manifest Anxiety Scale (R-CMAS), the State-Trait Anxiety Inventory for Children (STAIC), and the Children's Depression Inventory (CDI). The FSSC-II contains 75 items designed to identify the fears of children and adolescents based on five factors which are fear of death and danger, fear of failure and criticism, fear of the unknown, animal fears, and psychic-stress-medical fears (Gullone & King, 1992). This measure may indicate what specific fears or phobias the child may have, which may be involved in the child's separation anxiety or school refusal. The R-CMAS consists of 37 items and has three factors designed to measure chronic anxiety: worry/oversensitivity, physiological anxiety, and concentration (Reynolds & Richmond, 1985). The R-CMAS indicates the types of anxiety the child may be experiencing and how these compare to same-aged
peers’ anxiety. This measure may be useful in assessing general anxiety levels of children with separation anxiety disorder or school refusal. The STAIC is a scale containing 20 items assessing the child’s overall anxiety level (trait anxiety) and 20 items assessing the child’s situation-specific anxiety (state anxiety) (Speilberger, 1973). The STAIC may be useful in indicating situations in which a child with separation anxiety or school refusal experiences anxiety and may also indicate overall anxiety levels. The CDI is a 27-item instrument designed to measure depressive symptomatology (Kovacs, 1981). Although the CDI is not a measure of anxiety, anxiety and depression are often correlated, therefore it may make sense to assess for the presence of both disorders. If, in addition to anxiety, depression does appear to be a serious problem for the child, the treatment may need to involve a component designed to treat the child’s depression as well.

A more subjective measure that is often used to monitor a child’s anxiety level is the Fear Thermometer. The Fear Thermometer is a numeric rating scale, on which a child rates the amount of anxiety felt in certain situations. For instance, if a scale of zero to a hundred is used, zero would indicate no anxiety and a hundred would be the most extreme feelings of anxiety (King et al., 1998). This scale is useful particularly when systematic desensitization is part of the treatment. The Fear Thermometer will assist the child in identifying which situations are most and least anxiety-provoking, and desensitization can be utilized appropriately once these situations have been identified.

Parents and teachers may also be asked to complete rating scales about the child. Such rating scales include Achenbach’s Child Behavior Checklist (CBCL) for parents and the Teacher’s Report Form (TRF) (Achenbach, 1991a, 1991b). The CBCL and TRF are
broad-band measures that cover eight areas indicating the presence of problem behaviors in comparison to same-age peers. The Internalizing Problems composite on the CBCL and TRF may be elevated for children with separation anxiety disorder or school refusal. One of the subscales that may particularly relate to children with separation anxiety disorder or school refusal is the Anxious/Depressed subscale. Also, the Social Problems and Somatic Complaints subscales may be applicable as school refusal may be occurring in an attempt to avoid aversive social situations, and one of the possible symptoms listed by the DSM-IV for separation anxiety disorder is somatic complaints.

In addition to rating scales and checklists, functional assessment of the child's behavior may also be used. This type of measurement generally involves the assessment of the maintaining functions of the child's behavior. Common functions of school refusal behavior or separation anxiety disorder include avoidance of anxiety-producing situations at school or another applicable setting, avoidance of aversive social interactions at school, attention seeking, or the securing of tangible reinforcers (Lee & Miltenberger, 1996). To determine the maintaining function or functions of the behavior of concern, indirect and direct measures are often utilized. Indirect measures include structured or unstructured interviews with the child, parent, and teacher. Interviews may provide useful information concerning a specific description of the problem behaviors, duration of symptoms, and interventions that have previously been attempted by the child's teacher or parents. Another indirect measure is school attendance reports. If absenteeism or tardies are a concern, school attendance reports, if accurate, will indicate when these problems first began and the frequency and duration of absences and tardies. A final indirect measure is
the School Refusal Assessment Scale (SRAS). This scale is a brief checklist designed to
determine which of the possible functions of behavior is most likely to be the maintaining
function for the individual child’s behavior (Chorpita, Albano, Heimberg, & Barlow,
1996). For instance, a child whose behavior functions to avoid anxiety associated with
the school setting may fear a specific teacher or event that occurs at school, such as a fire
alarm or the school bus. A child avoiding aversive social interactions at school may have
problematic peer relationships or may fear evaluation by a teacher or peers. A child who
falls into the third category on the SRAS of attention-getting/separation anxious may
behave in a way to allow him or herself access to parental attention at home. The final
possible function of a specific tangible reinforcer would include behavior designed to
attain desired objects or activities, such as television time (Kearney & Silverman, 1990).
It is important to note that the same behavior (e.g. tantrumming) may serve a different
function for each individual child. A teacher, child, and parent form of this scale exist.
A study examining the utility of this scale for assessment and treatment has been
completed and will be described later (Kearney & Silverman, 1990).

Direct measures of behavior are also useful in completing functional assessments.
One direct measure is an observation of the child’s behavior including antecedents and
consequences of the behavior of concern. Teachers, parents, or the therapist may
complete these observations. These observations will help clinicians make hypotheses
concerning the maintaining functions of the students behavior (Lee & Miltenberger, 1996).
Monitoring the child’s behavior while absent from school may also assist in recognizing
the reinforcers involved in not being at school. For instance, a parent who notices that the
child spends time away from school playing video games may hypothesize that tangible reinforcers are maintaining the student’s behavior. If a child is constantly clinging to or interacting with a caregiver when absent from school, access to attention may be hypothesized to be a function of the child’s behavior. A more subjective form of data that might be useful is a measure of the student’s anxiety levels in various situations, such as playing at recess, taking a test, working on individual seat-work, and before and after school (Lee & Miltenberger, 1996). Thus, if avoidance of anxiety-producing situations is the function of the behavior, the increase in anxiety during certain situations may become apparent by using this type of measure. The Fear Thermometer, as discussed above, may be a useful measure to attain this type of data.

**Purpose of Current Paper**

To determine what interventions are most efficacious in the treatment of separation anxiety disorder and school refusal, the remainder of this paper will examine the research that has been completed on treatments for separation anxiety disorder and school refusal. The following section defines the method used to select the studies included in this paper, after which common cognitive-behavioral treatments will be described. Outcome studies on separation anxiety disorder and school refusal are then reviewed in detail. Following this discussion of specific treatment studies, the implications of the research for practicing school psychologists will be considered.

**Inclusion and Exclusion Criteria for Studies Reviewed**

To locate empirical studies or reviews of treatments of separation anxiety disorder, a computer search of Psychlit, Dissertation Abstracts, and ERIC was completed.
Also, a manual search of Psychological Abstracts was conducted, and the bibliographies of the consulted articles were examined for further sources. To be included, the majority of participants in the study needed to have a DSM diagnosis of separation anxiety disorder, and the study needed to specify outcome data for participants diagnosed with separation anxiety disorder. Separation anxiety disorder was not included in the DSM as a formal diagnosis until the DSM-III, so the search was confined to dates later than 1980. Because only three reviews and six studies (one review and four studies utilizing cognitive-behavioral treatments and two reviews and two studies using psychopharmacological methods) were found meeting these criteria, a search for studies of the treatment of school refusal following the methods outlined above was also conducted. Seven more studies and two reviews examining treatments of school refusal were found. Five used cognitive-behavioral methods, and one study and two reviews focus on psychopharmacological approaches. Though it cannot be assumed that cases of separation anxiety disorder will result in school refusal or vice versa, because of the overlap and similarities that are present between the disorders, it is believed that an examination of the treatment of school refusal may assist clinicians working with clients with separation anxiety disorder who also exhibit symptoms of school refusal. Included articles were confined to those available through Utah State University’s libraries or Interlibrary Loan during July 1999-May 2000.

Cognitive-Behavioral Treatment Strategies

Several common cognitive-behavioral treatments are often utilized in the treatment of all childhood anxiety disorders, including separation anxiety disorder and school refusal. These are reviewed here prior to discussing specific studies on separation anxiety disorder
and school refusal. These treatment methods include in vivo or in vitro systematic desensitization, flooding, self-instructional training, relaxation training, and contingency management (Bernstein & Borchardt, 1991; Dulmus & Wodarski, 1996).

Systematic desensitization involves graduated exposure to the feared stimulus. This can be accomplished using in vitro (imagined) or in vivo (actual) procedures or a combination of the two procedures. For instance, a child who fears separation from his mother may be instructed to first imagine his mother leaving for work one morning. The child would then be reinforced for successfully imagining this scenario. As time goes on the client would begin imagining increasingly more traumatic events. For instance, the child may imagine his mother leaving suddenly without his knowledge, and again, reinforcement would be provided for the child, if he or she is able to imagine these traumatic events. As anxiety-provoking imagery is paired with reinforcement, it is hoped that the anxiety associated with these events will decrease. Then the child may attempt to enter an actual situation where he and his mother will be separated. Reinforcement should be provided as the child continues through the desensitization process (King, Gullone, & Tonge, 1991). Flooding is a similar technique, but instead of gradually progressing to the most anxiety-provoking situation, the child is immediately thrust into such a situation, so that he or she is able to realize that the anxiety will eventually abate and no harm will come to him or her (Thyer & Sowers-Hoag, 1988). Both of these techniques may be very effective for children dealing with anxiety, though in vitro systematic desensitization may be difficult with younger children who are not developmentally capable of imagining situations. For younger children, in vivo desensitization may be a more useful technique.
Flooding can be disturbing to the child, and it is important that the child not be allowed to escape from the situation before the anxiety has alleviated, or else, in the future, greater anxiety may be associated with the situation (Bernstein & Borchardt, 1991).

To deal with anxiety-provoking situations more effectively, self-instructional training may be utilized (Rollings, King, Tonge, Heyne, & Young, 1998). Self-instructional training involves the examination, monitoring, and alteration of self-talk. Often children who are prone to anxiety will participate in negative self-talk. For instance, a child who often misses school may say to herself, "When I go back to school, all the kids will make fun of me for being absent for so long." This type of negative self-talk could then increase the child’s anxiety about returning to school and make treatment even more difficult. With self-instructional training, students are taught to first become aware of their self-talk, to evaluate whether it is negative or positive, and if it is negative, they are taught to substitute negative self-talk with positive self-talk. Self-instructional training may also involve cognitive restructuring (Anderson et al., 1998). Cognitive restructuring involves a recognition of faulty beliefs, (e.g. ‘No matter how hard I try on this test, I will fail.’) and then a replacement of the troublesome beliefs with more facilitative and appropriate cognitions (e.g. ‘If I study hard, ask the teacher for help, and use relaxation techniques, I can do my best on this test.’). Self-instructional training and cognitive restructuring are useful when dealing with maladaptive beliefs because they provide a suitable alternative to the negative thoughts that the child may have been experiencing (Anderson et al., 1998; Rollings et al., 1998).

Relaxation training may also be useful for children with anxiety disorders.
Relaxation training involves teaching children to utilize relaxation techniques when faced with an anxiety-provoking situation. Relaxation techniques may involve such activities as tightening and relaxing muscles and imagining peaceful or safe places. Younger children may have a more difficult time participating in such exercises. In such cases, emotive imagery might be used. Emotive imagery involves having the child imagine him or herself with a character, often from television or a favorite story, who evokes positive feelings for the child (King et al., 1991). The use of relaxation techniques may be effective in alleviating the commonly experienced physical symptoms of anxiety (Kearney & Silverman, 1990).

A final method often utilized with children with anxiety disorders is contingency management. Contingency management involves reinforcement for a child who displays the desired or appropriate behavior, and no reinforcement if the behavior is not used (Kearney & Silverman, 1990). Appropriate replacement behaviors may be taught to the child to substitute for the undesired behaviors. Shaping techniques may also be utilized in a fashion similar to that of systematic desensitization. A child may begin by receiving reinforcement for separating from his mother for half an hour, but after that criteria has been met satisfactorily, the criteria may be increased to a one hour separation before reinforcement will be given, and so on. Feelings of anxiety, however, may still be experienced by the child if contingency management is used without any of the anxiety-alleviating methods mentioned above (Kearney & Silverman, 1990).
Review of Cognitive-Behavioral Treatment Studies of Separation Anxiety Disorder

Separation anxiety was first reported to be treated using a psychodynamic approach (Thyer & Sowers-Hoag, 1988). Because of the lack of internal validity associated with these studies, it is difficult to determine if such methods were successful. As cognitive-behavioral treatments gained popularity, therapists and practitioners increasingly used these methods to treat anxiety disorders in children. In 1988, Thyer and Sowers-Hoag conducted a review of the research on behavioral treatment of separation anxiety disorder. Though separation anxiety had been originally described and reported in the 1940s, the authors only found eleven studies including participants clearly described as exhibiting separation anxiety. None of the participants in the studies had formal diagnoses of separation anxiety disorder, as there was no such label at that time in the DSM. Only three of the eleven studies were considered to be experimentally sound. One of these studies is by Blagg and Yule (1984) and is described in more detail in the school refusal section of this paper. The other two experimental studies did not meet the inclusion criteria for this paper as one was published in 1965, and the other describes a child with multiple phobias, but no DSM diagnosis of separation anxiety disorder or school refusal difficulties. The other eight examined studies consisted largely of case reports and used few experimental methods. Thyer and Sowers-Hoag concluded that more research was needed, but the studies reviewed suggested that treatments commonly used for other anxiety disorders such as differential reinforcement, shaping, and in vitro or in vivo systematic desensitization may also be useful for cases of separation anxiety disorder (Thyer & Sowers-Hoag, 1988).
Though Thyer and Sowers-Hoag noted the need for more research, there continues to be a paucity of studies on the treatment of separation anxiety disorder as a distinct condition. The research that has been completed approaches treatment from two basic modalities, cognitive-behavioral and psychopharmacological. Cognitive-behavioral treatments typically involve those cited above by Thyer and Sowers-Hoag. In addition, relaxation training, self-instructional training, and extinction may also be utilized in cognitive-behavioral treatments.

Ollendick, Hagopian, and Huntzinger (1991) illustrate the use of several of these methods in their study. Using a multiple-baseline design across two subjects, Ollendick et al. compared two phases of their treatment program. The participants in their study were both diagnosed with separation anxiety disorder according to the DSM-IIIR criteria. One participant was eight years old, and the other was ten years old. During what the authors labeled the self-control phase, the participants were taught in six sessions through modeling and role-play a coping model which involved the instruction of positive self-talk, problem solving strategies, and deep-breathing relaxation. Then the participants were exposed to the anxiety-provoking situation (going to bed, in this study). Though the participants were praised for exhibiting the relaxation and self-talk strategies, no reinforcement was presented for the actual target behavior, staying in bed, until the next phase. During the second phase, consisting of twelve sessions for one participant and eight sessions for the other, praise for displaying the coping behaviors was still given, but the focus of the second phase was reinforcement contingent on the amount of time the participants were sleeping in their own bed. Reinforcement consisted of jewelry, special
time with a parent, shopping trips, and praise. The authors found that the second phase, self-control training plus reinforcement resulted in the greatest degree of positive gains for both participants. At the end of treatment and at follow-up a year later for the first participant and two years later for the second, both participants were spending every night in their own bed. Furthermore, State scores on the STAIC decreased throughout the course of treatment, and remained low at follow-up for both participants (Ollendick et al., 1991).

In another study, Chorpita et al. (1996) treated a ten year old participant who met the DSM-IIIR diagnostic criteria for separation anxiety disorder and social phobia. The parents’ primary concern was the school refusal behavior exhibited by the participant. In this study, a functional assessment using the School Refusal Assessment Scale was completed. According to this measure, the function of the child’s behavior was ‘attention-getting/separation anxious’ (Chorpita et al., 1996). Treatment focused on the use of differential reinforcement. One problem behavior was placed on extinction each week. For instance, during the first week of the intervention, the child’s parents were instructed to ignore all instances of somatic complaints. Other appropriate and acceptable activities were introduced to act as functional substitutes for the problem behavior. For instance, the participant chose to cook with her mother during the week, and this behavior allowed the parents to provide attention that was now not being applied to the problem behaviors. A multiple baseline design across behaviors indicated the internal validity of this study. Following eight weekly sessions, all problem behaviors had ceased. At two week and twenty-four month post-treatment assessments, no criteria were met for any anxiety
disorders, and monitoring indicated no occurrence of the problem behaviors (Chorpita et al., 1996).

In a study by Hagopian and Slifer (1993), a six year old participant diagnosed with separation anxiety disorder using DSM-IIIR criteria was treated using graduated exposure. The child's main difficulty was attending school without the presence of her mother, so the treatment involved gradually increasing the amount of time the mother was away from the child during class. Also, proximity between the participant and her mother was gradually decreased. The child was reinforced with stickers at the end of the day for time spent in class away from her mother. These stickers could then be traded for prizes at the end of the week. Praise and encouragement were also used. After the success of the school attendance component of the treatment, a similar treatment was utilized to encourage the participant to sleep in her own bed. At post-treatment and two and nine month follow-ups, the participant scored in the normal range on all measures (CDI, R-CMAS, CBCL) and no longer met any criteria for any DSM-IIIR disorders (Hagopian & Slifer, 1993).

A final study examining treatment of anxiety disorders in children was designed to assess if individual cognitive-behavioral therapy in conjunction with family anxiety management would be more beneficial than individual cognitive-behavioral therapy with the child alone (Barrett, Dadds, & Rapee, 1996). Unlike the previous three studies described which utilized single subject methods, this study used a group design. Participants in the two treatment groups were compared to participants in a wait-list control group. Thirty of the seventy-nine participants were diagnosed with separation
Participants in this study ranged in age from seven to fourteen years. Participants were randomly assigned to groups. In this study, diagnostic interviews and self-report measures were used to assess improvement. Specifically, the Anxiety Disorders Interview Schedule for Children and for Parents, FSSC-II, R-CMAS, CDI, CBCL, and Depression Anxiety Stress Scales (DASS) were used. The DASS is a self-report measure which assesses depression, anxiety, and tension/stress in the child. Clinicians also made judgments concerning the amount of improvement in the areas of overall functioning, overall anxiety, avoidant behaviors, change of family disruption by the child’s behavior, change of parent’s perception of ability to deal with child’s behavior, and change of child’s ability to deal with difficult situations.

The participants in both treatment groups spent equal time with the therapist. In the cognitive-behavioral therapy only group, each individual child went through a program involving description and recognition of anxious feelings, cognitive restructuring, self-instructional training, and systematic desensitization. In addition to the cognitive-behavioral therapy described, participants in the cognitive-behavioral therapy and family anxiety management group met with the therapist and their family immediately following the cognitive-behavioral therapy portion. During the family anxiety management portion of therapy the family unit was encouraged to act as a team in attacking the anxiety disorder; parents were trained in reinforcement strategies (differential reinforcement and planned ignoring); parents were taught to deal with their own anxiety responses; and training in communication and problem-solving skills was provided. Participants in the
treatment groups attended twelve therapy sessions lasting from 60-80 minutes each.

The results of this study indicate that participants in both treatment groups made statistically significant gains over the wait-list control group, and children in the cognitive-behavioral therapy with family anxiety management group improved significantly more than children in the cognitive-behavioral therapy only condition. This finding was true across all participants, regardless of diagnosis (Barrett et al., 1996). Scores on the CBCL, FSSC-II, and R-CMAS for participants in treatment groups generally fell within average ranges at posttreatment and follow-ups. There was no difference between the wait-list control groups and treatment groups on the CDI, but all groups fell below the clinical cutoff on this measure prior to treatment, so it is not surprising that no differences were found at posttreatment. Because the participants in this study were diagnosed with several different anxiety disorders, the authors did not report specific changes in behavior that occurred, but instead relied upon the clinicians' ratings of general change in behavior as described above. At 12-month follow-up, participants in the cognitive-behavioral therapy and family-anxiety management group had made statistically significant gains over participants in the cognitive-behavioral therapy only group on all the scales rated by the clinicians (Barrett et al., 1996).

All of these studies indicate that cognitive-behavioral treatment resulted in positive outcomes for the participants with separation anxiety disorder. Each study used slightly different components of cognitive-behavioral therapy, however. Further research concerning the most efficacious components of cognitive-behavioral therapy when treating separation anxiety disorder may be useful for clinicians. All the studies examined here did
include some form of differential reinforcement or reinforcement associated with systematic desensitization indicating that classic behavioral methods may be a necessary component to successfully treat children with separation anxiety disorder. Most of the examined studies focused on the clinical significance of treatments (rather than exclusively on statistical significance), with an emphasis on normalization of behavior and elimination of problematic behaviors. The studies that reported specific changes in behavior all resulted in clinically significant changes for the participant. Only one of the studies reviewed used a group design, and statistical significance as well as clinical significance was obtained (Barrett et al., 1996). More studies utilizing group designs, while maintaining a focus on clinical significance, would further support the efficacy of cognitive-behavioral interventions. Though more research is necessary to strongly support the use of cognitive-behavioral therapy for clients with separation anxiety disorder, the evidence available indicates that the use of cognitive-behavioral therapy may be quite effective in reducing problem behavior. Additionally, Chorpita et al. (1996) indicated preliminary support for the use of functional assessment in designing interventions. Again, more research needs to be conducted on this technique to determine if it is a more efficacious approach to tailoring treatment to individual clients than a standard cognitive-behavioral approach to therapy.

Review of Psychopharmacological Treatment Studies of Separation Anxiety Disorder

As researchers began to hypothesize a link between childhood separation anxiety and adult panic disorder and agoraphobia, clinicians began to wonder if the medications used in the treatment of panic disorder and agoraphobia might also be useful for children
with separation anxiety disorder. This hypothesis, however, has not been supported through research. In a study on the use of Imipramine with children with separation anxiety disorder, no evidence was found to support its use (Klein, Koplewicz, & Kanner, 1992). Participants ranged in age from six to fifteen years, with a mean age of nine and a half. The participants in this study were first treated behaviorally for four weeks. Unfortunately, few details of the behavioral treatment are provided, so the efficaciousness of behavioral treatment for separation anxiety disorder cannot be further examined with this study. Twenty-four of forty-five participants no longer met DSM-III criteria following a month of behavioral treatment, though some required further behavioral treatment. The remaining twenty-one participants were entered into the Imipramine study. Eleven participants received Imipramine and the other ten received a placebo. Behavioral treatment continued on a weekly basis for all participants. Though most participants displayed a symptom reduction in treatment, this occurred across both the Imipramine group and the placebo group, and no statistically significant advantages were found for the use of Imipramine. The behavioral treatment which both groups were receiving may have led to the non-significant findings, or the size of the groups may have been too small to realistically exhibit statistical significance (Klein et al., 1992).

A study comparing the effects of Clonazepam to a placebo also did not obtain statistically significant results (Graae, Milner, Rizzotto, & Klein, 1994). Twelve children, eleven of whom were diagnosed with separation anxiety disorder, completed the double-blind, crossover trial. Ages of the participants ranged from seven to thirteen years. Two participants dropped out because of medication side effects, and another because of
noncompliance. Though nine participants improved on clinicians’ ratings, only six participants did not meet the criteria for an anxiety disorder at the conclusion of treatment. The use of Clonazepam was not supported by this study (Graae et al., 1994).

Two reviews of psychopharmacologic treatment of anxiety disorders in children also reported similar findings. These reviews indicate that there is little support for the use of tricyclic anti-depressants with children with separation anxiety disorder. Benzodiazepines such as Clonazepam are reported to be potentially useful, but not enough research has been conducted to make a firm conclusion. Also, research on the use of selective serotonin reuptake inhibitors is lacking, so it is not known if this class of medication would be useful for children with separation anxiety disorder (Kutcher, Reiter, Gardner, & Klein, 1992; Popper, 1993).

Based on current research, psychopharmacological treatments are not supported for use as an effective treatment for separation anxiety disorder. Perhaps, if cognitive-behavioral interventions fail, a psychopharmacological treatment may be attempted, but there is little research supporting the use of medication in children with separation anxiety disorder, so a physician should closely monitor dosage, side effects, and outcome of the treatment if a psychopharmacological approach is taken.

Review of Cognitive-Behavioral Treatment Studies of School Refusal

Because of the lack of research on separation anxiety disorder, the research on school refusal was also reviewed. These disorders are not identical and treatments for one do not translate directly into treatments for the other, but strategies for similar aspects of the disorders may be useful to consider when designing treatment for either condition. One
of the earliest studies comparing different treatments of school refusal was conducted by Blagg and Yule (1984). In this study utilizing a group design, a behavioral treatment utilizing reinforcement of students for time at school and in vivo flooding was compared to hospitalization and home schooling. Sixty participants were between 11 and 16 years old. Only six children in the study were younger than 11. The behavioral treatment was found to be superior to both alternatives. At a one-year follow-up, 83% of the children in the behavioral treatment group were attending school 80% or more of the time; 0% of the home schooling group were attending school 80% or more of the time, and 31% of the hospitalization group were attending regularly. In addition, Blagg and Yule report that none of the participants in the behavioral treatment exhibited separation anxiety at follow-up. This is compared to separation anxiety being exhibited by 7% of the students in the hospitalization group and 67% of the home schooling group. Unfortunately, Blagg and Yule did not indicate in this study how many of the participants were exhibiting separation anxiety prior to treatment, so it is impossible to make assumptions concerning the efficacy of these treatments with regards to separation anxiety, specifically.

A more recent study utilizing cognitive-behavioral therapy was performed by King et al. (1998). The cognitive-behavioral treatment spanned four weeks and included six sessions of individual therapy with the students. This therapy focused on identifying anxiety-producing situations, teaching relaxation techniques, and modifying negative self-talk to positive self-talk. Graduated exposure or desensitization was used to help students return to school. In addition, a parent-training component was used to assist caregivers in
recognizing their influence on their children’s behavior and ways in which parents could reinforce appropriate behaviors and ignore inappropriate ones. The parent-training component consisted of five weekly sessions. This cognitive-behavioral treatment was compared to a wait-list control group. Both groups consisted of 17 participants between the ages of five and fifteen. The participants in the cognitive-behavioral treatment group attended school significantly more than those in the wait-list control group at posttreatment. Participants in the treatment group were present at school an average of 93% of days compared to 56% attendance by the participants in the control group. Furthermore, the authors indicate that clinical significance was attained as well, as 90% attendance is considered to be an acceptable level of school attendance, and 15 of the 17 participants in the treatment exhibited an acceptable level of attendance at posttreatment compared to only 5 of the 17 participants in the control group. Additionally, the participants in the cognitive-behavioral treatment group improved on school attendance measures significantly over the wait-list control group. This improvement was maintained at the 12-week follow-up assessment (King et al., 1998). On the child self-report measures used (Fear Thermometer, FSSC-II, R-CMAS, CDI) the treatment group improved significantly over the wait-list control group. Average scores for the treatment group were within the normal range at the end of treatment. Within both the wait list control group and the treatment group, teacher ratings improved significantly on the TRF. This change would not be expected for the control group and is not explained by the authors. Parent ratings on the CBCL internalizing scale improved significantly for the treatment group over the control group and were in the normal range at the end of
treatment. Clinician Global Assessment of Functioning ratings also improved significantly for the treatment group (King et al., 1998). Thus, it appears that based on ratings and school attendance in this study, the cognitive-behavioral treatment group improved statistically and clinically significantly over the wait-list control group.

In a sample of seven children with a mean age of 12.5 years who were exhibiting school refusal, Kearney and Silverman (1990) examined the utility of the SRAS in designing cognitive-behavioral interventions which link the function of the school refusal behavior to treatment. Parent, teacher, and child forms of the SRAS were administered, and the combined mean scores were used to determine the maintaining function of the participant’s behavior. The maintaining function for four of the participants’ behaviors was found to be escape or avoidance of aversive social situations, and the treatment for these participants focused on modeling of appropriate social interaction and cognitive restructuring. One participant’s behavior was maintained by a general fear and anxiety of school situations, and systematic desensitization and relaxation training were the treatments utilized. Another participant’s behavior was functioning to gain attention for the child, and the treatment consisted of shaping and differential reinforcement of other behaviors. The final participant’s behavior was maintained by access to tangible reinforcers, and contingency management was used to treat this client (Kearney & Silverman, 1990). This study resulted in positive results for most participants. Six of the seven participants returned to school on a regular basis. The seventh student quit school and began working. In addition to the SRAS, self-report scales were used to monitor the participants’ anxiety levels. Generally, participant’s scores on these scales also decreased
to within normal ranges, with some variation between subjects due to the different interventions used. Though more research is necessary to further support the results of this study, the authors concluded that the SRAS may be useful in the development of treatment programs for students exhibiting school refusal behavior (Kearney & Silverman, 1990).

Two studies examining cognitive-behavioral treatment for school refusal were each conducted with one adolescent attending no school prior to treatment (Anderson et al., 1998; Rollings et al., 1998). In the first study, the adolescent, a 13 year old male, expressed severe anxiety in conjunction with school attendance. Over the course of three weeks, seven therapy sessions were conducted with the adolescent and his parents, separately. Treatment with the adolescent focused on cognitive restructuring and social skills training. The sessions with his parents focused on behavior management strategies including differential reinforcement and consequences for inappropriate behavior. At post-treatment and a five-month follow-up assessment, the student was attending school 100% of the time. Additionally, scores on the CBCL, TRF, Fear Thermometer, R-CMAS, and CDI had decreased to the average range at post-treatment and follow-up (Anderson et al., 1998).

In the second study, the therapist met individually with the 13 year old female. Ten sessions over the course of six months focused on positive self-talk, relaxation training, cognitive restructuring, social skills training, and contingency contracting. Following a change in schools, the student returned to school full-time. Graduated exposure and reinforcement were used in the school return. After treatment, the client
was attending school 95% of the time. At the twelve-week follow-up, school attendance had increased to 100% and scores on the R-CMAS, CDI, CBCL, and TRF had decreased to the average range (Rollings et al., 1998).

All of these studies utilizing cognitive-behavioral treatment approaches generally resulted in positive outcomes for participants exhibiting school refusal. All studies examined the clinical significance of the treatments and found that students returned to school more frequently and more regularly with cognitive-behavioral therapy. As with separation anxiety disorder, more research would lend greater support to the use of cognitive-behavioral therapy for school refusal. Additionally, studies examining what components of cognitive-behavioral therapy are most effective in treatment and over what time period therapy should occur may lead to more time-effective and focused treatment. For instance, some studies included a parent training component, but others did not. An examination of the factors that indicate that parent training or other individual components may be necessary to obtain positive results would be helpful to practitioners. Also, three of the five examined studies are single-subject designs. Though single-subject designs may exhibit internal validity, external validity may be a concern. More studies utilizing group designs would lend further information regarding the external validity of cognitive-behavioral treatments for school refusal.

Review of Psychopharmacological Treatment Studies of School Refusal

In addition to cognitive-behavioral therapy, psychopharmacological treatments have also been studied in children exhibiting school refusal or school phobia. In a study addressing the use of medication to treat school phobia, Berney et al. (1981) administered
Clomipramine to 27 participants and a placebo to 19 participants. Eighteen of the participants were younger than age 12, and the remaining 28 participants were 12 years or older. This was a double-blind procedure, and dosages were monitored and adjusted as necessary. Clinicians ranked participants on scales of depression, neurotic dimension, separation anxiety, ability to attend school, and overall severity. The participants in both groups improved according to clinicians' ratings, and the authors found that Clomipramine offered no advantage in treatment over the placebo (Berney et al., 1981).

Furthermore, a review of the use of anti-depressants to treat childhood disorders indicated that there was not sufficient support to warrant the use of tricyclic antidepressants for children exhibiting school refusal (Rancurello, 1985). The author suggested that if behavioral treatments fail to result in the child's return to school or if the child still reports severe anxiety associated with attending school, tricyclic antidepressants may be tried. The authors suggest that medication be used in conjunction with cognitive-behavioral treatment and that dosage and side effects of the medication be closely monitored (Rancurello, 1985). Another review by Allen, Leonard, and Swedo (1995) came to a similar conclusion and indicated that benzodiazepines and antidepressants may be helpful, but there is no definitive support for their use with children with school refusal.

These reviews and study provide little support for the use of medications in treating school refusal. Because of this lack of support, psychopharmacological treatments should not be the initial treatment attempted. Because school refusal may be the result of several different anxiety disorders, further diagnosis of an anxiety or other childhood disorder may be warranted if a psychopharmacological approach is being
considered. Then treatment may be approached according to the research available on that particular disorder. Though research is limited, the use of cognitive-behavioral therapy to treat school refusal is more strongly supported at this point than are psychopharmacological treatments.

**Treatment Acceptability and Integrity**

For interventions of childhood disorders, including separation anxiety disorder and school refusal to be successful, it is necessary that parents, teachers, and students be willing to cooperate with the chosen treatments. Treatment acceptability refers to the degree to which individuals involved in the treatment, such as children, parents, and teachers accept or agree with the treatment. Acceptability may be associated with the belief or perception that treatment will be helpful and will result in the desired outcomes (Gullone & King, 1991). Treatment integrity refers to how closely the prescribed treatment is followed and carried out by those involved (Hargett & Webber, 1996). Though this may not always be the case, if treatment acceptability is low, treatment integrity may also be compromised. For instance, Hargett and Webber (1996) report a case in which a mother of a school refusing child agreed to return her seven year old son to school if he ran away during the day, but then she did not adhere to the agreement, illustrating poor treatment integrity. A change was made to the treatment to have the neighbor return the child to school, but then the mother failed to contact the neighbor and inform her that her son needed to be returned to school. Finally, the therapists made an agreement with the child’s grandmother who was willing to carry out the intervention as planned. Thus, if a chosen treatment is not accepted by caregivers, treatment integrity will
likely suffer (Hargett & Webber, 1996). In addition, treatment integrity may also be compromised if there is other stress within the family. Troubled marriages, parent psychopathology or illness, and financial difficulties may also jeopardize treatment integrity. In such cases, therapy focusing on these difficulties or an alteration of the treatment approach to require less participation by parents may be necessary. Phone calls between sessions to assess the integrity of the treatment may also be useful in leading to immediate changes in treatment, when necessary (Rollings et al., 1998).

Continued assessment of treatment acceptability throughout therapy and inclusion of parents and teachers in decisions regarding treatment may be useful in encouraging treatment integrity. For example, some parents may be reluctant to put their child in a situation which will be anxiety-provoking. This may present difficulties for a practitioner treating a client with separation anxiety disorder or school refusal. Other parents may not support the use of reinforcement as an appropriate form of motivation. In such cases, a simple explanation of the rationale for such interventions may increase treatment acceptability or integrity. In other situations, however, it may be necessary for different approaches to be used, or the therapist may need to be solely responsible for implementing the intervention.

To determine which types of treatment are likely to be deemed acceptable by different groups of therapy participants, a survey including vignettes and different treatment options for school refusal was distributed (Gullone & King, 1991). Seventy-seven teachers and forty-two nurses comprised the professional component of respondents to the survey. One hundred and ninety-three students completed the survey, along with
sixty-four parents. All groups deemed behavior management as the most acceptable and potentially effective treatment method. After behavior management, home schooling and psychotherapy, hospitalization, and medication were seen as the most acceptable and effective treatments, respectively (Gullone & King, 1991). Therefore, though treatment acceptability may still be an issue when behavioral treatments to school refusal are used, it may be less of an issue than other treatment options. Of course, this study involved participants for whom treatment presumably was not an issue. Participants were simply asked to imagine themselves in such a situation and answer accordingly. If, however, these participants were actually presented with the situation they may respond differently. Furthermore, since these participants may not have been experiencing school refusal problems themselves or within their own family, it is possible that those actually dealing with such difficulties may respond differently than this group did.

One study discussed previously did include a treatment acceptability component. King et al. (1998) had the participants and the parents and teachers of the participants in the cognitive-behavioral therapy group complete a three-item satisfaction questionnaire. Following treatment, parents, teachers, and the children rated the program very highly. Additionally, King et al. report that there were no dropouts during cognitive-behavioral therapy in their study, further supporting the acceptability of the cognitive-behavioral treatment. As Hargett and Webber (1996) indicate this may not always be the case, and treatment acceptability and integrity must be assessed throughout treatment, and practitioners should be flexible enough to adjust treatment when needed and possible.
Implications of this Research for School Psychologists

Based on the research currently available, school psychologists should consider using cognitive-behavioral interventions to treat school refusal and separation anxiety disorder, as this approach is the most efficacious, according to the current research. When deciding on treatment strategies, school psychologists should recognize that the effectiveness of interventions is dependent on family involvement in treatment (King et al., 1998). Thus, it is imperative that school psychologists working with a child exhibiting school refusal with or without separation anxiety disorder work closely with the client’s family to insure treatment integrity. If treatment integrity is being compromised, the practitioner should explore the conflicts or reasons that parents may not be instituting the treatment as prescribed. In some cases, the methods used by the parents may be just as efficacious as those suggested by the therapist, in which case, the psychologist may wish to alter the approach to match the treatment being implemented by the family. On the other hand, if the methods utilized by parents are not as efficacious as the prescribed treatment, modifications may be made to make the optimal intervention more feasible for the family to implement. If practitioners are open to suggestions and change, those administering the treatment may be more willing to admit when the requirements of an intervention are too rigorous to be realistically implemented, thus, leading to more reliable communication between parents and practitioners.

In addition to increased treatment acceptability and integrity, preliminary evidence suggests that the efficacy of cognitive-behavioral treatments may be increased through the use of functional assessment techniques that determine the maintaining function or
functions of the school refusal behavior or separation anxiety symptoms. The studies examined in this paper illustrate the diverse symptoms that may be seen in children with separation anxiety disorder or school refusal. School psychologists should be knowledgeable of functional assessment techniques and ways in which to utilize the information gained from functional assessment in treatment. This will allow school psychologists to more accurately identify treatment components that will be efficacious for their clients' individual problems and symptoms. By streamlining cognitive-behavioral interventions to only include the elements that will most likely lead to the desired outcomes, fewer demands will be placed on teachers and parents, which, in turn, may increase treatment acceptability and integrity.

As separation anxiety disorder may lead to debilitating conditions in the future, and school refusal, if not treated effectively, will lead to a loss of educational and social opportunities, school psychologists are in a position to inform others of the importance of identifying and treating these conditions. An inservice training meeting for teachers that describes symptoms and outcomes of separation anxiety disorder and school refusal may lead to earlier identification of students for whom this may be a concern. Also, if teachers are aware of the consequences of these disorders, they may be more willing to participate and assist in interventions. School psychologists are also in a role in which they could make this information available to parents. Parents are likely the first people who will become aware of a child's separation anxiety or anxiety associated with specific school situations, and again, parents may be more willing to participate in interventions if they are aware of the importance of treating such disorders effectively.
By informing parents about the characteristics of separation anxiety disorder and school refusal, school psychologists are also in a position in which they could increase the number of referrals received from concerned parents whose children are exhibiting possible symptoms of these disorders. School psychologists may consider speaking at school meetings at which the parents will be in attendance. School psychologists could explain the importance of treating separation anxiety and school refusal as early as possible and could inform parents of the assistance available through the school psychologist. Additionally, some schools print a newsletter that is sent home to parents. School psychologists may be able to write a brief description of warning signs of separation anxiety disorder and school refusal and the importance of immediate intervention to be distributed in the newsletter. In the article, the phone number of the school psychologist could also be included to answer further questions or concerns the parents may have. Also, school psychologists could present information concerning these disorders and the help available on a school website for parents. By informing parents of possible problematic signs of separation anxiety disorder and school refusal and the resources and treatments available, referrals for children experiencing these problems may be received sooner than if parents are unaware of the impairments associated with prolonged school absenteeism and maladaptive reinforcement patterns. School psychologists may then increase the likelihood of a successful intervention and consequently lessen the time that students will be struggling with these disorders.

School psychologists themselves need to recognize the importance of identifying and treating cases of school refusal and separation anxiety disorder. The specific
treatment approach taken by a school psychologist depends on a number of factors including the child’s age, the specific symptoms the child exhibits, the function of the child’s behavior, and the resources available. Available resources may include family members and teachers willing to assist with the intervention, reinforcers for the student, assessment instruments, and time to devote to the case. If a school psychologist becomes aware of a child who is refusing school or who may be experiencing separation anxiety disorder, the first step in either instance is to assess the situation. The assessment process could begin with an interview of the child, the child’s parents or caregivers, and the student’s teachers. Interviews should focus on the duration of the problem behavior and on specifically what behaviors occur. For instance, does the child refuse to leave his or her bedroom in the mornings, are tantrums common when it is time to leave for school, does the child arrive at school in the morning, but then leave school grounds before school starts, is school the only situation the child avoids, when did the child first attempt to avoid the behavior, what does the child do when not at school, and how is the refusal behavior typically handled? The answers to these types of questions from both the caregivers and the teachers will allow the school psychologist to form a more complete picture of the child’s behavior. An interview with the child may lend information on the child’s perception of the problem and on possible reinforcers maintaining the behavior. A review of attendance records may indicate the frequency and duration of absences, which may assist the school psychologist in identifying the minimum duration of school refusal behavior.

In addition to interviews, assessment instruments such as those previously
discussed may be utilized. Instruments such as the STAIC or R-CMAS may indicate the level of anxiety the child is experiencing. Other measures, such as the CBCL, may help assess parents’ perceptions of anxiety or other comorbid problems. The SRAS may also be administered to offer further information concerning the maintaining functions of the child’s behavior. Because no research has specifically been completed concerning the efficacy of instruments to measure separation anxiety disorder or school refusal, the school psychologist should use his or her own best judgment of the available instruments and ensure that all instruments used are psychometrically sound. If anxiety is involved, each unsuccessful separation attempt reinforces the child’s feelings of anxiety. Thus, the earlier such cases are identified and treated, the more probable successful intervention is (King et al., 1998). Assessment may also involve direct observations if the child is in attendance at school long enough to be observed. The observations should focus on any avoidant or withdrawn behaviors the child may exhibit. If problematic behaviors such as tantrums have been reported, an observation of the antecedents and consequences of the problem behavior should be made. At this point in the assessment process, the school psychologist should be able to form hypotheses concerning the function of the child’s behavior.

After these steps in the assessment process have been completed, the school psychologist should meet with the parents and teacher to discuss treatment options. During this meeting the results of the various assessments should be explained, and the hypothesized functions of the child’s behavior should be described. A suggestion that the treatment be based on these functions should follow. Regardless of the function of the child’s behavior, the primary focuses of any intervention should be returning the child to
school, for at least a portion of the day, as soon as possible. Generally, if the child’s school refusal behavior is maintained by a specific or general phobia associated with school, treatment should focus on systematic desensitization and relaxation techniques. Young children may not be developmentally able to participate in relaxation techniques, so this aspect of the treatment may fluctuate depending on the specific client. If the child’s behavior functions as escape or avoidance of social situations, treatment should focus on cognitive restructuring and modeling of appropriate social behavior. If the behavior appears to be a way for the child to obtain attention, differential reinforcement of other behaviors and shaping of the desired behaviors should be the treatment of choice. Contingency management should be utilized if a child’s behavior is functioning to access tangible reinforcers (Kearney & Silverman, 1990). If the child’s behavior is maintained by more than one of these functions, the treatments may be combined as necessary. Because reinforcement seems to be a common component of successful treatments, the school psychologist should incorporate reinforcement into all interventions.

As treatment suggestions are made, the school psychologist needs to monitor and assess the caregivers’ and teachers’ reaction to the intervention. Parents and teachers should be given an opportunity to suggest alterations or additions to the treatment. The child should also have an opportunity to make suggestions concerning treatment. If systematic desensitization is the treatment of choice, the child will need to suggest which situations are most and least anxiety-provoking, so that desensitization can begin with exposure to the least anxiety-provoking situations and advance through the hierarchy. The child may also be able to suggest plausible reinforcers for appropriate behaviors. An
attempt to involve parents and teachers in treatment as much as possible should also be made. Parents and teachers should largely be responsible for interventions involving contingency management, differential reinforcement, and shaping. They may also be able to participate in modeling appropriate social interactions. The school psychologist will be responsible for meeting with the family and teachers regularly to discuss difficulties and to guide the intervention. The school psychologist will be responsible for cognitive restructuring exercises and systematic desensitization. Both of these intervention components may also involve the parents and possibly teachers if they are comfortable participating. In the research, treatment duration varies, so the school psychologist may want to consider each case individually and intervene as long as necessary.

In addition to the treatment itself, data collection should be planned. Data collection will depend greatly on the individual case. For instance, if tantrums are a problem, frequency and duration of the tantrums may want to be charted across the duration of the intervention. If absences or tardies are a problem, accurate attendance records may serve as data. If contingency management is being used, the frequency and type of reinforcement may be recorded for data collection purposes. In addition to such measurements, at post-treatment instruments given before treatment may be re-administered to detect changes in ratings.

Separation anxiety disorder and school refusal are impairing maladies that warrant immediate and effective treatment. Further research is necessary to truly understand the disorders and the circumstances under which they respond best to treatment. School psychologists are in a position to complete this research as they work with students with
separation anxiety disorder and school refusal. The rigorous data collection and treatment adherence required for research will not only increase the psychology community’s knowledge of efficacious treatments but will also result in data-driven treatment that can be adjusted as needed based on objective measures of the client’s needs and reactions to therapy.

Conclusion

Though separation anxiety disorder has been formerly recognized as an anxiety disorder of childhood since 1980, very little research has been completed examining effective treatments of this disorder. Treatments for school refusal which may result from separation anxiety disorder or other conditions have also been neglected by researchers. An examination of the research that is currently available on these disorders indicates that cognitive-behavioral interventions such as contingency management, shaping, cognitive restructuring, and systematic desensitization may be most successful in treatment of these conditions. The research on psychopharmacological treatments does not appear as promising. For this reason, it is suggested that practitioners attempt cognitive-behavioral interventions initially when treating separation anxiety disorder or school refusal. To obtain greater success with cognitive-behavioral approaches, treatment acceptability and integrity should be assessed throughout the duration of the intervention. If needed, changes should be made to the treatment plan to increase acceptability and integrity to the caregivers and teachers of the child. Because problems at school often accompany school refusal and separation anxiety disorder, school psychologists are in a position where they may be able to intervene with students exhibiting these disorders. They may also be able
to increase teacher and parent knowledge of the symptoms and outcomes of these conditions. School psychologists are also in a position to conduct additional research on these disorders. Future research should examine the most necessary treatment components of cognitive-behavioral interventions, the ideal number of sessions and the time span over which treatment should occur, and the use of functional assessment and associated treatments with separation anxiety disorder and school refusal. This research will allow practitioners to intervene more efficiently and to more effectively alleviate the adverse outcomes associated with school refusal and separation anxiety disorder.


Psychiatry, 33, 372-376.


Experimental Psychiatry, 22, 113-121.


