Separation anxiety disorder in toddlers

Karen Elizabeth Sims

University of Nevada, Las Vegas

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SEPARATION ANXIETY DISORDER
IN TODDLERS

by

Karen E. Sims

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Psychology

Department of Psychology
University of Nevada, Las Vegas
August, 1996
The Thesis of Karen E. Sims for the degree of Master of Arts in Psychology is approved.

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University of Nevada, Las Vegas
August 1996
ABSTRACT

The present study examined differences in families with a child with no symptoms of separation anxiety, subclinical separation anxiety (1-2 symptoms), and Separation Anxiety Disorder (3 or more symptoms). Specifically, an initial attempt was made to identify variables that may contribute to the development of Separation Anxiety Disorder (SAD) in toddlers. Parents of 60 toddlers were administered the SAD portion of the Anxiety Disorders Interview Schedule to determine if their child met the DSM-IV diagnostic criteria for SAD. Thirty percent of parents had children with no SAD, 43% had children with subclinical separation anxiety, and 27% of parents had children who met criteria for SAD. Parents completed the Family Environment Scale, the Conners’ Parent Rating Scale, and the Social Support Questionnaire-Short Form. Teachers of each child also completed the Conners’ Teacher Rating Scale. Results indicated that children with SAD displayed significantly more internalizing behaviors than children with subclinical SAD and children with subclinical SAD displayed significantly higher levels of internalizing behaviors than children without SAD. In general, families of a child with SAD reported higher levels of cohesion than families with a child without SAD, though differences were not significant. Additionally, families of children with SAD did not differ significantly from families of children without SAD with respect to levels of independence, conflict, and number of social supports. Results are discussed with respect to implications for etiology and treatment of SAD in toddlers.
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INTRODUCTION

Separation anxiety in children is characterized by excessive distress upon separation or anticipated separation from a parent or major attachment figure. The clinical syndrome has been described in the literature since the 1940s (Johnson, Falstein, Szurek, & Sveden, 1941). However, it was not until 1980, when the third edition of the Diagnostic and Statistical Manual of Mental Disorders was published, that separation anxiety was formally recognized as an anxiety disorder of childhood and adolescence (DSM-III; American Psychiatric Association; Francis, Last & Strauss, 1987). Prior to the DSM-III, adult models served as templates for classifying and understanding anxiety in children and adolescents (Last, 1989). In the DSM-IV (American Psychiatric Association, 1994), Separation Anxiety Disorder (SAD) is now a separate childhood category, no longer subsumed under the broad category of Anxiety Disorders of Childhood and Adolescence. It is now the only anxiety disorder specific to children.

According to the DSM-IV, the essential feature of SAD is anxiety surrounding separation from home or major attachment figures that persists for at least four weeks and is beyond what is considered developmentally appropriate for the child's age (Tonge, 1994). According to Rutter (1981), separation anxiety is normal from approximately 6 months until 2-3 years of age, peaking at 18
months. The development of a bond between caregiver and child during this time typically serves the biological function of protecting the infant from harm (Husain & Kashani, 1992). John Bowlby, a researcher who observed children separated from their parents for extended periods of time, referred to this bond between child and caregiver as attachment. He theorized that attachment provides a balance between infants' need for safety and their need for learning experiences. He viewed attachment as a highly evolved system of regulation that produces a "dynamic equilibrium between the mother-child pair." Whenever the distance between the two becomes too great, one or the other is likely to become anxious and attempt to reduce the distance (Bowlby, 1969). Thus, a child who exhibits anxious behavior upon separation at this stage would not be given a diagnosis of SAD.

For a DSM-IV diagnosis of SAD to be given, the development of symptomatology must occur before age 18 years, and the child must experience three of the following eight criteria: (1) excessive distress when separation from home or major attachment figures occurs or is anticipated, (2) persistent and excessive worry about losing, or about possible harm befalling, major attachment figures, (3) persistent and excessive worry about being separated from a major attachment figure, (4) persistent reluctance or refusal to go to school, (5) persistent and excessive fear of being at home alone without major attachment
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figures, (6) persistent reluctance or refusal to go to sleep without attachment figures or to sleep away from home, (7) repeated nightmares involving the theme of separation, and (8) repeated complaints of physical symptoms when separation occurs or is anticipated (American Psychiatric Association, 1994). Additionally, the disturbance must cause significant distress or impairment in the child's social, academic, or other important area of functioning. In contrast, DSM-III and DSM-III-R diagnostic criteria for SAD included (1) a ninth criterion stating that social withdrawal, apathy, sadness, or difficulty in concentrating on work or play was present when not with a major attachment figure, (2) a two-week duration requirement, and (3) no impairment criterion.

Generally, this paper reviews literature relevant to SAD, including a description of its clinical features, prevalence and comorbidity, and differential diagnosis. Much of the previous research on SAD used DSM-III and DSM-III-R criteria. A discussion of family correlates of the disorder is provided and limitations of prior research are addressed. A study to partially address these limitations is also presented.

**REVIEW OF LITERATURE**

In this section, a review of the literature on SAD is conducted to summarize previous work in this area and provide an initial historical context. Much of the literature on separation anxiety has described the syndrome in terms
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of school refusal behavior because the most obvious and often most distressing symptom of separation anxiety is reluctance or refusal to go to school. This has been a source of confusion for researchers and clinicians (Last, Francis, Hersen, Kazdin & Strauss, 1987). In fact, only recently have researchers agreed that children with school refusal and those experiencing separation anxiety represent two distinct populations (e.g., Wachtel & Strauss, 1994). Therefore, a historical review of literature on SAD necessarily incorporates some discussion of school refusal behavior.

During the 1940s, psychodynamically oriented psychologists (e.g., Johnson, Falstein, Szurek, & Svendsen, 1941) viewed "school phobia" as a manifestation of separation anxiety between a mother and her child. Three cardinal facets of this relationship were acute anxiety in the child, increased anxiety in the mother, and a poorly resolved early dependency relationship of the child to his/her mother (Pilkington & Piersel, 1991). According to the psychodynamicists, mothers of children with separation anxiety are ambivalent and encourage overdependence in the children to satisfy their own desire to be needed, resulting in repressed hostility in both mother and child. The mother becomes hostile because she realizes that she has not been successful in fostering independence in her child. As a result, she feels guilty and engages in overprotection of the child. Concurrently, the child develops anger and hostility.
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toward the mother because of her overindulgence, followed by a displacement of these emotions to the school setting (Coolidge, Hahn, & Peck, 1957; Johnson et al., 1941; Kelly, 1973).

During the 1960s, psychologists began to conceptualize separation anxiety in terms of other family dynamics. Leventhal and Sills (1964) stated that children at risk for school refusal behavior tend to overvalue themselves because of overindulging mothers who instill falsely inflated self-images. Within the school setting, the children then become overwhelmed and their self-images threatened because of new expectations from teachers and peers. The children subconsciously resist being evaluated in the same manner as other children and seek the protection and reassurance offered at home by their mothers.

During the late 1960s and early 1970s, theorists began to look at school refusal/separation anxiety more in behavioral terms. The basic psychodynamic principles were not abandoned but instead mixed somewhat with more empirical methodology. For example, behaviorists began to empirically investigate the phenomenon of separation anxiety and its relationship to psychodynamic principles by developing reliable methods of recording family dynamics. The DSM diagnostic criteria were also developed to emphasize reliability and empirical validation but still reflect many of the ideas put forth by early theorists (e.g., worry about harm to self and others).
One study that blended the two schools of thought was undertaken by Waldron, Shrier, Stone, and Tobin (1975). Using reliable clinical rating scales, they compared families of children with school phobia to families of children with other kinds of neuroses. The authors reported that families of children with school phobia showed excessive separation anxiety and dependency compared to children without school phobia. Additionally, they found a "greater tendency for the school phobic child to be more important to the mother than the father" (p. 805). In fact, this family imbalance occurred in more than half the families of children with school phobia and was thought to be linked to the mother's inability to separate from her child. The authors concluded that maternal overdependence maintains school refusal behavior because the child fears separation but not school. Recent research partially confirms the conclusions of Waldron and his colleagues, but also suggests that SAD and school refusal behavior are best conceptualized more broadly (Kearney, Eisen, & Silverman, 1995).

During the 1980s and early 1990s, the DSM conceptualized separation anxiety and specific phobia of school as "mechanisms of problematic school refusal behavior" (American Psychiatric Association, 1980, 1987, 1994; Kearney, Eisen, & Silverman, 1995, p.68). Thus, if a child refused school because of a desire to be with the primary attachment figure, a diagnosis of SAD was appropriate. However, if a child refused school out of a fear of some aspect of
school, then the correct diagnosis was specific phobia of school. Therefore, many contemporary discussions of SAD have been intertwined with those for school refusal behavior. For example, Sue, Sue, and Sue (1990) stated that "school phobia can reflect either a fear of separation from a parent or a phobic reaction to the school setting" (1990, p.466). According to Kearney et al. (1995), "the traditional concept of 'school phobia' and its theorized primary psychological mechanism, separation anxiety," may be viewed too narrowly and not be representative of all youngsters who display school refusal behavior. Instead, only one type of reinforced school refusal behavior, attention-getting, may be most analogous to separation anxiety.

**CLINICAL FEATURES**

The primary clinical feature of SAD is overwhelming panic or anxiety when separation occurs or is anticipated. In most cases, it is the mother from whom the child has difficulty being separated; however, it may involve the child's father or another major attachment figure in the child's life, such as an aunt or nanny. Many children with SAD state that they fear something awful will happen to their parents or that they, themselves, will be kidnapped, injured or involved in some accident that will separate him/her from their home and parents (Tonge, 1994). Because of their worries, these children find it very difficult to leave their home in general and their parents in particular.
Some children with SAD are unable to take pleasure in activities that other children typically enjoy, such as staying the night at a friend's house or going on a camping trip with peers. When faced with the possibility of separation, these kids often refuse to get dressed or cling to their parents. They may cry, scream, yell, hit, and experience somatic symptoms such as headaches or vomiting. Recurrent abdominal pain is the most common physical symptom associated with separation anxiety (Tonge, 1994).

If a child with SAD is forced to be apart from his/her major attachment figure, it is not uncommon for them to experience sadness, apathy, or difficulty concentrating on work or play. At home, young children with separation anxiety may "shadow" their parents, following them around the house, just a few steps behind (Last, 1989). Consequently, parents often describe children with SAD as demanding and in need of constant attention. Children with SAD may also look sad, cry easily, and report feelings of being unloved. They often complain that siblings are loved more than they, and in extreme situations may express wishes to die (Husain & Kashani, 1992). According to Last, Francis, and Strauss (1989), children with SAD often have rich, but fearful, fantasies and imagination relating to possible events and experiences that might separate them from their home and their attachment figures. For example, a child may be preoccupied with thoughts of monsters or threatening persons such as robbers.
Not all children experience the symptoms just described, and others experience symptoms only when they are away from home. These children often find themselves homesick and may call home often during the day. Not surprisingly, many children with SAD also experience sleep disturbances (Tonge, 1994). Younger children are usually unable to go to sleep by themselves and need their parents to be next to them while they fall asleep. Other children are unable even to sleep in their own beds and end up in bed with their parents, disrupting their sleep as well. It is also not uncommon for children with SAD to experience nightmares, usually with themes of separation (Tonge, 1994).

As has been previously discussed, the most common manifestation of SAD is reluctance or refusal to go to school. Gittelman-Klein and Klein (1980) found that over 80% of children refusing to go to school experienced separation anxiety. School refusal may also lead to academic difficulties and social avoidance (American Psychiatric Association, 1994). It should be noted, though, that children with SAD do not usually experience interpersonal difficulties. In fact, they are generally well-liked by their peers and have relatively good social skills (Last, 1989).

**ONSET**

By definition, the age of onset for SAD is before 18 years (American Psychiatric Association, 1994); however, SAD often begins in the preschool years.
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and onset during adolescence is rare. One study reported that the mean age of presentation at a clinic was about 9 years (Last, Hersen, Kazdin, Finkelstein, & Strauss, 1987). Children are often referred to mental health settings and diagnosed with SAD when entering kindergarten or first grade, with the major parental complaint being that the child won't go to school. However, it is probable that many children referred for treatment as they begin school experienced separation anxiety earlier but with less severity (Doris, McIntyre, Kelsy, & Lehman, 1971). With daycare placement becoming increasingly common, it seems likely in the future that many children will be referred for treatment as toddlers. One study of normal 3-year-olds, rated by parents and their preschool teachers, found that the level of separation anxiety prior to the start of preschool was predictive of the level of separation anxiety experienced throughout the child's first school year (Doris, McIntyre, Kelsy, & Lehman, 1971). Perhaps, then, the earlier separation anxiety is recognized in children and subsequently treated, the less likely a child is to experience separation anxiety during his/her first years of school.

In many cases, SAD has an acute onset and may be the result of a recent, major stressor in the child's life, such as moving to a new neighborhood, going to a new school, death of a family member, divorce, or illness of a relative. In addition, the onset of SAD often follows prolonged vacations from school (e.g.,
Christmas or summer vacation) and at certain developmental transitions such as entry into junior high from elementary school (Last, 1989).

**PREVALENCE, COURSE, AND DEMOGRAPHIC CHARACTERISTICS**

The prevalence of SAD is uncertain, although the DSM-IV states that it is not uncommon. Prevalence estimates average about 4% in children and young adolescents (American Psychiatric Association, 1994). A comprehensive study conducted in New Zealand of the prevalence of DSM-III disorders in preadolescents found that SAD was the most common anxiety disorder, with a prevalence of 3.5% (Anderson, Williams, McGee, & Silva, 1987). SAD and Overanxious Disorder (OAD), an anxiety disorder for which children could qualify in the DSM-III, are the most common disorders displayed by children referred to anxiety clinics (Last, Hersen, Kazdin, Finkelstein, & Strauss, 1987). Data from one community study determined the prevalence of SAD to be 2.4% (Bowen, Offord, & Boyle, 1990).

Other studies that rely on clinic populations to estimate prevalence indicate that 1-8% of children attending clinics have SAD, which usually presents itself as school refusal (Hersov, 1985). Tonge (1994) suggested that this is a conservative estimate because the number of milder cases such as those seen by school counselors, medical practitioners, and other professionals is not known. Some studies have estimated the prevalence rate of SAD using the prevalence
rates of school refusal, because school refusal is a more identifiable phenomenon with specific behaviors and a high proportion of children with separation anxiety (e.g., Lepton, 1962; Ollendick & Mayer, 1984). These studies suggest that "younger children with school refusal behavior are likely to have separation anxiety, but adolescents are more likely to qualify for either Mixed Anxiety Disorder or Depressive Disorder" (Bernstein, Garfinkel, & Hoberman, 1989, p.149).

According to Klein and Last (1989), the course of SAD is variable without intervention. Once separation anxiety has subsided, it is not uncommon for symptomatology to reappear during periods of life stress and developmental transition such as leaving for college or getting married. In other words, children with SAD may be vulnerable to excessive distress when attachments are disrupted or threatened, and this vulnerability "may remain as a stable personality trait throughout childhood and adolescence and into adulthood" (Black, 1995, p. 218). Black also points out that other children, especially the very young, may recover completely without subsequent difficulty.

There seems to be additional controversy about the sex distribution of SAD, with some authors arguing that there is equal distribution between the sexes (Hersov & Berg, 1980). More recent findings suggest, however, that SAD is more common in females than males (Orvaschel & Weissman, 1986). Last,
Strauss, and Francis (1987), and Last, Francis et al. (1987) also reported that SAD was more prevalent in females than males. The DSM-IV states that, in clinical samples, the disorder is equally common in both sexes but, in epidemiological samples, the disorder appears more common in females.

Evidence from community surveys (Orvaschel & Weissman, 1986; Velez, Johnson, & Cohen, 1989) suggests that children with anxiety symptoms and SAD come from families of lower socioeconomic status. Last, Francis, Kazdin, Finkelstein et al. (1987) and Last, Hersen et al. (1987) confirmed these findings, with 75% of children seen at their clinic for SAD coming from families of lower socioeconomic status.

Few studies have examined cultural or ethnic patterns associated with SAD. Orvaschel and Weissman (1986) suggested that SAD is more common in African-American than Caucasian children. However, another study examining children referred to a clinic found that SAD occurred primarily in Caucasian children (Last, Hersen, Kazdin, Finkelstein et al. 1987). It should be noted, however, that the demography of the area served by the clinic, and the extent to which various ethnic groups use these services, may result in a biased sample (Tonge, 1994). More research is needed before any valid conclusions can be drawn about cultural differences in children with SAD.
COMORBIDITY AND DIFFERENTIAL DIAGNOSIS

Children with SAD often present with various other childhood disorders (Wachtel & Strauss, 1994). Specifically, children with SAD may present with specific fears of the dark, ghosts, or bumblebees that may or may not be of phobic proportion (Last, 1989). Approximately one-third of children diagnosed with SAD also qualify for a secondary diagnosis of overanxious disorder (OAD), which manifests as generalized anxiety to a wide range of situations. Additionally, it has been reported that 22-24% of children diagnosed with SAD, or SAD plus OAD, experience a concurrent diagnosis of Attention Deficit Disorder, 0-9% qualify for a diagnosis of Conduct Disorder, and 14.3-27.2% meet criteria for Oppositional Defiant Disorder (Last, Hersen, Kazdin, Finkelstein, & Strauss, 1987; Last, Strauss, & Francis, 1987).

Differentiation of SAD from other anxiety disorders can be achieved by examining the specific situational determinants of the anxious symptomatology (Wachtel & Strauss, 1994). For example, children with Generalized Anxiety Disorder do not display situation-specific anxiety. Rather, they experience a variety of different worries in a range of situations, and anxiety occurs regardless of whether the attachment figure is present. Similarly, children with Social Anxiety Disorder exhibit specific fear and avoidance of interpersonal contact with
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strangers, and anxiety also occurs regardless of whether the attachment figure is present.

For treatment purposes, it is also important to distinguish "school phobia" from SAD (Wachtel & Strauss, 1994). School systems are frequently confronted with a child or adolescent who refuses to attend school, and a diagnosis of SAD is often given. All too often, however, school personnel indiscriminately place all children with this behavior into one group called "school refusers" (Gittelman & Last, 1989; Last & Francis, 1988). Traditionally, it has been thought that children are "school phobic" because they experience separation anxiety. Kearney, Eisen, and Silverman (1995) suggested, however, that separation anxiety is most "characteristic of younger children who initially refuse school, but older children do not report much fearfulness of being away from their parents or away from home" (p. 76). More often older children report being fearful of some aspect of school, such as social/evaluative situations. Thus, it is recommended that clinicians adopt a broad assessment procedure to determine what differential function school refusal behavior has for an individual child (Kearney, Eisen, & Silverman, 1995).

Recent empirical studies (Last, Francis, Hersen et al. 1987; Last & Strauss, 1990) of demographic variables also indicate that children with school phobia and those with separation anxiety represent two distinct populations. For example,
children with SAD are generally female, prepubertal, and from families of lower socioeconomic status, whereas children with school phobia tend to be male, postpubertal, and from higher socioeconomic backgrounds.

School refusal behavior that is the result of separation anxiety can also be distinguished from truancy (Wachtel & Strauss, 1994). Children who are truant tend not to experience anxiety when they are at school. Children who are anxious tend to stay at home with their primary attachment figures when they refuse school, whereas children who are truant stay away from home when they are not in school, unless their parents are away from the house. Additionally, children who are truant often display behaviors such as lying, stealing, and cheating, rarely seen in children with SAD (Wachtel & Strauss, 1994). For this reason, truancy is often associated with conduct disorder.

FAMILY CORRELATES

A considerable number of studies have produced evidence that familial factors are involved in the etiology of childhood anxiety disorders (Tonge, 1994). For example, Leckman, Merikangas, Pauls, and Prusoff (1983) found a familial relationship between anxiety and depressive disorders in first-degree biological relatives. Children of mothers with depression and panic disorder had the greatest chance of experiencing SAD. Specifically, the offspring of these mothers had a
38% chance of developing SAD (Weissman, Leckman, Merikangas, Gammon, & Prusoff, 1984).

Last, Hersen, Kazdin, Francis, and Grubb (1987) examined the lifetime psychiatric histories of mothers of 58 children with SAD, OAD, or both and compared them to a nonanxious control group. This study revealed that 83% of mothers of children with anxiety disorders had histories of anxiety disorders themselves, compared to 40% of the control group. Furthermore, 57% of the mothers of anxious children were currently suffering from an anxiety disorder, compared to 20% of the mothers from the control group. It has also been suggested that those experiencing SAD in childhood are at increased risk for developing adult anxiety disorders, such as Panic Disorder and agoraphobia (e.g., Gittelman & Klein, 1985; De Ruiter & Ijzendoorn, 1992). Other researchers contest these findings on the basis of poor validity, as some studies lack a control group and because diagnoses of SAD are often made from retrospective reports (Lipsitz, Martin, Mannuzza, Chapman, Liebowitz, Klein, & Fryer, 1994).

Kearney and Silverman (1995) examined specific patterns and interactions of families of children displaying school refusal behavior. They found that families of children who refused school for attention from their primary caregivers were significantly less independent than families of children who refused school for other reasons. They suggested that these families may display
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enmeshed, overinvolved parent-child relationships. The contribution of familial factors to the development of anxiety remains largely unexplored, however, and several authors (Dadds, Heard, & Rapee, 1992) have recently called for a more detailed analysis of family dynamics to improve assessment and treatment strategies for children with anxiety disorders.

LIMITATIONS OF PAST LITERATURE AND CURRENT STUDY

Although much of the previous literature regarding SAD tends to emphasize similar themes (e.g., enmeshed parent-child relationships), several drawbacks should be addressed in future studies. For example, much of the information about this population was derived from subjective reports and poorly defined diagnostic criteria. Although research since 1980 has improved in this regard (e.g., using more reliable diagnostic interviews), data regarding familial correlates of SAD are largely from the pre-1980 era and were not systematically derived.

In addition, almost no data are available with respect to SAD in preschoolers, despite some evidence that such behavior is predictive of functioning in the school-age years. As a result, little is known about potential precursors or early correlates that may be helpful in preventing later symptoms or consequences of SAD. Finally, little information exists about (1) specific internalizing and externalizing symptomatology that is comorbid with SAD, or (2)
the level of social support that families of this population experience. The latter may be an important mediating factor of SAD in that families with low social support may become overinvolved in the lives of family members and possibly predispose a child toward SAD.

The present study sought to address these concerns on a preliminary basis. Specifically, this study empirically investigated family variables that may be associated with SAD in three-year-old children. Family variables that were considered include independence, cohesion, control, and available social support. In addition, internalizing and externalizing behavioral correlates in the children were examined. The present study addressed these variables by employing empirical measures such as structured interviews and parent/teacher ratings. Specifically, hypotheses tested were that families of children with SAD would be characterized by: (1) lower levels of independence. This is based on research that indicates anxious children feel as though they have little involvement in family decisions and that their homes are less democratic than nonanxious children (Stark, Humphrey, Crook, & Lewis, 1990); (2) higher levels of cohesion. This stems from reports that anxious children are disengaged from outside activities and, as a result, are enmeshed (Stark et al., 1990) and psychodynamic theory which links high levels of cohesion between mother and child with anxiety (Waldron et al., 1975); (3) higher levels of conflict. This hypothesis is based on
findings that suggest levels of conflict discriminated referred families from nonclinic families (Patterson, 1982) and that anxious children perceive higher levels of conflict in their families than nonanxious children (Stark et al., 1990); (4) and fewer social supports than families of children without SAD. Social support has been shown to play an important role in parents’ ability to manage a child’s behavior. One study reported that mothers with low rates of extrafamilial contact were more likely to engage in longer, coercive, parent-child interactions than mothers with higher rates of extrafamilial contact (Wahler, Hughey, and Gordon, 1981). An additional hypothesis was that children with SAD would display higher levels of internalizing behavior and lower levels of externalizing behavior than children without SAD.

METHOD

Participants

Participants were parents of toddlers (31 males and 29 females) whose mean age was 42.20 months (s.d. = 4.04). Forty-eight (81%) of the children were Caucasian, four (7%) were Hispanic, six (10%) were Multiracial, and one (2%) was of Native American heritage. The average age of mothers of the toddlers was 32.51 years (s.d. = 5.21), and fathers’ ages averaged 35.83 years (s.d. = 7.09). Mothers worked outside the home an average of 27 hours per week (range 0-50 hours), and fathers worked outside the home an average of 43 hours per week.
(range 0-100 hours). Seventy-four percent of parents were married at the time questionnaires were completed, 7% were never married, 7% were separated, and 12% of parents were divorced. Parents of toddlers were recruited from Las Vegas area daycares/preschools: Creative Kids (4 different locations), First Presbyterian Preschool, University of Nevada, Las Vegas Preschool, Children's Oasis at the Lakes, Community College Child Development Laboratory School, and Fellowship Family Daycare. All toddlers evaluated attended preschool/daycare ranging from 5-40 hours per week. Table 1.0 provides the distribution of participants at each of the preschools.

Table 1.0 Preschool Distribution

<table>
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<th>Preschool/Daycare</th>
<th>% of Sample</th>
<th># of Parents Participating</th>
<th>No Symptoms of SAD</th>
<th>Subclinical SAD</th>
<th>SAD</th>
</tr>
</thead>
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<tr>
<td>Creative Kids-Lakes</td>
<td>10%</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Creative Kids-Katie</td>
<td>2%</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Creative Kids-Cheyenne</td>
<td>13%</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Creative Kids-Craig</td>
<td>15%</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Children's Oasis</td>
<td>3%</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>UNLV</td>
<td>28%</td>
<td>17</td>
<td>5</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>CCSN</td>
<td>7%</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Family Fellowship</td>
<td>15%</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>First Presbyterian</td>
<td>7%</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>100%</strong></td>
<td><strong>60</strong></td>
<td></td>
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</tbody>
</table>
Visual analysis reveals that participation was higher at the University of Nevada, Las Vegas, Family Fellowship, and Creative Kids-Craig preschools, which were also the largest of the participating preschools. Generally, the response rate from each of the preschools was 20%. Visual analysis indicates no obvious differences in levels of separation anxiety between schools. Of the 60 toddlers whose parents consented to participate, one parent later decided she preferred not to complete the questionnaires.

**Instruments**

The following measures were utilized:

*Anxiety Disorders Interview Schedule (ADIS).* The ADIS is a semi-structured diagnostic interview based on criteria provided by the DSM-IV. Both parent (ADIS-P) and child (ADIS-C) versions of the interview are available. For this study, the ADIS was slightly revised to be applicable for three-year-olds. The interview is subdivided into the various DSM anxiety disorders, and specific questions are provided based on the diagnostic criteria for each disorder. Each portion of the interview takes approximately 15-20 minutes to complete. The SAD portion of the ADIS was administered to determine whether children met the diagnostic criteria for SAD.
The ADIS has been reported to be psychometrically sound. Silverman and Nelles (1988) first examined interrater reliability of the ADIS. The overall kappa coefficient for the ADIS-C was .84, for the ADIS-P .83, and for the composite diagnosis .78. Items "worries harm befalls parent" and "wants parent near at bedtime" receive the most interrater agreement at a Kappa value of 1.0 (Silverman & Rabian, 1995). In a subsequent study, test-retest reliability was examined over a 14-day period. Satisfactory reliability was found, with an overall Kappa of .75 for composite diagnoses (Silverman & Eisen, 1992).

**Family Environment Scale** (FES). The FES (Moos & Moos, 1986) is a 90-item true-false, self-report survey designed to assess social-environmental characteristics within families. The FES contains ten subscales, three of which were used in the current study. These scales are cohesion (i.e., degree of commitment and support provided by family members), conflict (i.e., amount of openly expressed anger, aggression, and conflict), and independence (i.e., assertiveness, self-sufficiency, and independent decision making). Moos and Moos (1986) define healthy family environments as those characterized by higher levels of cohesion, expressiveness, and independence, and lower levels of conflict and control. Scoring the scale involves converting the raw score of each subscale into a standard score, which is compared to a mean of 50 and standard deviation of 10.
The FES has been found to be reliable and valid (Moos & Moos, 1986). Test-retest reliability ranges from .68-.86 and the internal consistency is moderate with values from .64-.75. Several studies support the construct validity of the FES. For example, it has been shown to be positively related to the Procidano-Heller indices of perceived support from family members and friends (Swindle, 1983), the Locke-Wallace Marital Adjustment Scale (Waring, McElrath, Lefcoe, & Weisz, 1981), and the Spanier Dyadic Adjustment Scale (Abbott & Brody, 1985). The FES also has good concurrent validity and has been found to be a sensitive measure of change during family-oriented crisis intervention and treatment (e.g., Bader, 1982).

*Conners' Parent Rating Scale- 48* (CPRS). The CPRS-48 (Goyette, Conners, & Ulrich, 1978) is a rating scale completed by parents to characterize patterns of child behavior. It consists of 48 items rated on a 0-3 scale, including “not at all, just a little, pretty much, or very much.” The CPRS-48 scales include conduct problem, learning problem, psychosomatic, impulsive-hyperactive, and anxiety. Scores are reported as linear T-Scores, which have a mean of 50 and a standard deviation of 10. Once transformed into a linear t-score, the variable may be interpreted, using the general guideline that any score above 55 is above average.
Interrater reliability of the CPRS-48 ranges from .46 to .57, with a mean of .51. No significant differences were found for mother and father ratings.

Though nothing has been published examining the test-retest reliability of the CPRS-48, the factorial stability appears adequate over time (Conners, 1990). With respect to its internal consistency, item-total correlations on the CPRS-48 range from .13 to .65.

The validity of the Conners' Rating Scales has been established using different techniques. Though the scales have been shown to be valid indicators of hyperactivity and attention deficit disorder, they have also been valuable indicators of other childhood behavior disorders. Support of the construct validity of the scale is provided by Campbell and Steinert (1978), who studied the relationship of the Conners' Rating Scales with Quay and Peterson's scales of the Behavior Problems Checklist. Both the Quay-Peterson Personality Problem scale and Inadequacy-Immaturity scale correlated significantly with the CPRS Anxiety scale. Factor analyses of the CPRS-48 were also done in 1978 by Goyette, Conners, and Ulrich. The analyses resulted in 5 orthogonal factors/subtests: Conduct Problem, Learning Problem, Psychosomatic, Impulsive-Hyperactive, and Anxiety.

For purposes of the present study, the CPRS was utilized to determine levels of internalizing and externalizing behavior. A child’s internalizing score
Separation Anxiety

was determined by taking the average of his/her scores on the anxiety and psychosomatic factors. Items that loaded onto these factors include “Fearful (of new situations, new people or places, going to school),” “Shy,” “Headaches,” “Stomachaches,” and “Vomiting.” Externalizing scores were determined in a similar fashion, using the average of scores on the conduct problem and impulsive-hyperactive factors. Items that load onto these factors include “Sassy to grown-ups,” “Destructive,” “Quarrelsome,” “Bullies others,” “Fights constantly,” “Excitable, impulsive,” “Restless or squirmy,” and “Restless, always up on the go.”

**Social Support Questionnaire- Short Form** (SSQSR). The SSQSF (Sarason, Sarason, Shearin, & Pierce, 1987) is an instrument that yields scores for number and quality of social support. It consists of 12 questions and is modeled after the original Social Support Questionnaire (SSQ). The SSQ is a valid and reliable measure that is useful in quantifying an individual’s perceived availability of and satisfaction with social supports. The SSQSR appears to be highly similar to the SSQ both in correlation of its two scores with comparable scores of the SSQ and in its relationship to a variety of personality and social competence variables. Test-retest reliability is good, and internal reliability between the two scales is moderate. For example, the number scores for the SSQ and the SSQSR
correlated .43 and .39, respectively, with the Social Network List (Sarason et al., 1987).

Procedure

Cover letters, consent forms, and addressed, postage-paid envelopes were issued to parents as they dropped off/picked up their children from preschool (see Appendices I, II). A brief cover letter invited them to participate, informed them of the time commitment required if they agreed, and discussed confidentiality of all information collected during the course of the study. Parents were asked to complete the consent form and to return it to the researcher in the envelope provided within seven days. They were also given the option of returning the consent form to their child's school in a designated box provided by the researcher.

As consent forms were returned, parents were contacted to schedule a convenient time to administer the SAD portion of the Anxiety Disorders Interview Schedule. Interviews were conducted over the telephone for parents' convenience and took approximately fifteen minutes to administer. The researcher was trained in the use of the interview by a professional using discussion and role play. The interviewer also audiotaped her end of the telephone call using a minicassette recorder.
Later, trained undergraduate students listened to each of the telephone interviews to ensure that the researcher was asking questions of all parents and doing so in an unbiased manner. Specifically, by circling "yes" or "no," they indicated whether the researcher asked each of the questions covered in the ADIS and any other questions not provided (see Appendix III). Another student noted the number of questions that were not asked during each interview. Finally, the percentage of questions asked consistently and accurately was calculated by dividing the total number of questions missed (from all the interviews) by the total number of questions possible. One interview was accidentally not recorded. As a result, there were 31 questions asked for 59 subjects, yielding a total of 1829 questions to be asked. The interviewer missed a total of 30 questions across all of the interviews, meaning she failed to ask 1.6% of the questions. In other words, 98.4% of the time the interviewer asked each of the questions and did so in an unbiased manner.

From these telephone interviews, three groups of children were formed. The first group consisted of 18 children (30%) who did not meet the diagnostic criteria for SAD, as determined by the diagnostic interview. The second group consisted of 26 children (43%) with subclinical separation anxiety, and the third group consisted of 16 children (27%) who met the diagnostic criteria for SAD.
Within two days of completing each interview, the researcher returned to the preschools and distributed the Family Environment Scale (FES), Conners' Parent Rating Scale-48 (CPRS-48), Social Support Questionnaire-Short Form (SSQSR), and a demographic sheet (see Appendix IV) with another postage-paid envelope. In the event that a child was not returning to the preschool within this time frame, questionnaires were mailed directly to parents at their home, after having received permission. To counterbalance any effects due to external forces, such as fatigue, the scales were compiled and distributed in random order. Parents were asked to complete the questionnaires together and return them within seventy-two hours in the same manner as the consent forms.

RESULTS

Part I: Data Analyses

Initially, a one-way analysis of variance (ANOVA) with three groups was performed for each dependent variable to determine if differences existed between the groups. Subsequently, a Student Newman Keuls Test (SNK) was performed to determine where differences occurred. SNK was selected to maximize power while reducing the possibility of chance differences. To determine which, if any, of the hypothesized dependent variables predicted SAD, a multiple regression analysis was performed. Independence, cohesion, conflict, number of social supports, internalizing, and externalizing behavior were used as predictors based
on the stated hypotheses. Descriptive statistics (i.e., means, standard deviations, and ranges) were also computed to examine demographic variables of the sample. There were no differences between the groups with respect to age, gender, and race. Therefore, any differences in the groups are not due these variables.

The analyses were completed using independence, cohesion, and conflict subscales of the FES, quality of social support as determined by the SSQ-SF, and internalizing and externalizing scores derived from the CPRS-48, as discussed previously. Post hoc tests were only performed when significant differences were revealed.

**Part II: Analyses of Variance**

Analyses of variance between the three groups (nonclinical, subclinical, SAD) yielded no significant differences with respect to levels of independence, cohesion, conflict, or social support in families. Analyses of variance between the groups did reveal a significant difference, $F(2, 56) = 18.910, p < .0001$, with respect to levels of internalizing behavior. Post hoc analyses revealed significant differences ($p < .05$) between groups 1 and 3 and groups 2 and 3. That is, children with SAD displayed significantly higher levels of internalizing behavior than children with no symptoms of separation anxiety and children with subclinical separation anxiety.
Significant differences, $F(2, 56) = 4.187, p < .020$, were also found with respect to levels of externalizing behavior, though not in the predicted direction. Subsequent analyses indicated significant differences ($p < .05$) between groups 1 and 3 and groups 2 and 3. That is, children with SAD displayed significantly higher levels of externalizing behavior than children with no symptoms of separation anxiety and children with subclinical separation anxiety. Table 2.0 provides alpha levels for each of the dependent variables.

### Table 2.0

<table>
<thead>
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<th>Alpha Level</th>
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<td>Independence</td>
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<td>Cohesion</td>
<td>.149</td>
</tr>
<tr>
<td>Conflict</td>
<td>.248</td>
</tr>
<tr>
<td>Social Support</td>
<td>.294</td>
</tr>
<tr>
<td>Internalizing *</td>
<td>.0001</td>
</tr>
<tr>
<td>Externalizing *</td>
<td>.020</td>
</tr>
</tbody>
</table>

### Part III: Multiple Regression

A multiple regression analysis to predict category membership (no symptom, subclinical, clinical) was significant, $F(6, 50) = 4.907, p < .0005$, $r^2 = .37062$. Dependent variables included independence, cohesion, conflict, number of social supports, and internalizing and externalizing behavior. Parent reports of internalizing behavior accounted for the majority of the variance with
Separation Anxiety

$p < .0001$. Externalizing behavior was the next best predictor with $p < .2878$.

None of the other predictors approached significance.

Part IV: Differences in Demographic Data

With respect to demographic data, some differences existed between the groups. First, there was a significant difference in the number of years that fathers attended college. Post hoc analyses revealed differences between groups 1 and 3 and groups 2 and 3. Fathers of children with no symptoms of SAD, subclinical separation anxiety, and SAD attended an average of 3.72, 3.27, and 0.87 years of college, respectively. One implication of these data is that the more educated a man, the less likely he is to have a child with SAD. However, fathers' level of education may also be related to the family's income level. Therefore, it may be family income and not education that impacts upon the development of SAD.

In fact, the groups differed with respect to household income as well. Post hoc analyses revealed significant differences between groups 1 and 3 and groups 2 and 3. Average income ranged from $41,000-50,000 in families of children with no symptoms of SAD and subclinical separation anxiety and from $31,000-40,000 in families of children with SAD. There are two possible implications of these data. First, it may be that fathers of children without SAD tend to be more educated and make more money, allowing mothers to work fewer hours and
separate from their children less frequently. Second, children with SAD may tend to come from single parent families and thus families with less income.

Indeed, post hoc analyses of current marital status revealed significant differences between groups 1 and 3 and groups 2 and 3. Children with SAD more often had parents who were separated or divorced than children with subclinical separation anxiety or no symptoms of SAD. Seven parents of children with SAD were separated or divorced. However, only four parents of children with subclinical separation anxiety and one parent of a child without SAD were separated or divorced.

In these cases of separation or divorce, significant differences were also found with respect to the custody arrangement. Post hoc analyses revealed differences between groups 1 and 3 and groups 2 and 3. Custodial rights in the one nonclinical case were awarded to the father. Custodial rights in the four subclinical cases were awarded to two fathers, one mother, and jointly in one case. Custodial rights in the seven clinical cases were awarded jointly in three cases and to the mother in three cases. It is not likely that custodial arrangement affected the current results because of the small number of parents for whom it was an issue.
DISCUSSION

The present study empirically investigated family variables associated with Separation Anxiety Disorder (SAD) and identified early correlates that may be helpful in preventing its later symptoms and consequences. Data from ANOVA and multiple regression indicated significant differences in levels of internalizing and externalizing behavior in children with SAD compared to children without SAD. Generally, children with one or two symptoms of SAD (subclinical separation anxiety) behaved much like children with no symptoms of SAD. Toddlers in the subclinical group did not experience as much impairment as those with SAD, but instead showed mild discomfort in a limited number of situations. For example, parents of toddlers in the subclinical group often reported that their child required an adult/parent to remain with them as they fell asleep at night or that their child slept in bed with them.

Though toddlers in the subclinical group did not differ much from children in the nonclinical group, children with SAD differed significantly from both groups in levels of internalizing and externalizing behavior. Parents of toddlers in the clinical group reported that their children were excessively fearful, worried about being away from them, and acted out externally as a result of their anxiety. They reported that their children get very upset, cry, beg them to stay home, and avoid going places such as preschool that provoke separation. Additionally,
toddlers in this group often needed to have a parent stay with them as they fell asleep or regularly slept in their parents’ bed. In each of these cases, behavior often escalated if the toddler didn’t get his/her way. Thus, parents of these toddlers might report not only high levels of internalizing behavior (as one would expect), but also high levels of externalizing behavior when their child felt threatened by separation.

Analyses of variance and multiple regression data indicated no significant differences in families with respect to levels of independence, cohesion, conflict, and social support. Several implications for these results exist. First, it may be that the sample was too small and future studies will reveal differences in these family variables. Second, it is possible that the Family Environment Scale was not sensitive enough to measure more important and specific family variables. Perhaps the scale measures more global concepts and, as a result, no differences were found with respect to family dynamics. Specifically, the FES did not measure parental reactions to their child’s behavior that may play a role in the development of the disorder. A third possibility is that parents responded to items on the FES in a socially desirable manner. It may have been difficult to admit to their own or their family’s shortcomings.

Another explanation for the lack of family differences is that SAD is more a child-based disorder than one that stems from family variables. Specifically,
some children may be genetically predisposed to be anxious. Some evidence exists that suggests anxiety is a heritable trait. For example, Leckman et al. (1983) found that children with SAD often come from families with a history of Panic Disorder.

Temperament may also predispose some children to develop SAD. Twin studies indicate that individuals have temperamental differences even in infancy (Buss & Plomin, 1975). Thomas and Chess (1982) identified behavioral traits they believed define temperament. They found that "most children can be classified into one of three broad temperamental categories from the time they are infants" (p. 139). They identified "easy" babies who were playful, regular in their biological functions (e.g. sleep), and readily adaptive to new situations. "Slow to warm up" babies were slow to respond, displayed low activity levels, and tended to withdraw from situations in a mild manner. Finally, "difficult" babies displayed irregular biological functions, irritability, adverse and intense responses to new situations and people, and withdrawal (Chess & Thomas, 1982). Children with SAD may have been "difficult" babies with a stable temperamental characteristic that predisposed them to react adversely to separation.

If genetic factors and temperamental characteristics predispose a child to SAD, then parents' reactions to the child may play a role in the final development and maintenance of the disorder. For example, a parent's reaction may serve to
reinforce or mute a child’s separation anxiety and subsequent behavior (e.g., clinging, crying). Specifically, a child whose parent confidently reassures him/her that everything will be fine and walks away may adjust to separation with minimal discomfort over the long term. On the other hand, a parent who continually responds to a child’s anxiety by acquiescing to the child’s demands, using bribes, or showing distress may encourage the child’s behavior. A parent who is apprehensive and anxious about separation him/herself may also model such behavior. The end result is that some toddlers who are predisposed to be anxious may adjust well to separation, whereas others do not.

In this study, toddlers in the clinical group may have had a biological predisposition to become anxious to new stimuli such as separation. However, undetected family dynamics, such as parental reactions, may have encouraged rather than muted the expression of the anxiety. Parents may have given in to their children’s pleas, either by picking the child up and showing affection, agreeing not to leave, or crying themselves. These responses may have reinforced or modeled the child’s behavior and increased the likelihood of separation anxiety. Parents of children in the nonclinical group may have responded to the child’s behavior in a neutral manner, providing simple reassurance and moving on.
Assessment Recommendations

Based on the results of this study, clinicians are encouraged to carefully evaluate levels of internalizing and externalizing behavior during assessment of children with SAD. There may be a tendency to conclude that a child's behavior is not anxiety-related if he/she displays significant acting out behavior. Results of this study indicated, however, that children with SAD are likely to act out. Furthermore, because acting-out behavior is often disturbing to others, parents may seek treatment for the child’s behavioral problems and not separation anxiety. Clinicians should be wary of this and evaluate whether externalizing behavior may be “masking” separation anxiety.

Initially, a clinician may suspect that a toddler has SAD if the child is hesitant to leave his/her parent’s side. For example, some toddlers readily entertain themselves and don’t mind when their parents leave the room, whereas others become noticeably upset, scream, cry, and require reassurance. The latter is likely to describe youngsters with SAD. It is also important to observe parent-child interactions during assessment because they may be a good indicator of how parents relate to their children at home (Mash & Terdel, 1988). Furthermore, clinicians should observe parents’ reactions to their child’s behavior to assess parenting skills and styles.
Although parent-child interactions can be telling, parent reports of the child's behavior will likely be more valuable. Clinicians may gather information informally or utilize a semi-structured interview such as the ADIS. From the results of this study, the major symptoms to look for include (1) crying, clinging, and begging to avoid separation from a parent/caregiver, (2) fear of going places that provoke separation, and (3) resistance to sleeping alone. Teacher reports may also provide valuable information about the child's behavior at school and, with parental consent, can be obtained informally or with the use of a rating scale. The Conners' Teacher Rating Scale, for example, yields scores for emotional indulgence and anxious-passive behavior. Children with SAD may score in the clinical range on these scales. When rating children with SAD, teachers often endorse items such as "Submissive," "Shy," "Fearful," "Demands must be met immediately," "Overly sensitive," "Sullen or sulky," "Cries often and easily," and "Stubborn." Finally, because toddlers' reports of their own behavior/feelings are inconsistent and unreliable, clinicians may wish to engage the child in pretend play to elicit feelings of fear surrounding separation. Doll houses can be helpful tools because they allow children to recreate interactions between family members, including interactions involving separation.
Treatment Recommendations

Based on results from this study, several recommendations are made with respect to the treatment of SAD. Because parent reactions may play a role in the development and maintenance of the disorder, parent training seems an appropriate treatment option. To minimize a child’s fears, parents may be taught principles of behavior management (Silverman & Kurtines, 1996). For example, when a child is fearful and worried about separating from a parent before work or school, parents may find it helpful to know that children respond well to routine. Therefore, a morning routine could be established during which the child completes all required tasks, spends quality time with a parent, and knows what to expect. A similar routine can be established before a baby-sitter arrives as well.

Parents may also be encouraged to provide their children with simple reassurances in a neutral manner and then ignore the anxious or acting-out behavior. However, they should also be attuned to times that the child is behaving appropriately and praise him/her for the behavior, making a statement such as “I am very proud of the way you’re behaving today. Mom/Dad is happy when you’re brave.” Additionally, when a child is taken someplace, such as preschool, parents should avoid anxious behavior on their part and model appropriate behavior so the child believes his/her parents are comfortable with
any separation. Often what occurs, though, is that parents feel guilty for leaving their child and become upset when he/she cries.

Clinicians may consider teaching more verbal toddlers and older children to use positive self-statements such as “I know I can go to school today without crying.” The children can also be instructed to use deep breaths to calm themselves when they become fearful about separation. These techniques offer children reassurance and teach them that they have some control over how they feel and behave (Eisen & Kearney, 1995).

Because children with SAD are not only fearful and anxious but act out as well, parents may also be taught how to effectively manage their child’s inappropriate behavior. First, they can implement a system of reward for desirable behavior. For example, they can design a sticker chart and award one each time their child goes to school without tears or doesn’t become upset when the baby-sitter arrives. For each number of stickers, the child could earn special time with a parent, perhaps playing a game or going to the park. This kind of reward is especially effective for children who exhibit symptoms of SAD to get attention. As children become older, a similar system can be utilized in which children receive points rather than stickers and earn special privileges (e.g., going to movies) as a result (Barkley, 1989).
The most common symptom reported by parents of toddlers with SAD was difficulty at bedtime. Parents should develop a regular bedtime routine during which a child may take a bath, brush his/her teeth, or lay out clothes for the following day. Another popular nighttime ritual, reading a bedtime story, provides an ideal opportunity for parents to spend quality time with their child at the end of each day. Regardless, toddlers should know ahead of time that bedtime is approaching and what to expect.

Following the nightly routine, toddlers should be expected to sleep in their own beds. In the event a child is unable to sleep in his/her own bed, parents may gradually move the child from their bed into his/her own bed. For example, they can prepare a mattress for the child to sleep on the floor next to their bed and gradually move the mattress closer to the child’s room as he/she is more comfortable. Used in conjunction with a system of reward for each night’s success, this technique may be effective and reduce parental guilt (Mindell & Cashman, 1995). Parents may be tempted to acquiesce to their child’s demands, especially at night when tired, so clinicians should warn them of future negative consequences and possible relapse.

Limitations of Current Research/ Future Recommendations

The current study, though one of the first of its kind, has several limitations. First, sample size was small, so differences may not have been
revealed where they truly exist. Future research with more participants is necessary and could reveal a different picture with respect to family dynamics in families of children with SAD. Furthermore, the sample was biased in that only toddlers whose parents consented to participate were evaluated. Future research could solicit a more representative group of parents to participate. Also notable is the fact that fewer fathers \((n = 4)\) were administered the ADIS than mothers \((n = 56)\) and did not play a large role in completing questionnaires. Additional research in this area could solicit more participation from fathers to examine whether differences exist in mothers' and fathers' reports. Ideally, the ADIS and any other diagnostic tool should be administered to fathers of half the toddlers and to mothers of the other half.

Though this study suggests there is no relationship between family variables and SAD, previous literature indicates otherwise and should not be dismissed (e.g., Tonge, 1994; Weissman et al., 1984; Dadds et al., 1992; Patterson, 1982; Wahler et al., 1981). Future research should explore the relationship between family dynamics, such as parental reactions to children's behavior, and SAD. A parent training program could be offered to parents of children with SAD to confirm the role of parental reactions in the development of the disorder. In addition to parent reactions, the relationship between infant temperament and SAD should be investigated to determine what role it plays in
the development of SAD. Finally, it is suggested that this sample be followed over time to measure the stability of SAD.
Dear Parents:

As a part of a joint effort between your child's school and the Department of Psychology at the University of Nevada, Las Vegas, we are interested in having your child participate in a research study looking at changes in the familial environment as a child enters a preschool setting. Understandably, changes during this time often cause parents and children to become anxious, and it is this level of anxiety that we are interested in examining.

The study that we have designed does require some involvement on your part. All parents of three year olds relatively new to school are invited to participate. If you consent to participate, you will be agreeing to a short telephone interview (approximately 15 minutes) with myself. Of course, this interview will be set up at your convenience. A subgroup of parents may also be asked to fill out a few short questionnaires pertaining to their child's behavior and family functioning. These questionnaires may be taken home and will take approximately 45 minutes to complete. Additionally, teachers of these children would be asked to fill out one questionnaire pertaining to the child's classroom behavior.

It is important to stress that all information obtained in this study will be kept entirely confidential. Dr. Kearney and myself will be the only two people to see the names attached to the information. Once collected, the information you provide will be summarized into a large, anonymous data pool. General results of the study will be made available to parents upon request at its conclusion, however information about an individual child will not be reported.

It is my wish that participation in this study be as easy for you as possible. For this reason, I am willing to accommodate your scheduling needs. I am excited at the prospect of working with all of you. If you wish to participate, please sign the attached consent form and return it to me in the envelope provided. PLEASE RETURN THE ATTACHED FORM WITHIN 48 HOURS. For your convenience, you may also return the consent in the box provided at your child's preschool.

Of course, you may feel free to withdraw from this study at any time, even after you have consented to participate. Finally, if at any time you have questions about his project, contact Dr. Christopher Kearney at 895-3305. Thank you for your consideration.

Christopher A. Kearney, Ph.D.
Associate Professor, Psychology
University of Nevada, Las Vegas

Karen E. Socha
M.A. Candidate, Psychology
University of Nevada, Las Vegas
APPENDIX II

CONSENT FORM
Consent Form

This research study is designed to explore changes in the familial environment as toddlers enter a preschool setting. As a participant, you will be given a telephone interview lasting approximately fifteen minutes. After this initial interview, you may be asked to further participate by filling out several paper and pencil questionnaires. It will take approximately 45 minutes to complete these questionnaires. If there are any questions in the interview or in any of the questionnaires that you do not want to answer for any reason, please feel free to skip these items. It is hoped, however, that you will respond honestly to all the items. In addition, you may terminate your participation in this study at any time without giving justification.

All information collected will be encoded numerically to ensure confidentiality. The coded data will only be examined by the researchers and will not be used for any purpose other than the scientific goals of the study. Furthermore, at no time during the study will your name or your child's name be associated with the responses you give.

While there are no known effects or hazards as a result of participation in this study, if there are any problems or questions, please contact Christopher Kearney, Ph.D. in the Psychology Department at UNLV at 895-3305.

If you agree with the following paragraph, please sign below and return this form in the postage paid envelope provided.

I have been given the opportunity to ask questions about this project, and I am satisfied that I understand what will be expected of me. Any information I provide will remain confidential with respect to my identity. Furthermore, I understand that I am free to withhold answers to any specific questions and am free to withdraw from the study at any time.

__________________________  __________________________
        Child's name             Date

__________________________  __________________________
        Parent's signature      Telephone Number

Please indicate when is the best time for you to be reached  ________________

When I leave my child, he/she gets very upset and begs me to stay with him/her.
True  False
APPENDIX III

RECORD OF INTEGRITY
Record of Reviewer Integrity

Interview #  
Subject #  

As you review each interview, please indicate whether the interviewer asked each of the questions as presented in the ADIS. Indicate your response by circling "yes" or "no."

1. When your child is not with you, does he/she tell you or have you noticed that he/she feels really scared or worried and does whatever he/she can to be with you?
   
   yes      no

2. Does he/she get very upset, cry, or beg to stay home when you plan to go somewhere without him/her?
   
   yes      no

3. If yes to one or both of these questions, what does he/she do?
   
   yes      no

4. When you leave (child's name), does he/she cry or tell you he/she feels very badly because he/she missed you a lot?
   
   yes      no

5. When you go somewhere and leave (child's name) with a baby-sitter, friends, or relatives, do they tell you that your child cried while you were gone or felt very badly because he/she missed you?
   
   yes      no

6. When you know that you are going to be away from home does your child get upset and worry about your leaving home ahead of time?
   
   yes      no

7. When your child is not with you, does he/she tell you that he/she worries a lot that something bad might happen to you, like you might get sick, hurt, or die, or that you may leave and never come back?
   
   yes      no
8. If yes, what does your child think might happen to you? When does your child get these thoughts?
   yes  no

9. Does your child worry a great deal that something bad might happen to him/her, like getting kidnapped, lost, or killed, so that he/she couldn't see you or loved ones again?
   yes  no

10. If yes, what does your child think might happen to him/her? When does your child get these thoughts?
    yes  no

11. Are there places that your child won't go because he/she is scared to be away from you?
    yes  no

12. If yes, what places do you remember (child's name) refusing to go because he/she would rather be with you at home?
    yes  no

13. If yes to question #11, when was that?
    yes  no

14. Does your child often want to have you (or another adult) stay close to him/her when it's time to go to sleep at night? For example, does your child like to have you (or your spouse) lie down next to him/her when it's time to go to bed?
    yes  no

15. If your child has opportunity to sleep over at a relative's house alone, does he/she avoid doing so because he/she doesn't want to be away from you?
    yes  no

16. Does your child try as hard as he/she can to avoid being alone?
    yes  no

17. When the family is at home is your child afraid to be alone in his/her room or any other places in the house?
    yes  no
18. Does your child tell you that he/she often has bad dreams about being away from you or another loved person?

yes  no

19. When your child has to leave home to go to school or some place else, does he/she tell you that he/she is experiencing some physical symptoms, such as nausea, vomiting, headaches, etc.?

yes  no

20. If yes, what place? What are his/her symptoms?

yes  no

21. Has this problem of your child feeling scared or worried when he/she is not with you been going on for at least 4 weeks?

yes  no

22. How much does this problem interfere with school? Does it stop him/her from doing things and make it hard for him/her to enjoy school?

yes  no

23. How much does this problem interfere with your child’s friendships? Does it keep him/her from making friends or doing things with friends?

yes  no

24. How much does this problem interfere with your family life? Does it cause arguments, strain your relationships, prevent the family from doing things, and cause family members to be upset?

yes  no

25. How much does this problem cause trouble for your child with things like sleeping, eating, or keeping his/her mind on things like homework; or how much does it cause him/her to cry and get easily upset?

yes  no

26. Does the interviewer ask any additional questions, other than those provided?

yes  no

27. If yes, what are these questions?
APPENDIX IV

INFORMATION SHEET
Information Sheet

This sheet is to be filled out by one or both parents (or guardians). Once again, the information you provide will be coded numerically and will in no way be associated with you or your child. Please feel free to skip an item if you don't feel comfortable answering, however it is hoped that you will respond honestly to all items.

1. Child's name: _______________________________

2. Child's birth date: _______ __________

3. Child's Gender: (circle one) M F

4. Child's race: (circle one)
   Asian  African-American  Caucasian  Hispanic  Multiracial
   Native American  Other __________

5. Please indicate whether you are the child's parent or guardian by circling one.
   Mother's/ Guardian's name: __________________________  Age: __________

6. Did mother/ guardian graduate from high school? yes no
   How many years, if any, did mother/ guardian attend school after high school? ______

7. Did father/ guardian graduate from high school? yes no
   How many years, if any, did father/ guardian attend school after high school? ______

8. Mother's/ Guardian's occupation: __________________________

9. Father's/ Guardian's occupation: __________________________

10. Number of hours mother/ guardian works outside the home per week? _______

11. Number of hours father/ guardian works outside the home per week? _______

12. Age (in years) and gender of all siblings:
   age: _______  gender: M  F  age: _______  gender: M  F
   age: _______  gender: M  F  age: _______  gender: M  F
   age: _______  gender: M  F  age: _______  gender: M  F

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13. Marital status of parents/guardians? (circle one)
   married     never married     separated     divorced

14. If parents/guardians are separated or divorced, circle one of the following:
   joint custody     mother has custody     father has custody

15. Is one or both of the custodial parents remarried?  yes no
    if yes, circle one of the following
    both are remarried     only mother is remarried     only father is remarried

16. If parents do not have joint custody, how many hours per month does the noncustodial
    parent spend with the child? _____________

17. Do any of the child's grandparents live in town?  yes no

18. How many hours per month does the child spend with his/her grandparents? _______

19. Is your child adopted?  yes no

20. What is your family's average annual income? ________________

In the future, the researcher may want to make brief contact with you again as a follow up. Of
 course, your cooperation would be entirely voluntary at this time again. Please provide the
 following information if it is all right that someone contact you.

Mailing Address: 
   _____________________
   _____________________
   _____________________

Telephone Number: 
   Home: ________________
   Work: ________________

_____________________

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REFERENCES


Archives of General Psychiatry, 41, 845-852.