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## School refusal behavior: The relationship between functions and symptom sets

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SCHOOL REFUSAL BEHAVIOR: THE RELATIONSHIP BETWEEN  
FUNCTIONS AND SYMPTOM SETS

by

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Bachelor of Arts  
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A thesis submitted in partial fulfillment  
of the requirements for the

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## THE GRADUATE COLLEGE

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**Marisa Charlene Hendron**

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## ABSTRACT

### **School Refusal Behavior: The Relationship Between Functions and Symptom Sets**

by

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The current study examined the relationship between functions of school refusal behavior and internalizing and externalizing symptom sets in a community sample of 200 youth and parents recruited from two truancy settings. The first hypothesis was that youth who endorsed refusing school primarily to avoid stimuli that provoke negative affectivity (function 1) would report more symptoms of generalized anxiety and depression. The second hypothesis was that youth who endorsed refusing school primarily to escape from aversive social or evaluative situations (function 2) would report more symptoms of social anxiety. The third hypothesis was that youth who endorsed refusing school primarily due to attention-getting behavior (function 3) would report more symptoms of separation anxiety. The fourth hypothesis was that parents who reported that their child refused school primarily due to pursuit of tangible reinforcement outside of school (function 4) would report more symptoms of oppositional behavior. High scores on function 1 were associated with higher generalized anxiety and depression symptom scores. Similarly, high scores on function 2 predicted high scores on social anxiety symptoms, and high scores on function 3 predicted high scores on separation

anxiety symptoms. Finally, parent report demonstrated that high scores on function 4 predicted high scores on oppositional behavior. These results provide important clinical implications regarding assessment and treatment of youth with school refusal behavior in community settings.

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## CHAPTER 1

### INTRODUCTION

Education in the United States is free and mandated for all children of school age. Still, many children are frequently absent from entire days of school or skip certain periods of the school day. School attendance difficulties have been studied for decades and are a major concern in many education programs (Davies & Lee, 2006). A number of terms exist and are commonly used interchangeably to refer to school nonattendance. Some of these terms include absenteeism, school refusal, school phobia, truancy, and school refusal behavior, which are used to refer to children who do not attend school for extended periods of time. The differences between school refusal and truancy are commonly misunderstood. School refusal typically refers to absenteeism that is anxiety-based and involves a general sense of worry or distress while attending school (Suveg, Aschenbrand, & Kendall, 2005). Parents of children with school refusal are commonly aware of the child's absences and the child is typically in the home when not in school. These children frequently have somatic complaints on school days which are not present on weekends and holidays (Stroobant & Jones, 2006). Truancy refers to an illegal or unexcused absence from school where parents are generally unaware of the child's absences, and other behavior, family, or social difficulties may be present (Fantuzzo, Grim, & Hazan, 2005; Fremont, 2005; Reid, 2000). According to Gavin (1997), truancy and delinquency were linked as early as the 1800s by social scientists who described truant behavior as "kindergarten of crime". By the 1900s, literature began to surface regarding children's nonattendance at school. As will be reviewed and discussed, no

consensus has been reached regarding the terminology, assessment, and treatment of these behaviors.

Rates of absenteeism vary depending on age, gender, race, and socioeconomic status. The prevalence rate of illegal absenteeism from school is greater than many formal childhood behavior disorders (Kearney, 2008b). Children and parents of these children who encounter school attendance difficulties may face mandated court programs and charges of educational neglect if the behavior persists.

A number of factors may play a role in an individual's motivation to refuse school, which may include child, family, and school characteristics. Some child characteristics commonly associated with school nonattendance include psychopathology, social skills deficits, cognitive difficulties, health problems, learning disabilities, and emotional disorders (Kearney, 2008b; Corville-Smith, Ryan, Adams, & Dalicandro, 1998). These individual factors likely influence a child's view of school and reluctance toward attendance. Family socioeconomic status, the role of the parent, family social support, and child abuse and neglect also may be factors that lead to school refusal. Finally, problems within the school context, such as teachers and safety in the school environment, may affect a child's decision to attend (McCluskey, Bynum, & Patchin, 2004).

School nonattendance is frequently associated with internalizing and/or externalizing psychological disorders or symptoms. Research has indicated that over 60% of individuals with school refusal behavior are diagnosed with one or more internalizing or externalizing disorders (Kearney, 2006b). Commonly associated internalizing disorders include separation anxiety, generalized anxiety, social anxiety, panic disorder, specific

disorder, and depression. Externalizing behaviors frequently related to school nonattendance include symptoms of conduct disorder and oppositional defiant disorder. Research has focused on inpatient, outpatient, and community samples with respect to psychopathology.

The present study investigated the relationship between symptom sets of internalizing and externalizing behaviors and the functions of school refusal behavior. One of the primary goals of the study was to investigate this relationship in community samples to extend previous work by Kearney and Albano (2004), which investigated similar relationships in a clinic sample. Data were collected in the Clark County Truancy Court and Truancy Diversion Program and consisted of child self-report and parent-report measures. The purpose of this study was to demonstrate links that will guide treatment plans based upon the symptoms and function of school refusal behavior. In addition, the study aimed to determine if similar relationships exist in a community sample compared to those found previously in a clinic sample.

## CHAPTER 2

### LITERATURE REVIEW

#### *School Absenteeism*

School absenteeism refers to excused or unexcused absences from elementary, middle, or high school (Kearney, 2008a). Most absences (80%) are occasional and brief (Hersov, 1985). Excused absences from school often involve a health or medical condition as well as religious holidays, family funeral, or hazardous weather conditions (Kearney, 2001). Unexcused absences may be due to school withdrawal, or parent-motivated absenteeism due to personal psychopathology, desire to conceal child abuse, or economic reasons. Unexcused absences may also be due to school refusal behavior or child-motivated refusal to attend school or difficulties remaining in classes for an entire day (Kearney, 2004).

Absentee behaviors include several facets: attending school under duress with a desire for future nonattendance, misbehaving in the morning to avoid school, arriving late to school, or periodically or frequently missing entire days or classes (Kearney, 2003). Extensive absenteeism can lead to eventual dropout (Kearney, 2002a). Last and Strauss (1990) found that 23% of children in their treatment sample had mild absenteeism (missing 1 day in 2 weeks), 22% had moderate absenteeism (missing 1 day per week), 17% had severe absenteeism (missing several days per week), and 38% had extreme absenteeism (missing several weeks). Many terms exist to describe the broad range of school absenteeism. Table 1 includes definitions of key terms regarding absenteeism.

## *Truancy*

Truancy is an illegal, unexcused absence from school (Fantuzzo et al., 2005). Early classification of absenteeism involved traditional, delinquent truancy and psychoneurotic truancy (Kearney, 2001). Kline (1897) defined truancy as a type of protest and rebellion against the lack of freedom children have inside school. Kline's work first suggested that truancy and delinquency are related. Other early definitions referred to this type of truancy as unlawful and as "absence from school without the knowledge and consent of the parents" (Williams, 1927). Williams (1927) also focused on features of truancy such as a difficult home environment, lack of motivation in the youth, and a poor choice of friends. Broadwin (1932) later focused on what motivates a child to be truant and suggested that the behavior of these children is an "act of defiance, an attempt to obtain love, or escapes from real situations to which it is difficult to adjust" (p.254).

Partridge (1939) further divided truancy into five subgroups: two simple subgroups (undisciplined and hysterical) and three complex groups (desiderative, rebellious, and psychoneurotic). Children who were absent due to lack of discipline or delinquent behavior comprised the undisciplined group. The undisciplined group generally met the definition of traditional, delinquent truancy. Partridge used the term hysterical to define those who ran away from school difficulties. The desiderative group included children who sought tangible rewards outside of school. Children in the rebellious group are more severe than those in the desiderative group, from which they developed. This group demonstrated delinquent behavior and kept their absenteeism secret from a parent or guardian. The final group, psychoneurotic, consisted of children who had less adjustment difficulties in school but were absent due to "peculiar states of mind" (p.68).

Psychoneurotic truancy pertained to children who demonstrated anxiety-related behaviors that caused them to refuse school (Partridge, 1939). Warren (1948) reported that mothers had a significant impact on children with psychoneurotic truancy. These children also had a higher likelihood of being an only child and were overdependent. Psychoneurotic truancy may stem from children's separation anxiety while in school, which creates significant worry. Later classification strategies sorted truancy into cases with and without neurotic aspects (Kearney, 2001).

Truancy is also an absence from school without a valid excuse (Mueller, Giacomazzi, & Stoddard, 2006). Berry and Lizardi (1985) suggested that a truant youth is absent from school without parental permission and tries to conceal absences from his parents.

Truants tend to lack motivation and show little interest in attending school (Pellegrini, 2007). Truancy from school is commonly associated with conduct disorder and may lead to eventual dropout once a student reaches an age where he is not legally required to attend school. Conduct disorder (CD) refers to "a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated" (APA, 2000, p. 93). One symptom of CD is frequent truancy from school, which must begin before age 13 years (APA, 2000). The characteristics of children who demonstrate symptoms of conduct disorder versus those prone to absenteeism due to anxiety-related difficulties are different, as is discussed in later sections.

### *School Phobia*

Johnson, Falstein, Szurek, and Svendsen (1941) first described school phobia as a psychoneurotic disorder in some children with absenteeism. They split school phobia

into three main components. The first component involved acute anxiety with hypochondriacal and compulsive symptoms. The second component was maternal anxiety due to a life stressor that caused a threat to her security. The third component, an unresolved “overdependent mother-child relationship,” maintained a child’s absenteeism (Kearney, 2001). Johnson later proposed that the term school phobia was incorrect and described such difficulties as separation anxiety or distress when separated from a parent or caregiver (Estes, Haylett, & Johnson, 1956; Johnson, 1957).

Coolidge, Hahn, and Peck (1957) later classified children with school phobia into neurotic and characterological types. The neurotic type indicated the presence of school phobia and included younger children who demonstrated acute onset with panic symptoms. The characterological type included the characteristics of psychoneurotic truancy or school refusal and pertained to older children who demonstrated a gradual onset likely related to depression or paranoia.

Kennedy (1965) expanded the idea of neurotic versus characterological and reported two types of children with school phobia: Type 1 (acute) and Type 2 (chronic). Kennedy (1965) listed characteristics to define each type. Type I was described as a neurotic type and included the following characteristics: (1) present episode is the first; (2) Monday onset following an illness the previous Thursday or Friday; (3) acute onset; (4) prevalent in early elementary grades; (5) concern about death; (6) mother’s physical health in question (or at least child fears so); (7) generally good communication between parents; (8) mother and father well adjusted; (9) father involved in household management and childrearing; and (10) parents are easy to work with and have a basic understanding of what the child is experiencing. Characteristics associated with Type II school phobia are:

(1) second, third, or fourth episode; (2) Monday onset following minor illness; (3) incipient onset; (4) upper grades most prevalent; (5) death theme not present; (6) health of mother not an issue; (7) poor communication between parents; (8) mother shows neurotic behavior and father has a character disorder; (9) father shows little interest in household or children; (10) parents are very difficult to work with.

Berg, Nichols, and Pritchard (1969) proposed four diagnostic criteria to determine whether a child had school phobia. He suggested that a child must have severe difficulty attending school, display severe emotional upset (excessive fearfulness, temper, misery, or complaints of illness), stay at home with parental permission, and fail to display antisocial behavior. Berg and colleagues (1969) based diagnoses on parental report, child interview, and available case records. Berg and colleagues (1969) also defined acute and chronic school phobia. Acute school phobia involved school attendance difficulties not present in the 3 years prior to the current episode. Chronic school phobia encompassed all other cases. As school phobia classifications expanded, the terms truancy, school refusal, and school phobia became more blurred (Kearney, 2001).

In recent literature, the term school phobia describes two types of absenteeism. The first involves separation anxiety and the second involves specific fear (Kearney, 2001). Early ideas of school phobia focused on mutual anxiety between a mother and child from unresolved codependency. Other early attempts portrayed school phobia as emotional difficulties or “transitory anxious states” that occur in a crisis, such as changing schools. School phobia is commonly associated with severe emotional difficulties such as depression and anxiety (King & Bernstein, 2001).

The second type of school phobia involves a feared stimulus. The stimulus is frequently something or someone inside of school that causes anxiety and fear (Chitiyo & Wheeler, 2006). The object or situation thought to cause the phobia frequently includes a teacher, social evaluation from peers and teachers, or separation from a parent or caregiver (Dumas & Nilsen, 2003). Other common causes may be fear of academic failure, being bullied by peers, tests, or visiting the principal (Kearney, 2001). School phobic children tend to exhibit acute anxiety and tension, manipulation of a parent or guardian, depression and sadness, and unrealistic self-image (Berry, Inejikian, & Tidwell, 1993).

School phobia is a type of specific phobia. A specific phobia is a “marked and persistent fear of clearly discernible, circumscribed objects or situations” in which children may present with “crying, tantrums, freezing, or clinging” (APA, 2000, p. 443, 446). Phobias in children are (1) out of proportion to the demands of the situation, (2) not explained or reasoned away, (3) beyond voluntary control, (4) leading to avoidance of the feared situation, (5) persistent over an extended period of time, (6) maladaptive, and (7) not age- or stage-specific (King & Ollendick, 1989).

### *School Refusal*

The term school refusal refers to anxiety-based absenteeism, including panic, social anxiety, and general emotional distress or worry while in school (Suveg, Aschenbrand, & Kendall, 2005). Hersov (1960a) believed that youth with school refusal remained at home while not in school and described school refusal as “one manifestation of a psychoneurosis” (Kearney, 2001). Comorbid disorders frequently associated with school refusal include separation anxiety disorder and depression. A common trait of school

refusal is the presence of somatic symptoms, which tend to be present on school days and may remit on weekends and holidays (Stroobant & Jones, 2006).

### *School Refusal versus Truancy*

Lauchlan (2003) stated that psychiatrists relate school refusal to children with separation anxiety and relate truancy to conduct disorder. Other children have emotional disturbances frequently associated with school refusal and demonstrate antisocial behaviors that accompany truancy. Children with school refusal are good students who stay at home when not attending school. Their parents are aware of their absences, which may last weeks or months. Truants are generally not good students, avoid home while not attending school, and keep their nonattendance a secret from their parents. They also attend school intermittently instead of being absent over large periods of time (Chitiyo & Wheeler, 2006). Truants are also more likely to be involved in serious juvenile delinquency when not in school (McCluskey, Bynum, & Patchin, 2004). Children with internalizing school refusal symptoms generally have an acute onset, whereas truants have a more gradual onset and demonstrate externalizing symptoms (Kearney & Silverman, 1996). School refusers are more likely to present to mental health clinics than truants (Last, Hansen, & Franco, 1998). Inpatient and outpatient clinic studies have typically examined children with school refusal who sought out treatment, which has allowed specific prescriptive treatment techniques to be linked to specific problems associated with school refusal. Community studies have typically only investigated children who were referred by education services for poor attendance, similarly to the present study. One difficulty with this is that these studies have not presented an agreed upon treatment plan for such individuals. One advantage of the current study is the

ability to link reported attendance difficulties to the functions of school refusal behavior, which have previously been linked with prescriptive treatment techniques. This will allow for specific treatments to be linked with reported difficulties in community samples.

### *School Refusal Behavior*

School refusal behavior is an umbrella term defined as child-motivated refusal to attend school or difficulty remaining in classes for the entire school day in children aged 5-17 years (Kearney, 2001). A child may completely refuse school, attend school and leave at some point throughout the day, attend school with difficulty after misbehaving in the morning, or attend school under duress, which may lead to desire for future nonattendance. School refusal behavior encompasses truancy, psychoneurotic truancy, school refusal, and school phobia. School refusal behavior includes a continuum of school attendance problems (Kearney, 2001).

Kearney and Silverman (1996) suggested an atheoretical approach to subtyping children with school refusal behavior. One subtype, *self-corrective school refusal behavior*, occurs when a child's refusal to attend school spontaneously ends. Another subtype, *acute school refusal behavior*, involves absenteeism that lasts 2-52 weeks. *Chronic school refusal behavior* occurs when a child refuses school for more than 1 calendar year.

### *Prevalence of Absenteeism*

Many components of school refusal behavior exist, so determining prevalence is difficult. According to the National Center for Education Statistics (2006), approximately 5.5% of students are absent from school on a given day. In 2000, over

50% of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students missed at least one day of school in a 4-week period (NCES, 2002). Inner city schools report a greater number of absences than rural schools (5.7% and 5.3%, respectively). Recent estimates show public school absenteeism rates at 5.9% and private schools at 4.1%. Absenteeism rates also increase with the size of the school. In addition, elementary schools report less absenteeism than middle and high schools (5.2%, 6.3%, and 8.0%, respectively) (NCES, 1996). The number of children who skip school increases as children age. Of all reported absences by 12<sup>th</sup> grade students, 26% were due to skipping school. Over the course of a school year, skipping accounted for 16% of 10<sup>th</sup> grade absences and 9% of 8<sup>th</sup> grade total absences (NCES, 2002). Overall, the percentage of absenteeism is highest in public inner-city high schools and lowest in rural elementary schools (Kearney, 2001).

Another absenteeism component is partial absences from school, including cutting class and tardiness. NCES reported that 4.5% of teachers found cutting class to be a problem (NCES, 1996). One study found that 4.4% of high school students cut classes, which may double to 8.8% when elementary and middle school students are included (Duckworth & deJung, 1989; Kearney, 2001). The rate of partial absenteeism varies by school. Inner city schools (7.6%) have higher rates of partial absenteeism than rural schools (2.4%). Public schools (5.1%) have a notably greater problem than do private schools (0.7%). Tardiness is difficult to determine, but Kearney (2001) estimated the prevalence of morning misbehavior leading to tardiness to be 4.4%-9.5%.

The last component is duress during school that leads to desire for future nonattendance. This type of behavior is the most challenging to determine. Kennedy (1965) and Eisenberg (1958) reported school phobia rates at 1.7% and 3%, respectively.

Granell de Aldaz, Vivas, Gelfand, and Feldman (1984) investigated the prevalence of fears and dislikes among children in 10 previous studies. They reported that the average prevalence rate was 4.9%. In a study they conducted with children aged 3-14 years, 17.7% reported fears involving school. Parents and teachers estimated these rates at 7.7% and 2.7%, respectively. School nonattendance rates and fearfulness were combined and analyzed across six criteria to provide an estimated rate of fear-nonattendance at 5.4%. This rate is close to the 4.9% that Granell de Aldaz and colleagues found in their initial review of fear-nonattendance. Kearney and Beasley (1994) reported the rate of specific phobia in school refusing youth at 10%, while 35% of participants reportedly refused school due to aversive and anxiety-provoking stimuli within the school.

#### *Characteristics of Absenteeism*

##### *Age*

Ollendick and Mayer (1984) found that many cases of absenteeism occur at ages 5-6 and 10-11 years when children enter kindergarten and middle school, respectively. Other studies show the average age of onset to be 10-13 years (Kearney, 2006b). The National Center for Education Statistics (2005) reported that a similar percentage of 4<sup>th</sup> and 8<sup>th</sup> grade students missed at least 3 days of school in a one-month period (19% and 20%, respectively). Seven percent of 4<sup>th</sup> and 8<sup>th</sup> grade students reportedly missed at least 5 days of school in a one-month period. Once children reach high school they can leave school permanently, making exact rates of absenteeism more difficult to determine at that point (Kearney, 2008b). Hansen, Sanders, Massaro, and Last (1998) concluded that older children miss more school than younger children.

### *Gender*

Absenteeism is equally apparent in males and females (Hansen et al., 1998; Kearney & Albano, 2004), though the motive for absenteeism may vary. Males demonstrate absenteeism more frequently related to conduct problems, whereas females may be absent due to problems of fear and anxiety (Kearney, 2001). Despite similar rates of absenteeism, a higher percentage of males than females leave school before graduation. The National Center for Education Statistics (2004) reported that the school dropout rate is approximately 11.6% for males and 9.0% in females (Kearney, 2008b). Some studies (Bernstein & Garfinkel, 1986; Hersov, 1960a; Kearney & Silverman, 1996) reveal higher rates of males as participants. Gender does not seem to be a significant factor in absenteeism (Kearney, 2001).

### *Race*

According to the U.S. National Center for Education Statistics, minority students exhibit significantly more problematic nonattendance than nonminority students. Hispanics (23.8%) tend to have higher rates of high school dropout than African Americans (11.8%) and European-Americans (6.8%) (NCES, 2006). Kearney (2001) reported that determining racial differences in absenteeism is difficult because minorities do not seek clinical treatment as frequently as non-minority students.

### *Socioeconomic Status*

Schools with a greater number of minority students and students from low socioeconomic backgrounds tend to have higher rates of absenteeism than schools with fewer minority students and higher socioeconomic backgrounds. This trend is apparent in elementary, middle, and high schools (Kearney, 2001). Schools with a greater number of

children who receive free or reduced-price lunches also tend to have higher rates of absenteeism. This may be due to greater school dropout rates in children of lower socioeconomic and minority status (Kearney, 2008a; NCES, 2006). This study aimed to provide important information regarding school refusal in minority students by examining a community sample with a high percentage (greater than 75%) of minority participants. In addition, this study may further allow for treatment strategies to be applied to a more diverse sample.

### *Course*

Absenteeism can lead to many short-term consequences. Failure to attend school can result in fines for parents and juvenile detention for youth (Berg, 1992). Additional short-term difficulties include child and family distress, academic troubles, social alienation, and financial expense (Kearney, 2001). Psychological difficulties are also commonly associated with absenteeism from school. Common psychiatric conditions include anxiety, depression, and disruptive disorders (Bernstein, Warren, Massie, & Thuras, 1999; Kearney & Albano, 2004; Lahey et al., 1999; Last, Francis, Hersen, Kazdin, & Strauss, 1987; Last & Strauss, 1990).

Long-term effects of school nonattendance can be quite detrimental. Serious problems such as risky and delinquent behaviors and violence are frequently associated with youth who demonstrate prolonged absenteeism (McCluskey, Bynum, & Patchin, 2004). Youth who are chronically absent from school have a greater likelihood of dropping out of school and subsequently developing substance abuse (Sheldon & Epstein, 2004). These individuals are less likely to pursue higher education and have difficulties finding employment. In 2004, the highest rates of unemployment were in those who

failed to graduate high school (Richtman, 2007). These individuals are likely to have lower earning potential over their lifetime and a greater likelihood of relying on welfare services (Garry, 1996). Follow-up studies reveal that adults treated for school refusal as children tend to seek psychiatric consultation more so than adults who did not have school refusal (Flakierska, Lindstrom, & Gillberg, 1988). Up to 52% of youth with school refusal behavior meet criteria for other psychological problems later in life, including anxiety, depression, conduct, personality, or other disorders (Kearney, 2006b). Long-term functioning has also been examined with respect to treatment outcome for youth with school refusal behavior.

#### *Follow-up Studies*

Berg (1970) examined the outcome of 21 youth approximately 1 year after discharge from an inpatient setting for treatment of school refusal. The average stay at the inpatient unit was 9 months (5 participants later attended the same treatment center for day treatment, ranging from 1-4 months). At the time of follow-up, 14 participants were still of school age, 13 of which were attending day schools since discharge. The last follow-up participant enrolled in a boarding school after discharge and successfully attended classes. Of the 13 participants in day school, 10 had satisfactory attendance records, though one had multiple relapses that lasted several days. This study demonstrated that inpatient school refusers can successfully reintegrate into the school environment.

McShane, Walter, and Rey (2004) investigated the outcome of adolescents previously diagnosed and treated for school refusal. They predicted that various factors would contribute to poorer outcomes, including history of inpatient treatment, comorbid

diagnoses, history of difficulty in academic achievement, and family history of psychiatric problems. At 6-month follow-up, 70% of adolescents (aged 12-18 years) reported functional improvement in educational and/or employment settings. At 3-year follow-up, 76% of participants reported improvement. Participants with comorbidity or dysthymia had poorer outcomes at 6 months but not at 3 years. Adolescents with social phobia or severe academic difficulties also displayed poorer outcomes.

The course and symptoms of absenteeism tend to be highly heterogeneous. The presence of a wide array of symptoms has made classification of absenteeism a difficult task, as noted by the many classification strategies that are described next. The study described later aimed to identify whether specific symptoms sets relate to individual functions of school refusal behavior, which may eventually help clarify how youths in this population may be classified.

### *Classification Systems: Historical, Diagnostic, Empirical, and Functional*

#### *Historical Attempts at Classification*

Psychologists have long investigated school refusal behavior using various terminology and diagnostic categories. A major problem with classification is that the DSM-IV-TR (APA, 2000) does not contain specific diagnostic criteria for school refusal. Early attempts at classification by Broadwin (1932) relied on motivation for nonattendance. Johnson and colleagues (1941) attempted to divide school phobia into components that maintained the behavior, such as hypochondriacal and compulsive symptoms, maternal anxiety, and an overdependent mother-child relationships. Later classification systems focused on characteristics such as neurotic versus characterological (Coolidge, Hahn, & Peck, 1957) and common versus induced (Sperling, 1967). Common

school refusal is the child's unconscious motivation and desire to gain control of the mother when the relationship is threatened by some external event. Induced school refusal has a subtle onset, a highly dependent parent-child relationship, and no external precipitating event. Common and induced school refusal can be further classified as acute or chronic (Sperling, 1967). Shapiro and Jegede (1973) presented the idea that school refusal occurs along a behavioral continuum including ego alien and ego syntonic behaviors. Ego alien behaviors encompassed phobia, anxiety, clinging behaviors, and somatic complaints. Ego syntonic behaviors included truancy reinforced by parents via teacher criticism (Shapiro & Jegede, 1973).

#### *Diagnostic Classification*

Bernstein and Garfinkel (1986, 1988) classified youth with school phobia into four subgroups based on DSM categories: affective disorder only, anxiety disorder only, affective and anxiety disorders, and neither an affective nor an anxiety disorder. They also found that children with diagnoses tended to have family members with affective and/or anxiety disorders. Bernstein and Garfinkel's work was later supported by Last and colleagues (1987), who examined primary and secondary disorders using the diagnostic criteria of the DSM-III (APA, 1980). They reported that school phobic youth often met criteria for another anxiety disorder such as separation anxiety (52.6%), overanxious disorder (15%), social phobia of school (15%), or major depression (15%) (Last et al., 1987). These classification systems did not include all youth with school refusal behavior and did not link specific assessment and treatment recommendations (Kearney, 2007a). More specifically, community samples were not included in these diagnostic studies.

### *Empirical Classification*

Achenbach and Edelbrock (1978) empirically classified children's behavior into overcontrolled-internalizing and undercontrolled-externalizing categories. Behaviors related to overcontrol include fear, anxiety, and depressive symptoms, whereas behaviors related to undercontrol include aggression, fighting, and stealing (Kearney, 2001).

Young and colleagues (1990) later distinguished "internalizing school refusal disorders" from "externalizing truant disorders." Internalizing disorders of this type include phobia, anxiety, fears, fatigue, withdrawal, depression, or somatic complaints (Kearney, 2002a).

Conversely, externalizing disorders include impulsivity, manipulateness, noncompliance, and other symptoms of conduct disorder or delinquency (Young, Brasic, Kisnadwala, & Leven, 1990). Mental health professionals did not generally adopt a single diagnostic or empirical classification method. A universal classification system that encompasses all youth with problematic absenteeism, including those in clinical and community settings, and that assists specific assessment and intervention strategies is necessary.

### *Functional Classification*

Kearney and Silverman (1996) suggested a classification system based on functions of school refusal behavior, or what motivates a youth to maintain absenteeism. The functional approach relies on categorical and dimensional qualities. Clinicians identify a primary problem with secondary difficulties to address in treatment. The functions of school refusal behavior are outlined below. Singular or multiple types of reinforcement may apply to a particular case of school refusal behavior. Functional classification is

important to the aim of the current study in that specific functions were compared against certain symptom sets in adolescents with school refusal behavior.

### *Negative Reinforcement*

Negative reinforcement refers to desirable termination of an aversive event (Kearney, 2001). Two negative reinforcement functions may contribute to continued absenteeism. The first function refers to avoidance of stimuli that provoke general negative affectivity (ANA). These children do not like attending school due to a specific stimulus at or surrounding school. Examples include the school bus, a teacher, or a peer. Some children cannot give a specific example of what causes their anxiety and simply say they experience “malaise” or “misery” at school. Anxiety, sadness, and other somatic complaints such as headache and stomachache are common among young children who refuse school for this reason (Kearney, 2001). These children tend to score higher on measures of anxiety than children who refuse school for positive reinforcement. Children who refuse school for negative reinforcement generally have less notable attention, delinquent, and aggression difficulties than those who refuse school for positive reinforcement. Additionally, these children frequently have more active and cohesive families than children with other functions of school refusal behavior (Kearney & Silverman, 1996).

The second negative reinforcement function is escape from aversive social or evaluative situations. This function tends to occur more frequently in older children and adolescents. Children of this function may have difficulties with teachers, peers, test taking, public speaking, performance in gym class, or walking in the hallways. Social anxiety and depression are frequently associated with this group. Other areas of

difficulty for this group include somatic complaints and social withdrawal (Kearney, 2001). Delinquent behavior is less common among children in this group than children in the positive reinforcement groups (Tillotson & Kearney, 1998). The current study proposed that functions of negative reinforcement would relate primarily to internalizing symptom sets, including generalized anxiety, depression, and social phobia, in a community sample. A majority of previous research looking at the functional model has primarily taken place in clinical settings and has not examined a diverse community sample, as in the current study.

#### *Positive Reinforcement*

Positive reinforcement also leads to school refusal behavior, such as tangible or intangible rewards. Two positive reinforcement functions include attention-seeking and pursuit of tangible rewards outside of school. Children in the attention-seeking category tend to be younger and misbehave before school to be excused from attending. These misbehaviors include tantrums or exaggerated physical complaints. They seek to evoke sympathy and gain attention from a parent or caregiver. Some of these children exhibit signs of separation anxiety, but their primary desire is to induce parental acquiescence to their demands to remain home from school. These children also demonstrate oppositional symptoms and their families tend to be less cohesive and more enmeshed than families of children who refuse school for negative reinforcement (Kearney & Silverman, 1995).

A second positive reinforcement function is pursuit of tangible rewards outside of school. These rewards may include sleeping, shopping, working, watching television, playing video games, or spending time with friends who are not in school (Kearney,

2001). Children in this category have less internalizing distress than children in other groups and represent non-anxiety based absenteeism. These children have a greater likelihood of attention problems, delinquency, and aggressive behaviors than other school refusing children (Tillotson & Kearney, 1998). Individuals in this category have families who tend to be less cohesive and more conflictive (Kearney & Silverman, 1995).

Functions of positive reinforcement were hypothesized to be related to separation anxiety and oppositional symptom sets, according to the present study. As previously mentioned, research on the functional model has primarily examined clinical samples and has not focused strongly on community studies, as was the purpose of the current study.

#### *Pure versus Mixed Functions*

Youth can demonstrate a single function of school refusal or they may have a combination of functions that reinforce their behavior. Less attention has focused on youth who refuse school for multiple reasons (Kearney, 2002a). Some children initially refuse school to avoid negative stimuli and then discover the positive amenities of staying home (e.g., attention, tangible rewards). Other children may stay home for an extended period of time and then experience anxiety about returning to school with new teachers, peers, and classes. Both examples refer to children who refuse school for negative and positive reinforcement (Kearney, 2002a). Treatment for children that refuse school for more than one reason (function) should include a combination of prescriptive treatments strategies, as discussed in later sections.

#### *Etiological Factors*

Many factors, including child, parent, family, peer, school and community variables, contribute to school refusal behavior. These variables often overlap, such as a link

between deviant peers and increased academic difficulties in school (Kearney, 2008b).

The next sections outline major etiological factors.

### *Child Factors*

An important child factor related to school refusal behavior is psychopathology in the form of internalizing and/or externalizing disorders (Kearney, 2008b). Commonly associated disorders and symptoms include anxiety, depression, fear, and perfectionism (Berg et al., 1985; Bernstein & Garfinkel, 1986, 1988; Bools, Foster, Brown, & Berg, 1990; Egger, Costello, & Angold, 2003; Kearney & Albano, 2004). This study aimed to further investigate the symptoms that were previously associated with school refusal behavior in a community sample by relating symptom sets to specific functions. Children with poor attendance frequently demonstrate low self-esteem as well as poor social and academic skills (Corville-Smith, Ryan, Adams, & Dalicandro, 1998; Reid, 1982, 1984; Southworth, 1992). Children with absenteeism often have key personality variables such as low openness, agreeableness, conscientiousness, and emotional stability (Kee, 2001; Lounsbury, Steel, Loveland, & Gibson, 2004; Okuyama, Okada, Kuribayashi, & Kaneko, 1999). Children may also refuse school to avoid stimuli that provoke negative affectivity or to escape aversive social or evaluative situations (such as public speaking or gym class) (Kearney, 2001). A child may also refuse school to obtain attention or pursue reinforcements outside of school (Kearney, 2001).

Pregnancy is another factor that may lead to school refusal behavior and eventual dropout. Frequent absenteeism can also be an indicator of teenage pregnancy (Kearney, 2008b). Barnet and colleagues (2004) reported that pregnancy was the main reason

females left school. Males also report teen parenthood as a reason for leaving school (18.1%) (Barnet, Arroyo, Devoe, & Duggan, 2004).

Trauma, such as being the victim of a violent crime or bullying, can also lead to school refusal behavior (Kearney, 2008a). Davies and Lee (2006) found that youth reported bullying and intimidation by peers as key reasons for their school nonattendance. Some students (6%) avoided school in a 6-month period due to fear of being attacked and 20% of elementary students admittedly missed school due to fear of bullying (Glew, Fan, Katon, Rivara, & Kernic 2005; National Center for Education Statistics, 2006). Children who reported school victimization were at increased risk for eventual school dropout (Janosz, LeBlanc, Boulerice, & Tremblay, 1997).

Relationships with authority figures within the school environment and student-teacher conflict are also associated with school absences (Bealing, 1990; Buist, 1980; Harte, 1994; Nielsen & Gerber, 1979). Some children report fear of a teacher as a contributing factor to their nonattendance (Granell de Aldaz et al., 1987; Hersov, 1960b). In addition, school dropout is less likely to occur in smaller schools where students and teachers have better relationships (Jimerson, Egeland, Sroufe, & Carlson, 2000; Lee & Burkham, 2003). Davies and Lee (2006) found, among students with a high number of absences, that males felt relationships with school staff were more problematic than relationships with peers, whereas females tended to report the opposite.

Health problems and related difficulties such as enuresis are also associated with school refusal behavior (Hersov, 1960a; Torma & Halsti, 1975). Youth with sleep difficulties or problematic eating habits due to school-related stress tend to exhibit school refusal behavior (Kearney, 2001). Youth with anxiety or depression-based school refusal

behavior also have higher rates of glucoregulatory problems compared to students without school refusal behavior (Iwatani et al., 1997). Students with asthma are at increased risk for school refusal behavior (Kearney, 2001). Additional associated medical problems include abdominal pain and gastrointestinal difficulties (Rubenstein & Hastings, 1980).

### *Parent Factors*

Parent factors frequently contribute to school refusal behavior. Active parenting behaviors such as reading to a child, attending parent-teacher conferences, checking homework, limiting television on school nights, and monitoring attendance have been associated with positive attendance (Kearney, 2008a). Conversely, problematic approaches to parenting such as poor involvement and supervision, as well as a permissive parenting style, frequently contribute to school refusal behavior (Astone & McLanahan, 1991; Ekstrom, Goertz, Pollack, & Rock, 1986; Fagan & Pabon, 1990; Rumberger, 1983). Children of parents who do not give substantial or effective assistance with respect to schoolwork tend to feel overwhelmed and may withdraw from school (Astone & McLanahan, 1991).

A relationship exists between single-parenting, school nonattendance, and later dropout. Single parents tend to have lower expectations for educational attainment and are less encouraging than dual parents (Astone & McLanahan, 1991). In addition, single mothers spend more hours working outside the home and may spend less time supervising their children's attendance (Douthitt, 1989).

Lack of communication between parents and school officials regarding absences and poor parental involvement in school are associated with absenteeism (Guare & Cooper,

2003). Franklin and Soto (2002) reported that language barriers between parents and school, cultural differences, lower family acculturation, and parental mistrust of school officials also contribute to attendance difficulties. Davies and Lee (2006) found that primary concerns for parents regarding absenteeism focused on poor communication between the home and school environment and mistreatment of parents and students by school officials.

A relationship exists between parental psychopathology and youth absenteeism. Last and Strauss (1990) found that children with school refusal were more likely than controls to have mothers who refused school. Children classified as separation anxious school refusers were more likely than phobic school refusers to have mothers who refused school (Last & Strauss, 1990). Parents of school refusing children also report greater panic disorder and agoraphobia than parents of non-school refusing children (Martin, Cabrol, Bouvard, Lepine, & Mouren-Simeoni, 1999).

#### *Family Factors*

Hersov (1960b) suggested that family relationships contribute to school refusal behavior. Family variables such as enmeshment and substantial conflict often contribute to and maintain absenteeism. Transitions within a family also lead to attendance difficulties. These transitions may include family separation, divorce, trauma, or illness (Suveg et al., 2005). Family chaos, child maltreatment, and parental alcohol and drug abuse contribute to absenteeism as well (Casas-Gil & Navarro-Guzman, 2002; Kearney, 2001; McShane, Walter, & Rey, 2001; Taussig, 2002).

Homelessness and poverty are commonly associated with school refusal. Only about 77% of homeless youths regularly attend school (US Department of Education, 2002,

2004). In addition, poor educational assistance contributes to nonattendance. Davies and Lee (2006) reported that parents felt there was a lack of support from Education Welfare Services as a whole, but that individual mentors for children from Education Welfare Services were helpful in addressing nonattendance.

Fremont (2003) outlined interactions within families related to school refusal. These interactions include overdependency, detachment and little interaction among family members, isolation with small amounts of interaction outside of the family, and significant family conflict. Bernstein and colleagues (1990) concluded that families of children with school refusal may have unclear boundaries between the roles of parent and child. In these cases, a parent does not adopt the appropriate role of encouraging a child to return to school. Additionally, parents may give contradictory messages to a child about returning to school. Others have found that lack of cohesion and family separation contribute to attendance problems (Chapman, 2007; Lagana, 2004; McShane et al., 2001).

Kearney and Silverman (1995) divided families of children with school refusal behavior into 6 types of dynamics: enmeshed, conflictive, detached, isolated, healthy, and mixed. Enmeshed families frequently involve parental overprotectiveness and overindulgence of the child. A conflictive family is one that demonstrates hostility, violence, and coercion (Patterson, 1982). A detached family exhibits little involvement with one another. Isolated families tend to have little contact with others outside the family unit. A healthy family demonstrates communication and cohesion among members. Finally, a mixed family involves patterns of two or more of these family types (Kearney & Silverman, 1995).

### *Peer-based Factors*

Several peer-based factors also contribute to school refusal behavior. Youth who spend time with deviant peers have lower rates of school completion (Fergusson & Horwood, 1998; Newcomb et al., 2002). Farmer and colleagues (2003) also suggested that youth who spent time with aggressive peers had higher rates of school dropout than youth who did not associate with aggressive peers. Aggressive students may enter school with poor social skills, which leads to rejection from prosocial peers and causes students to form and befriend deviant peer groups (Bagwell, Coie, Terry, & Lochman, 2000; Dishion, Patterson, & Griesler, 1994). Additionally, children who do not receive attention or reinforcement from parents may turn to deviant peer groups for reinforcement, which perpetuates school absenteeism (Kearney & Silverman, 1996).

Research shows that participation in extracurricular activities and school attendance are related. Involvement in passive activities is a risk factor, whereas active participation in extracurricular activities is a protective factor (Janosz et al., 1997). Youth involved in gangs or gang-related activities often display attendance problems (Kearney, 2001). Youth in gangs have a strong pressure from their peer group toward nonattendance and a push toward reinforcing activities outside of school such as drug use. Johnson, O'Malley, and Bachman (1988) found that school commitment and delinquency and drug use were inversely related (Johnson, O'Malley, & Bachman, 1988).

### *School-based Factors*

Absenteeism has been associated with many school-related variables. Harsh or legal means of addressing all cases of absenteeism are associated with continued absenteeism. Many schools have adopted strict "zero tolerance" policies regarding discipline to

promote student attendance and secure state funding based upon attendance, but the effectiveness of these policies is suspect (James & Freeze, 2006; Reid, 2003).

Another important school factor is school climate. School climate includes student safety, support, respect, and flexibility regarding disciplinary approaches (McNeely, Nonnemaker, & Blum, 2002; Shochet, Dadds, Ham, & Montague, 2006). Research on school climate indicates that several factors are associated with absenteeism, including poor curriculum leading to student boredom, rigid discipline for nonattendance, conflict between students and teachers, and disregard for cultural and diversity issues between families and teachers (Conroy, Conroy, & Newman, 2006; Guare & Cooper, 2003; National Center for Education Statistics, 2006; Weisman & Gottfredson, 2001).

#### *Community-based Factors*

Problematic factors within the community, such as unsafe and poor neighborhoods, have been associated with school refusal behavior (Chapman, 2003). Bowen and colleagues (2002) found that youth reportedly viewed neighborhood factors as having a more significant negative impact on education than family factors. They concluded that neighborhood variables such as social support, drug use, gang membership, and safety may account for more variation in behaviors related to education (including grades, attendance, and social behavior) than individual demographic variables (race/ethnicity and poverty) (Bowen, Bowen, & Ware, 2002). Nash (2002) further suggested that neighborhood factors, including crime and negative peer culture, relate to educational behavior such as students' school coherence and connectedness.

A relationship exists between neighborhood disorganization and absenteeism and poor adult supervision, high levels of child self-care, and lack of parental response to

poor attendance (Chapman, 2003; Crowder & South, 2003; Henry, 2007). Economic factors within the community, such as high-paying jobs that require little formal education, enable youth to leave school before graduation (Kearney, 2008b).

Some cases of school refusal behavior may be due to one causal factor, such as moving schools or a specific event that occurred in the school. In other cases of school refusal behavior, identifying a primary cause or variable is difficult. Researchers have developed various assessment methods to determine the etiological variables that contribute to school refusal behavior and to determine a formal diagnosis when appropriate. A detailed presentation of assessment methods follows.

### *Assessment*

Multiple methods and multiple informants are necessary to assess school refusal behavior (King & Bernstein, 2001). Commonly used assessment methods and strategies, which have often been utilized for clinical samples, are described next. The current study utilized self-report and parent report measures to obtain data from a diverse community sample.

### *Interviews*

The Anxiety Disorders Interview Schedule for Children for DSM-IV (ADIS-IV; Silverman & Albano, 1996) is a semistructured interview that focuses on anxiety and other DSM-IV disorders. The ADIS-IV can identify school refusal behavior, separation anxiety, social phobia, specific phobia, panic disorder, agoraphobia, OCD, ADHD, and PTSD. Additionally, sections are included for externalizing and mood disorders, which are useful for identifying comorbid diagnoses. Parent and child versions are available and should be included in assessment. The school refusal behavior section of the ADIS-

IV contains several questions relevant to the school setting and nonattendance. The section inquires about worries or fears regarding school, number of days a child missed during the current and last school year, whether a child is nervous at school, and the frequency with which a child sees the nurse or counselor to leave school early. Other questions refer to what is scary about attending school and whether a child attempts to miss school because he prefers to be home. A list of commonly associated fear items or situations in the school is given; a child or parent must report whether a stimulus or situation is fear-provoking. If so, then a child or parent must rate the level of fear on a 0-8 scale and rate the level of interference (on a 0-8 scale) that the item poses (Silverman & Albano, 1996).

### *Questionnaires*

Questionnaires are also useful to assess school refusal behavior. Child questionnaires commonly focus on absenteeism-related behaviors such as anxiety, fear, stress, and depression and may be useful for youths who refuse school for negative reinforcement. A number of relevant anxiety measures exist. The Multidimensional Anxiety Scale for Children (MASC; March, 1997) is a 45-item measure to assess anxiety (physical, social and separation) and harm avoidance. The Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Paget, 1983) is a 37-item questionnaire used to measure anxiety, worry and concentration problems. The State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973) contains 40 items to measure situation-specific and general anxiety. The Social Anxiety Scale for Children-Revised (SASC-R; LaGreca & Stone, 1993) is a 22-item assessment that measures fear of negative evaluation and social avoidance.

The Children's Depression Inventory (CDI; Kovacs, 1992) is a 27-item measure to assess for depressive symptoms over a 2-week period. This assessment is ideal for youth who refuse school to avoid negative affectivity or escape aversive situations, and can determine whether depression or school refusal is the primary presenting problem. The Daily Life Stressors Scale (DLSS; Kearney, Drabman & Beasley, 1993) is a 30-item scale to measure stressful events related to home or school as well as social situations. This measure is useful for youth who refuse school for negative reinforcement and attention. Finally, the Youth Self-Report (YSR; Achenbach & Rescorla, 2001) is a 118-item measure that includes a range of internalizing and externalizing problems and is useful for assessing all adolescents who refuse school.

Parents may complete the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) a 118-item measure similar to the YSR that measures internalizing and externalizing behaviors such as social difficulties, anxiety, and somatic complaints. The measure is useful for all youth with school refusal behavior. The Conners Rating Scale – Parent Version Revised (CRS-PVR; Conners, 1997) also measures behaviors related to many internalizing and externalizing disorders.

Teachers may complete measures such as the Teacher Report Form (TRF; Achenbach & Rescorla, 2001) and Conners Teacher Rating Scale – Teacher Version Revised (CTRS-TV; Conners, 1997), which measure internalizing and externalizing behaviors and are similar to parent versions of each scale. Questionnaires should be considered with caution when forming a diagnosis and treatment plan because of the heterogeneity and fluidity of school refusal behaviors.

### *Monitoring*

Monitoring is another useful assessment technique for a child and parent on a daily or weekly basis (Kearney, 2001). Youth who refuse school for negative reinforcement may complete The Daily Diary (Beidel, Neal, & Lederer, 1991), which is useful for recording the occurrence, time, location, and behavioral responses to an anxiety-provoking event (p. 508). Another tool to measure a child's anxiety or distress is a fear thermometer, which contains a rating scale of 1-5 or 1-10, where a child can rate the fearfulness of a certain event. This technique is most useful for youth who refuse school due to a specific school-related fear (Kearney, 2001). Another rating measure for youth with school refusal behavior is The Subjective Units of Distress/Disturbance Scale (SUDS; Wolpe, 1969). This scale ranges from 0-100. Kearney and Silverman (1990, 1999) used this scale for youth with school refusal behavior to rate distress. This method is favorable for hourly ratings with youth whose levels of emotional distress change throughout the day (Kearney, 2001).

### *Functional Analysis*

To obtain a descriptive functional analysis of school refusal behavior, a child and parent could complete the School Refusal Assessment Scale-Revised (SRAS-R-C and SRAS-R-P, respectively) (Kearney, 2002b; 2006a). The SRAS-R is a 24-item self-report measure that includes 6 questions relevant to each of four functions of school refusal behavior. The measure uses a 7-point Likert scale from 0-6 where 0=never and 6=always (Kearney, 2002b). An item mean score is calculated for each of the four functions based on child and parent responses. The function with the highest item mean score is the primary variable maintaining a child's school refusal behavior (Kearney, 2002b).

The SRAS-R-C has demonstrated significant 7-14-day test-retest reliability for each of the four functions (.64, .73, .78, and .56, respectively). Concurrent validity was examined between all functional conditions in the original SRAS-C and the SRAS-R-C with a mean  $r = .68$ . Confirmatory factor analysis was used to examine the structure of the SRAS-R-C and investigate the validity of the four-factor model (two negative reinforcement factors and two positive reinforcement factors) (Kearney, 2006b). Confirmatory factor analysis revealed that 22 of the 24 items supported the four-factor model. With the weakest items removed (20 and 24), the model was supported, revealing Cronbach alphas of .82, .80, .87, and .74 for each of the four functions, respectively. Kearney (2006a) recommended using caution when including items 18, 20, and 24. Confirmatory factor analysis supported the four-factor model of the SRAS-R-C and the functional model of school refusal behavior (Kearney, 2006a).

### *Behavioral Observation*

Behavioral observation involves tracking and recording a child's school refusal behavior. Parents should track behaviors a child engages in on a daily basis. These behaviors include verbal or physical resistance to getting out of bed, dressing, washing, or eating, riding in a car or bus to school, and entering the school building (Kearney, 2007b). These behaviors should be monitored and recorded on a 0-10 scale (0 = none and 10 = extreme). Parents can provide ratings for each of these activities, track the number of minutes it takes a child to do each activity, and note the amount of time a child misses school (Kearney, 2007b). Behavioral observations provide important information to help identify what is causing a child's undesirable behaviors.

After proper assessment, the next step is to identify a treatment approach that will be best suited for each individual case. The following sections detail specific treatments as well as prescriptive approaches to address the functions of school refusal behavior. Treatment plans should be flexible, and reassessment throughout treatment will further guide treatment planning.

## *Treatment*

### *Overview of Treatment*

Children commonly demonstrate school refusal behavior 1-2 years before formal treatment is sought (Stickney & Miltenberger, 1998). Over 40% of cases persist for more than two years prior to professional help (Bernstein, Svingen, & Garfinkel, 1990). Children with severe forms of school refusal behavior are likely to be more resistant to treatment than those with less chronic forms (Kearney, 1995). Given the urgent and debilitating nature of school refusal behavior, early identification of the problem and treatment is essential. The American Academy of Child and Adolescent Psychiatry (AACAP, 1997) recommends a multimodal treatment approach that may include many of the treatment components described next.

### *Pharmacotherapy*

Early treatment approaches for anxiety-based school refusal behavior included antidepressants and anxiolytics (Abe, 1975; D'Amato, 1962; Frances & Petti, 1984; Frommer, 1967; Kraft, Ardali, Duffy, Hart, & Pearce, 1965; Nice, 1968). Tricyclic antidepressants may be more useful for children with fewer signs of social or separation anxiety and better attendance records. One important consideration to note is that children do not always respond as well to medications as adults (Kearney, 2006b).

Studies examining the effectiveness of medication on school refusal behavior have yielded mixed results. Gittelman-Klein and Klein (1971) reported that 13 of 16 youth (81.3%) showed improved attendance when taking 25-200 mg of imipramine daily. Bernstein and colleagues (1990) reported moderate to marked improvements in 67% (N = 9) of participants taking imipramine to treat anxiety-based school refusal behavior. This study confirmed that imipramine with cognitive-behavioral treatments were associated with more favorable outcomes than placebo for school attendance and depression during an 8-week trial (Bernstein, Garfinkel, & Borchardt, 1990). Pharmacotherapy now includes other medications such as selective serotonin reuptake inhibitors (SSRIs), benzodiazepines, buspirone, beta-blockers, and antiepileptics for anxiety-based school refusal behavior (Kearney, 2008b). These medications are generally effective for cases of school refusal behavior involving anxiety and depression (Kearney, 2006b).

#### *Cognitive-Behavioral Approaches to Treatment*

Much research has focused on cognitive-behavioral treatment of anxiety-based school refusal behavior. Cognitive techniques include (1) recognizing anxious feelings and somatic reactions to anxiety, (2) clarifying unrealistic or negative expectations or anxious cognitions in anxiety-provoking situations, (3) developing a coping plan by enhancing coping self-talk and coping actions, and (4) evaluating performance and administering self-reinforcement (Kearney, 2001; Kendall, Panichelli-Mindel, Sugarman, & Callahan, 1997). Behavioral approaches include imaginal and in vivo exposure, modeling, role play, relaxation training, contingent social reinforcement, and practice (Kearney, 2001; Silverman et al., 1999). Several studies have examined and reported the effectiveness of these cognitive and behavioral treatment approaches.

### *Cognitive-Behavioral Outcome Studies*

King and colleagues (1998) examined cognitive-behavioral treatment in children with school refusal. The 4-week study included 34 children, aged 5-15 years, randomly assigned to cognitive-behavioral treatment (CBT) or wait-list control. The treatment group received child therapy and parent/teacher training. Child therapy consisted of six 50-minute individual sessions of training in coping skills, anxiety-reducing self-talk, and application of skills via imaginal and in vivo exposures. Reentry into school was gradual until a child attended a full week of classes. Parent training included five 50-minute sessions of child behavior management, which included stimulus control, contingency management, and social and/or tangible reinforcement for positive coping behavior and school attendance. Teachers attended one meeting in the school to address treatment and facilitate school attendance. Control participants received no treatment. School attendance, self-report measures, parent measures, teacher measures, and clinician ratings were used to measure treatment gains. Significant improvements in school attendance and self-reports of fear, anxiety, depression, and coping were seen in the treatment group compared to the control group and were maintained at follow-up. Parent measures indicated significant improvement of internalizing symptoms in the treatment group over the control group. Externalizing symptoms improved in the treatment group but did not differ between the two groups. Teacher ratings improved in both groups, but improvement ratings did not differ between the two groups. Clinician ratings revealed significantly higher GAF ratings for the treatment group than the control group. The treatment group (88.2%) showed significantly more improvement in attendance than the control group (29.4%) (King et al.,1998).

Last, Hansen, and Franco (1998) examined cognitive-behavioral treatment in children with school phobia. Fifty-six school phobic children and adolescents aged 6-17 years were randomly assigned to one of two groups for 12 weeks. The treatment group received graduated in vivo exposure and training in coping self-statements. The educational-support therapy control group focused on educational presentations and supportive psychotherapy. Nine subjects in the treatment group dropped out before midtreatment. Both groups showed reduced anxiety and depressive symptoms and did not differ with respect to school reentry. CBT was not superior to educational and supportive methods of treatment (Last et al., 1998).

Bernstein and colleagues (2000) examined imipramine paired with CBT versus placebo in an 8-week study. Forty-seven participants aged 13-17 years completed the study. Each youth received 8 individual therapy sessions lasting 45-60 minutes. The medication group received 25 mg of imipramine twice daily. School attendance improved significantly in the medication but not the placebo group. Anxiety and depression ratings decreased significantly in both groups, but improvement was faster in the medication group. Layne, Bernstein, Egan, and Kushner (2003) concluded that treatment response related to higher rates of school attendance at baseline, receiving imipramine, and not having a diagnosis of separation anxiety or avoidant disorder.

Heyne and colleagues (2002) investigated the effects of child therapy alone, parent/teacher training alone, and a combination of the two in 61 children aged 7-14 years with school refusal. The child therapy alone group consisted of eight, 50-minute sessions of relaxation training, social skills management, desensitization, and cognitive therapy to reduce anxiety-provoking thoughts and use coping statements. The parent/

teacher training group consisted of eight, 50-minute sessions that focused on behavior management strategies (including reduced home-based reinforcement during school hours, escorting the child to school, and positive reinforcement for coping behavior and attendance) and cognitive techniques to help parents manage their own anxiety. The combined group received eight, 50-minute child sessions and eight, 50-minute parent/teacher training sessions. All groups showed improved attendance, reduction in symptoms of distress, and increased self-efficacy. Parent involvement in treatment was related to better attendance. Combined child and parent treatment did not produce better outcome than child or parent therapy alone (Heyne et al., 2002).

These treatment approaches have typically been used to address individuals in clinical settings. Due to lack of research in community settings, little formal assessment information is available and therefore no standard method of assessment has been recommended for this population. Without formal assessment, no information exists to guide treatment approaches in community settings.

#### *Functional Approach to Treatment*

Kearney (2001) detailed specific multimodal treatment approaches based on the function of school refusal behavior (Table 2). Treatment of children who refuse school to avoid stimuli that provoke negative affectivity is primarily child-focused and involves psychoeducation, hierarchy development, somatic control exercises, imaginal and in vivo desensitization, and self-reinforcement (Kearney, 2001). Psychoeducation helps children better understand the link between their feelings, thoughts and behaviors. A negative affectivity-avoidance hierarchy is constructed from a list of low- to high-anxiety-provoking items to be addressed in stepwise fashion. Somatic control exercises such as

relaxation training and breathing techniques help a child reduce bodily symptoms. Implementing desensitization using imaginal and in vivo exposures will help a child tolerate feared situations. Finally, children are encouraged to recognize and reward their improvement (Kearney, 2001). Children who avoid aversive or evaluative situations are treated similarly, but cognitive restructuring is added. Cognitive restructuring focuses on negative thought patterns and helping children think in more healthy and realistic ways (Kearney, 2001).

Treatment of children who refuse school to receive attention from an adult or caregiver is parent-focused and involves restructuring parent commands, establishing daily routines, implementing consequences for behavior, decreasing reassurance-seeking behavior, and bringing a child to school (Kearney, 2001). Parents need to restructure commands to be short and directive. A fixed morning routine is set to establish structure and enable parents to respond appropriately to child noncompliance. Consequences are paired with the routine and other undesirable behaviors. Forced school attendance may be necessary in some cases (Kearney, 2001).

Treatment for children who refuse school for reinforcement outside of school focuses on family contracts, communication and peer refusal skills training, and escorting a child to school. The creation of contracts between a student and parents increases problem-solving ability and school attendance. Youths also learn skills to enhance communication in school and refuse peer pressure toward nonattendance. Escorts to school and from class to class may be necessary to ensure attendance (Kearney, 2001).

### *Treatment Outcomes of the Functional Model*

Kearney and Silverman (1990) investigated the effectiveness of prescriptive treatment in 7 children with acute school refusal behavior. Children, parents and teachers completed the School Refusal Assessment Scale (SRAS-C, SRAS-P, and SRAS-T, respectively) to determine the most significant function of school refusal behavior and treatment assignment. Treatment effectiveness was measured by 90% school attendance for a minimum of 2 weeks (excluding legitimate physical illness) or 75% reduction of anxiety, depression, and general distress. Children and parents used daily logbooks to record anxiety, depression, and general distress. Treatment ranged from 3-9 weeks. Six of seven participants fully attended school for at least 2 weeks by posttreatment. The subject who did not return to school began working with parental permission. At six-month follow-up, 5 of the 7 cases were still regularly attending school (Kearney & Silverman, 1990).

Chorpita, Albano, Heimberg, and Barlow (1996) further examined the effectiveness of prescriptive treatment for school refusal behavior. The study included a 10-year old female with school refusal, separation anxiety disorder, and social phobia. The child and parents completed the SRAS-C and SRAS-P, respectively. Ratings revealed that she missed school due to attention-getting/separation anxiety. Treatment focused on daily monitoring and differential reinforcement of behaviors. Each week predetermined target behaviors were ignored and extinguished. Treatment first targeted somatic complaints, which decreased within 3 days. Somatic complaint reduction was stable and manifested only once in 60 days. All targeted behaviors such as tantrums ceased by post-treatment and gains continued to 2-year follow-up (Chorpita et al., 1996).

Kearney and Silverman (1999) examined prescriptive and nonprescriptive treatment in youth with school refusal behavior. Eight children (five boys and three girls) with acute school refusal behavior were included. Four participants received prescriptive treatment and four received nonprescriptive treatment. Each child's primary and least influential function of school refusal behavior was determined. The four participants in the prescriptive treatment group received relaxation training, gradual re-exposure to school, cognitive therapy, increased daily activity, parent training and contingency management, and family contingency contracting, depending on the primary function of school refusal behavior. The four participants in the nonprescriptive group received procedures assigned on the basis of their least influential function. Participants' time spent out of school was reduced a mean of 94.2%. This reduction was evident in all participants but was most apparent in children who received prescriptive treatment. During the final week of treatment, the nonprescriptive group showed a 14.6% increase in absenteeism from baseline. Anxiety and depression ratings decreased by a mean of 60.7% and 42.0%, respectively, but improvements were most evident in children receiving prescriptive treatment. Children in the nonprescriptive group showed a slight worsening of symptoms in their final week of nonprescriptive treatment.

Kearney (2002b) addressed multifunction school refusal behavior in a 12-year-old boy. The child presented with numerous anxiety-based symptoms that included shaking, nausea, muscle tension, and crying. The symptoms caused the child to return home, where symptoms would quickly subside until the next morning. The child also reported fears in school and perfectionistic tendencies. Assessment revealed that the child refused school for three reasons: to avoid stimuli that provoke negative affectivity, to obtain

attention, and for tangible reinforcement outside of school. The child was treated in 4 sessions using psychoeducation, breathing retraining, muscle relaxation, a part-time school schedule, consequences from his parents for undesired behavior, and parent training to ignore undesired pleas for reinforcement. Acceptable levels of attendance were established by the fifth treatment session.

Kearney, Pursell, and Alvarez (2001) detailed two cases of children with school refusal behavior and the efficacy of prescriptive treatment. Both cases involved children who refused school for positive and negative reinforcement. Both experienced distress surrounding school and reinforcement at home when not in school. The first participant, a 9-year old Hispanic female, was diagnosed with separation anxiety, generalized anxiety, and social anxiety disorder. Treatment involved anxiety management and parent-based contingency management that included psychoeducation, a hierarchy of fears, somatic management skills, and exposure. The child's difficulties were successfully treated and gains maintained after 5 therapy sessions. The second participant was a 10-year old Caucasian male with ADHD and social anxiety disorder. Treatment was similar to that of the female and the child successfully attended classes by the fifth treatment session.

Tolin and colleagues (2009) further examined intensive prescriptive treatment in 4 adolescent males with school refusal behavior. The School Refusal Assessment Scale – Revised (Kearney, 2002b) was completed by the child and parent to determine the primary function of school refusal behavior. Treatment consisted of 15 sessions of CBT over 3 weeks, with sessions lasting 90-120 minutes 5 times per week. Specific treatment approach modifications varied for each subject, taken from treatment guidelines by

Kearney (2001) and Kearney and Albano (2000). All adolescents showed improved attendance at post-treatment. At 3-year follow up, all participants were attending alternative education programs, but parental reports noted an improvement in symptoms from pretreatment. Tolin and colleagues (2009) demonstrated that a prescriptive approach to treatment is associated with long-term improvement in adolescents with school refusal behavior. The aforementioned studies provide support for prescriptive forms of treatment, but did so utilizing clinical samples. A main goal of this study was to identify relationships between functions and symptom sets in a community sample that may suggest that prescriptive treatment techniques could be expanded to a larger population. Others have examined school-based treatment approaches for absenteeism and these approaches are described next.

#### *School-Based Approaches to Treatment*

Schools have implemented several procedures to address absenteeism. These procedures include school staff training that focuses on monitoring attendance and intervening at the earliest signs of school refusal (Pellegrini, 2007). Early interventions for school nonattendance include establishing support and peer-mentoring systems (Newton & Wilson, 1999). Long-term school approaches include safe havens for students, monitoring areas of the school where bullying occurs, and fostering healthy relationships between staff and students (Pellegrini, 2007). Other approaches include, but are not limited to, sanctions for absences, academic enrichment programs, computerized attendance monitoring, and multiagency collaborative interventions (Mueller et al., 2006). The engagement and support of parents with the involvement and cooperation of the school is vital for correcting the problem (Lauchlan, 2003).

### *Treatment Outcomes*

Bry and George (1980) investigated the effects of a preventative program for students with school attendance difficulties. The study included 40 seventh-grade students from a large, urban school district who were randomly assigned to the preventative group or a control group. Students in the preventative group participated in daily monitoring of attendance, tardiness, and disciplinary actions. School officials monitored nonattendance, tardiness, and disciplinary problems through parent contact. A positive letter home followed improvement in attendance. Each student had one teacher interviewed weekly, focusing on how that student was doing in class. Students also received points for various improvements such as daily attendance, arriving on time, and lack of disciplinary action. Points were distributed at weekly student meetings. Significant improvements were noted in the attendance and grades of the monitored group. This program demonstrated improvement in key areas (grades and attendance) and provided evidence for the efficacy of stringent attendance monitoring programs (Bry & George, 1980).

Ford and Sutphen (1996) investigated an incentive-based elementary school program to improve attendance. The study included implementation of individual interventions and school-wide attendance initiatives. The program informed parents of absences and tardiness policies and requested parental support for child participation. The program aimed to promote 9 weeks of perfect attendance during each grading period. The names of children with perfect attendance appeared on posters hung throughout the school as incentive for continued attendance and to promote attendance among all students. Children with perfect attendance also received an attendance certificate and had their

names announced. The individual program focused on students who missed over 20 days of school the previous year or had 6 or more absences in the first 9-week term. The goal of the individual program was to provide support and incentives to students and their families. The students attended daily counseling sessions lasting 15-60 minutes. The child was monitored for the remainder of the school year after the intervention phase. Students receiving individual treatment had significantly improved rates of attendance (Ford & Sutphen, 1996).

Sheldon and Epstein (2004) investigated community involvement for chronic absenteeism in 39 schools (29 elementary and 10 secondary) in urban and suburban areas. Several approaches to boost attendance were successful. Communication with the child's family regarding attendance, celebrating good attendance with the student and their family, and connecting students with mentors in the community led to a significant reduction of absences from one school year to the next.

#### *Legal Approaches to Treatment*

Truancy has often been a topic of discussion associated with "irresponsible parents" (Zhang, 2004). Legal means of addressing absenteeism through child and parent sanctions are necessary in some cases. Between 1987 and 1996, the number of cases of truancy addressed in juvenile courts nearly doubled (Snyder & Sickmund, 1999).

Zhang (2004) investigated the impact of parental prosecution on attendance in truant youth. The study included 43 local education establishments over three years (1999-2002). The number of cases of parental prosecution compared with attendance rates did not indicate that more stringent prosecution leads to a decrease in nonattendance. Parental prosecution did not prove to be a means to addressing attendance problems, so

Zhang (2004) proposed that parents receive professional support to address their children's attendance. In addition, the author suggests that attendance legislation be reconsidered, such that older youth could be prosecuted for truancy, rather than their parents (Zhang, 2004).

Fantuzzo, Grim and Hazan (2005) investigated differences between non-court-referred cases of truancy versus court-referred cases. The study included 567 truants, aged 6-18 years, from urban elementary, middle, and high schools. The purpose was to implement Project START (Stop Truancy and Recommend Treatment). Participants had at least 25 or more unexcused absences from school. Three groups were included: truants referred to multidimensional, community-based family court (Project START), truants referred to traditional, one-dimensional family court, and nonreferred truants. Participants and legal guardians in the Project START and family court referred groups were summoned to family court, where a court master determined the disposition of the case and ordered the next steps, and imposed court sanctions when parents did not comply. The Project START group also had caseworkers assigned in the courtroom to promote family utilization of community services and provide referrals for services such as counseling or occupational training as needed. School records were used to track number of school days attended, number of excused absences, and number of unexcused absences. Truancy in nonreferred cases remained high or unchanged. Both court-referred groups demonstrated a significant improvement in attendance. At 30-60-day follow-up, the community-based court group showed decreased rates of truancy compared to the family court referred group. At 1-year follow-up, all groups showed an increase in

nonattendance, but youth in the community-based court-referred group continued to show the most improvement.

To form effective treatment strategies, the psychopathology associated with school refusal behavior must be understood. The following sections detail psychopathology, both internalizing and externalizing, as they relate to school refusal and truancy behaviors. Many treatments are available to address school refusal behavior, but the preferred method of treatment will vary depending on the psychopathology associated with an individual case. Addressing psychopathology is an important step during assessment and treatment. The following sections detail internalizing and externalizing psychopathology related to school refusal and truancy.

### *Psychopathology*

Child psychopathology and school refusal behavior are frequently related. Researchers have investigated the relationship between psychological disorders and school nonattendance for decades. Studies indicate that over 60% of children with school refusal behavior meet criteria for at least one internalizing and/or externalizing disorder (Kearney, 2006b). Most studies have looked at psychopathology in individuals that seek out formal treatment. The goal of this study was to identify aspects of function and symptom sets in a community sample, where little research has been focused.

#### *Internalizing Disorders and School Refusal*

Children with comorbid anxiety, depression, and school refusal behavior have significantly greater and more severe psychopathology and distress than children with no diagnosis or those with fewer diagnoses (Bernstein, 1991; Bernstein et al., 1997). Children with anxiety disorders frequently experience social impairments in the form of

school refusal. School refusal is commonly comorbid with separation anxiety, social anxiety, generalized anxiety, panic disorder, and agoraphobia. Separation anxiety disorder leads to significant distress when a child encounters situations of separation from parents, such as school. These children may resort to behaviors such as tantrums and screaming to avoid separation. This type of behavior can have a negative impact on a child's education and social interaction (Lease & Strauss, 1993). Children with school refusal may also show signs of a specific phobia. A situation at school or the school itself can cause a specific phobia (Last et al., 1987). Children with school refusal may also experience somatic symptoms and difficulties with mood (Last & Strauss, 1990). Several researchers have investigated the relationship between internalizing disorders and school refusal, as presented next.

#### *Outpatient/Clinic Studies*

Bernstein and Garfinkel (1986) examined 26 youth age 9-17 years (15 males and 11 females). Referrals came from schools and two county juvenile court systems (Bernstein & Garfinkel, 1986). Youths missed at least 10 days of school in a single trimester, though most participants reported a more chronic case lasting at least 2 years. Diagnoses were based on the Diagnostic Interview for Children and Adolescents (DICA; Herjanic & Campbell, 1977), Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richman, 1978), Visual Analogue Scale for Anxiety (Garfinkel, Bernstein & Erbaugh, 1984), Children's Depression Inventory (CDI; Kovacs & Beck, 1977), Children's Depression Scale (CDS; Lang & Tisher, 1978), Anxiety Rating for Children (ARC; Erbaugh, 1984), and Children's Depression Rating Scale (CDRS; Poznanski, Cook, & Carroll, 1979).

Based on the Diagnostic Interview for Children and Adolescents, 69.2% of participants met criteria for depression and 61.5% met criteria for an anxiety disorder. Anxiety disorders included separation anxiety disorder only (26.9%), separation anxiety disorder with overanxious disorder (23.1%), and overanxious disorder only (11.5%). Fifty percent of participants met criteria for anxiety and depression. Conduct disorder was also present in 23.1% of the sample. Participants who met criteria for anxiety and depression reported the highest scores (most severe symptoms) on all rating scales. The anxiety and depression group did not differ significantly from those with depression alone. Participants with no diagnosis or anxiety alone reported the lowest amount of symptoms among the sample. The authors concluded that youth with affective disorders typically also report symptoms of anxiety, but youth with anxiety disorders commonly do not also report symptoms of affective disorders. Findings indicated that youth with more severe cases of anxiety do report symptoms of depression, making the two disorders indistinguishable (Bernstein & Garfinkel, 1986).

Last and Strauss (1990) investigated differences between two subgroups of children with school refusal: separation anxious and phobic. This study included 63 youth aged 7-17 years who presented to an outpatient anxiety disorder clinic with anxiety-based school refusal. The disorder most commonly associated with school refusal was separation anxiety (38.1%), followed by social phobia (30.2%), simple phobia (22.2%), panic disorder (6.3%), and post-traumatic stress disorder (3.2%). Last and Strauss (1990) concluded that youth refusing school due to separation anxiety differ from those refusing school due to phobia (social or simple). Youth with phobic school refusal had a later age of onset and reported more severe symptoms. Youth with separation anxiety commonly

had mothers who reported having childhood school refusal themselves. The authors suggested that separation-based school refusal is likely due to the mother-child relationship, while phobia-based school refusal is more likely due to the school environment (Last & Strauss, 1990).

Bernstein (1991) studied the severity of symptoms in 96 youth aged 7-17 years evaluated at an outpatient school refusal clinic. All participants had school refusal, which the author defined as “poor school attendance secondary to psychological symptoms without medical illness” (Bernstein, 1991, p. 44). Participants were classified into four groups: separation anxiety disorder and/or overanxious disorder (28%), major depression or dysthymia (28%), anxiety diagnosis and depression (25%), and absence of an anxiety or depression diagnosis (19%). Diagnoses in the non-anxiety/depression group included conduct disorder (39%) and oppositional defiant disorder (28%). Participants also completed the following measures: Anxiety Rating Scale for Children (ARC; Erbaugh, unpublished instrument), Revised Children’s Manifest Anxiety Scale (RCMAS; Reynolds & Richman, 1978), Revised Form of the Children’s Depression Rating Scale (CDRS-R; Poznanski, Freeman, & Mokros, 1985), Children’s Depression Inventory (CDI; Kovacs & Beck, 1977), and Children’s Depression Scale (CDS; Lang & Tisher, 1978). The anxiety group had the lowest mean age (11.3 years) of the four groups. Youth with comorbid anxiety and depression reported the highest level of symptoms compared to the other groups. Youth who received no diagnosis scored the lowest on all rating scales, as expected. Symptom means were similar for youth with anxiety alone and depression alone.

Bernstein and colleagues (1997) examined somatic symptoms associated with anxious-depressed school refusers. The study included 44 adolescents aged 12-18 years who participated in an 8-week treatment study and who met the following criteria: (1) absence from school at least 20% of time in the past 4 weeks, (2) diagnosis of at least one anxiety disorder based on the Diagnostic Interview for Children and Adolescents-Revised-Adolescent Version (DICA-R-A) and/or Diagnostic Interview for Children and Adolescents-Revised-Parent Version (DICA-R-P; Reich & Welner, 1990), (3) diagnosis of major depression based on DICA-R-A and/or DICA-R-P, and (4) postpubertal status (Bernstein, 1991). The study utilized clinician rating scales, self-report measures, and parent report measures. Clinician administered scales included the Children's Depression Rating Scale-Revised (CDRS-R; Poznanski et al., 1985) and Anxiety Rating Scale for Children-Revised (ARC-R; Bernstein et al., 1996). Child self report measures included the Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richman, 1978), Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) and Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1994). Mothers completed the Child Behavior Checklist (CBCL; Achenbach, 1991).

Nearly one-third (31.8%) of participants reported at least five somatic symptoms on the DICA-R-A. Complaints most frequently endorsed (by 20.5% of participants) were faint/light-headed/dizzy, sick to stomach, and back pain. Stomach pains and vomiting followed next in reported frequency, affecting 18.2% of participants. According to mothers' reports (on the CBCL), the most elevated scale was Somatic Complaints (T = 72.5), followed by the Anxious/Depressed scale (T = 70.4) and Withdrawn scale (T = 69.8). Elevations in the RCMAS and BDI were associated with higher reported

symptoms as measured by the ARC-R Physiological subscale. Separation anxiety was commonly associated with gastrointestinal complaints and lower levels of nonattendance. These types of somatic complaints with school refusal should serve as a “red flag” for parents and school officials to consider anxiety and/or depression (Bernstein et al., 1997).

Hansen and colleagues (1998) examined 76 youth aged 6-17 years referred to an anxiety-based school refusal clinic. Youth had anxiety-based school refusal according to DSM-III-R (1987) diagnosis, had missed at least 10% of school days in the month prior to the study, had no current diagnosis of depression, and were not on medication. Participants displayed phobic disorder (54%), separation anxiety disorder (29%), panic disorder (7%), overanxious disorder (5%), avoidant disorder (4%), or anxiety disorder not otherwise specified (1%). In addition, 53% of study participants received more than one anxiety disorder diagnosis. Non-anxiety related comorbid diagnoses included oppositional defiant disorder (11%) and trichotillomania (1%).

Comorbid anxiety diagnoses did not correlate with level of absenteeism. The authors predicted that increased rates of absenteeism and levels of trait and somatic anxiety, as measured by the Modified State-Trait Anxiety Inventory for Children (STAIC-M; Spielberger, 1973) and Children’s Depression Inventory (CDI; Kovacs & Beck, 1977), respectively, would significantly affect absenteeism. Their results did not support this hypothesis, which they attributed to exclusion of participants with major depressive disorder. Hansen and colleagues (1998) found that age was the strongest predictor of absenteeism; older children tended to miss more school than younger children. Findings revealed a negative relationship between fear and level of absenteeism. The presence of

anxiety disorders commonly associated with school refusal (separation anxiety and phobic disorder) did not correlate with level of absenteeism in participants.

Kearney and Albano (2004) examined 143 school refusing youth and parent dyads referred to two separate university-based school refusal behavior clinics. The aim of this study was to identify patterns of psychopathology associated with functions of school refusal behavior. Youth aged 5-17 years participated in the study. Each child/parent dyad participated in a diagnostic interview using the Anxiety Disorders Interview Schedule for Children-Child and Parent Versions (ADIS-C/P; Silverman & Albano, 1996). Youth and their parents also completed the School Refusal Assessment Scale (child and parent versions) (SRAS-C and SRAS-P, respectively; Kearney, 2002b; Kearney & Silverman, 1993). If only one parent was present during the assessment, then he or she completed the SRAS-P; if two parents were present, then they each completed an individual SRAS-P.

Nearly two-thirds (67.1%) of the sample received a primary diagnosis and 32.9% received no diagnosis. Of those receiving a primary diagnosis, 30.8% met criteria for a second diagnosis in addition to school refusal symptoms, 11.9% received a third diagnosis, 4.2% met criteria for a fourth diagnosis, and 2.1% received a fifth diagnosis. Separation anxiety disorder was the most commonly comorbid diagnosis with school refusal behavior and was most related to the attention seeking function. Anxiety disorders most highly related to functions of negative reinforcement (stimuli that provoke negative affectivity and escape from aversive social and/or evaluative situations). Disruptive disorders were most highly related to pursuit of tangible reinforcement outside of school. Younger youth were more likely to refuse school for attention or to avoid

stimuli that provoke negative affectivity, whereas older children were more likely to refuse school to escape aversive social and/or evaluative situations or to pursue tangible reinforcement outside of school. Those who avoided school due to stimuli that provoke negative affectivity reported the most severe diagnoses. Kearney and Albano (2004) noted that internalizing disorders are most frequently associated with functions of negative reinforcement and conduct and oppositional defiant disorders are commonly associated with the pursuit of tangible reinforcement outside of school. This study has contributed significantly to the hypotheses in the current study, which aimed to investigate whether similar relationships occur in a community sample.

#### *Inpatient versus Outpatient Studies*

Some researchers have investigated the differences between school refusal and psychopathology in inpatient and outpatient settings. Borchardt and colleagues (1994) looked at differences between 28 age and gender-matched inpatient and outpatient adolescents with school refusal. The outpatient sample was assessed using various measures of depression and anxiety, including the Children's Depression Inventory (CDI; Kovacs & Beck, 1977), Children's Depression Rating Scale-Revised (CDRS-R; Poznanski et al., 1985), Children's Depression Scale (CDS; Lang & Tisher, 1978), Anxiety Rating Scale for Children (Erbaugh, 1984 unpublished), Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richman, 1978) and State Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973). Some participants also completed the Diagnostic Interview for Children and Adolescents (DICA; Herjanic & Campbell, 1977). The two groups showed no differences in age or duration of the problem.

The inpatient group had significantly more affective disorders (89.3%) than the outpatient group (50%). The inpatient and outpatient groups did not differ significantly with respect to prevalence of anxiety disorders (75% and 67.9%, respectively). Inpatients had an average of 2.4 Axis I disorders, whereas outpatients had an average of 1.8 Axis I disorders. Single-parent families were more common among inpatient adolescents. The authors concluded that inpatient status denoted a more severe case of affective disorders.

McShane, Walter, and Rey (2001) examined differences in youth admitted to an inpatient unit for treatment of school refusal versus those treated on an outpatient basis. The study included 192 youth aged 10-17 years, 153 of whom had symptoms of school refusal that persisted for two years. Inpatient participants had higher rates of dysthymia and outpatient school refusers reported higher rates of panic and disruptive behavior disorder not otherwise specified. Fifty-five percent of participants met criteria for more than one diagnosis, and dysthymia was commonly comorbid with major depression, separation anxiety disorder, and oppositional defiant disorder. Findings were similar to Borchardt and colleagues (1994) such that inpatients had more comorbid diagnoses than outpatients.

#### *Education Department and Community-based Studies*

Previously discussed studies involved inpatient and/or outpatient school refusers. Studies in this section include youth who did not actively seek treatment but were enlisted through an education welfare department or through community-based studies. Bools, Foster, Brown, and Berg (1990) examined 100 children with severe school attendance difficulties. Education welfare officers identified children with problematic absenteeism through a standard checklist used to interview parents. Parents participated

in home-based interviews. The interview, conducted by a psychiatrist, was completed with the mother (N=72), father (N=9), or both parents (N=19). A psychiatrist then decided if the child exhibited school refusal, truancy, a mixed pattern, or neither. The psychiatrist also diagnosed psychiatric symptoms.

Of the 100 participants, 53% were labeled as truants, 24% as school refusers, 9% with truancy and school refusal, and 14% with neither truancy nor school refusal. Half of the children met criteria for a psychological disorder. A conduct disorder diagnosis was common with a truancy classification, whereas children classified as school refusers demonstrated higher rates of emotional disorders. Over one-third of the school refusal group experienced anxiety symptoms that were only present on school mornings. Bools and colleagues (1990) also reported that 11% of children with mixed refusal met criteria for conduct disorder alone, 22% for emotional disorder alone, and 33% met criteria for both mixed conduct and emotional disorders. Children not in the truancy or school refusal groups who reported remaining at home without any symptoms were labeled as “school withdrawal” (Bools et al., 1990).

Berg and colleagues (1993) examined 80 adolescents aged 13-15 years that had missed over 40% of the school term and a control group of 30 participants. Parents and children completed the Child and Adolescent Psychiatric Assessment Scale (CAPA; Angold et al., 1995) and parents completed the School Attendance Problems Scale. Using the CAPA interview, the authors later assigned DSM-III-R (APA, 1987) diagnoses.

Half of the children met criteria for a diagnosis, 32% met criteria for a conduct disorder, and 17% met criteria for an anxiety or mood disorder. Some (28.8%) showed

signs of truancy and no disorder, and 26.2% showed truancy and conduct disorder. Fifteen percent had school refusal and no disorder, while 7.5% demonstrated school refusal and an anxiety disorder, 1.3% had truancy and an anxiety disorder, 1.3% demonstrated school refusal and conduct disorder, and 17.5% showed no signs of truancy or school refusal.

Egger, Costello, and Angold (2003) conducted a large scale community study with 1422 youth aged 9-16 years. School refusal difficulties were determined by parent and youth reports using the Child and Adolescent Psychiatric Assessment Scale (CAPA; Angold et al., 1995) to form DSM-IV (APA, 1994) diagnoses. The authors identified anxious school refusers (1.6%), truants (5.8%), and a mixed group (0.5%). One-fourth of children with anxious school refusal met DSM-IV (APA, 1994) criteria for a psychological disorder, especially depression (13.9%). Eighty-eight percent of children in the mixed category met DSM-IV (APA, 1994) criteria for a psychological disorder especially conduct disorder (43.4%). Twenty five percent of truants met criteria for a disorder, especially conduct disorder (14.8%). Only 6.8% of youth without school refusal met disorder criteria, especially oppositional defiant disorder (2.3%).

Approximately 75% of nonattending students did not meet criteria for a diagnosis, which is notably less than findings from previous studies (Egger et al., 2003).

#### *Externalizing Disorders and Truancy*

Externalizing behaviors are also common in youth with school refusal behavior and truancy. As previously mentioned, truancy from school is one criterion used to diagnose conduct disorder (DSM-IV-TR, 2000), and is frequently associated with academic difficulties in youth with oppositional defiant disorder. Conduct problems cover a wide

range of behaviors, from clinging, whining, noncompliance, refusal to move, and temper tantrums, to theft, vandalism, running away from home or school, and verbal and physical aggression (Freeman, 2004; Kearney, 2002a). Mueller and colleagues (2006) reported that rates of delinquency increase proportionally with rates of truancy. Chronic truants are commonly more delinquent than youth who regularly attend school. The current study hypothesized that individuals with greater externalizing symptoms will refuse school primarily to pursue tangible reinforcement outside of school.

### *Truancy Studies*

Fergusson and colleagues (1995) looked at truancy among 935 adolescents assessed longitudinally from ages 11-16 years. Parent interviews were administered in their homes and adolescent interviews occurred in school using the Self Report Early Delinquency Scale (Moffitt & Silva, 1988). Prior to age 13 years records indicate whether a participant was truant in the past school year. From age 13 years and older the frequency of truancy was recorded. Conduct and oppositional behaviors were measured using parts of the Rutter (Rutter, Izard, & Whitmore, 1970) and Conners (1969; 1970) parent and teacher questionnaires.

Truancy increased tenfold from 3.0% at age 12 years to 30.2% by age 16 years. Severe truancy, defined by more than 30 absences, occurred in 7.1% of the adolescents. Over one-third (39.8%) had one episode of truancy during their secondary education. No gender differences appeared with respect to truancy rates. The authors concluded that more severe truancy was associated with conduct problems, such as juvenile offending, police contact, substance use, low self esteem, mood disorders, and suicidal ideation.

Lahey and colleagues (1999) examined 1285 youths aged 9-17 years from four communities within the United States, looking at the relationship between age of onset of conduct disorder in youth and the most prominent presenting problems that accompany the disorder. Participants were chosen from housing units and must have lived in that household for six months. The responding guardian must have lived with the participant for at least six months. The youth and their parent completed the National Institute of Mental Health Diagnostic Interview Scale for Children (DISC-2.3; Shaffer et al., 1996). Each parent also completed the Service Utilization and Risk Factor (SURF) interview (Goodman et al., 1998; Leaf et al., 1996) and the parent and interviewers completed the Children's Global Assessment Scale (CGAS; Setterberg, Bird, & Gould, 1992).

Lahey and colleagues (1999) found, in the 12 months prior to assessment, parents reported that males (15.6%) were more likely than girls (9.5%) to demonstrate one or more conduct problems. Males (26%) were also more likely than females (19%) to report one or more conduct problems. Results showed no gender differences with respect to age of onset. Parents reported an average age of onset of 11 years (for males and females) and youth reported an average age of onset of 10.2 years for girls and 9.6 years for males. The authors concluded that youth with an earlier age of onset of conduct disorder (aged 8-12 years) were more likely to engage in more serious behaviors such as physical aggression, lying, theft, and vandalism, in addition to truancy. Those with a later age of onset (aged 12-16 years) were more likely to engage only in truancy, as reported by the parent and youth.

Truancy and conduct disorder are frequently associated with eventual school dropout. Tramontina and colleagues (2001) conducted a study of Brazilian students in grades three

and four. These grades were determined as the first peak of dropout in students in Brazilian state schools. The study defined dropout as having missed 15 consecutive days of school without a valid excuse. The study included 49 school dropouts and 44 gender matched controls from the same class as the dropout student. One parent (generally the mother) completed the Schedule for Affective Disorders and Schizophrenia for School Age Children, Epidemiological Version (K-SADS-E; Orvaschel, 1994) and the Self Report Questionnaire (SRQ-20; Mari & Williams, 1996), a measure of psychopathology. Each child's cognitive abilities were measured using two subtests (vocabulary and block design) from the Wechsler Intelligence Scale – Third Edition (WISC-III). The authors gathered information from parents and schools regarding each participant's sociodemographic profile, grade repetition, suspension, and expulsion records.

Tramontina and colleagues (2001) found significant differences between children who dropped out of school and those who were still in school. Children who repeated a grade were likely to drop out later. The groups did not show differences with respect to number of suspensions and expulsions. Elementary school children that dropped out of school had significantly higher rates of conduct disorder than children who remained in school. The two groups also showed no differences with respect to additional mental disorders. This study concluded that, without school and government intervention to prohibit school dropout, conduct disordered children will continue to be truant, which will lead to eventual school dropout (Tramontina et al., 2001).

Harada and colleagues (2002) investigated the relationship between psychosocial problems (including school refusal) and psychological diagnoses in three groups. The groups included youth aged 15 years or younger with attention-deficit/hyperactivity

disorder (ADHD) (23 participants), oppositional defiant disorder (ODD) (10 participants), and comorbid ADHD/ODD (31 participants). The authors defined school refusal as having missed 30 or more school days not related to physical disorders. The participants and their mothers were interviewed to determine Axis I and II diagnoses. Participants also completed the Wechsler Intelligence Scale for Children-Revised, the Illinois Test of Psycholinguistic Abilities, the Japanese version of the Children Depression Inventory (CDI; Kovacs, 1981), and the State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973).

Number of ADHD symptoms and the number of ODD symptoms did not differ between the comorbid group and the ADHD alone or ODD alone group, respectively. Participants in the comorbid group scored significantly higher on the CDI and the state-anxiety score on the STAIC than those with ADHD or ODD alone. Participants reported no differences on the trait-anxiety score of the STAIC. School refusal behaviors were evident in 17% of the ADHD group, 42% of the comorbid group, and 80% of the ODD group. The comorbid group demonstrated significantly more psychosocial symptoms than participants in the ADHD or ODD group. The ODD group reported more problems with respect to isolation from peers, impulsive reactions to friends, and being bullied than the comorbid and ADHD groups. All groups also reported significant achievement difficulties (62% of the comorbid group, 73% of the ADHD group, and 42% of the ODD group) (Harada et al., 2002).

Henry (2007) examined truancy in 5684 8<sup>th</sup> grade students and 5429 10<sup>th</sup> grade students. Truancy was self-reported and included absences in the 4 weeks prior to the survey. The author also collected information regarding gender, ethnicity, parental

education level, mother's employment status, religious participation, living situation, amount of unsupervised time after school, high school class level and grades, employment status, perceived likelihood of graduating from high school and college, safety of the school, and recent drug use.

Henry (2007) found that 10.5% of 8<sup>th</sup> grade participants and 16.4% of 10<sup>th</sup> grade participants reportedly skipped school 1 or more times over the previous 4 weeks. Most truants skipped only 1-2 days, including 7.5% of 8<sup>th</sup> grade students and 11.4% of 10<sup>th</sup> grade students. A smaller percentage of students, 3.0% of 8<sup>th</sup> grade students and 5.1% of 10<sup>th</sup> grade students, demonstrated chronic truancy. The author also determined that the variables most associated with truancy were poor academic performance, low perceived likelihood of graduating from high school, and drug use (Henry, 2007).

A wide range of literature has thus covered the relationships between psychopathology and school refusal behavior. These studies have focused on internalizing and externalizing disorders, but primarily with clinical samples. One gap in the literature is the lack of information available on community samples with school refusal behavior. The current study aimed to address this deficit.

### *The Current Study*

This study aimed to investigate and expand upon the relationship between psychological disorders and school refusal behavior by examining a community sample. The present study examined youths with school refusal behavior with respect to reported function of school refusal behavior and psychopathology. Clear links between psychopathology and school refusal behavior are evident in past literature in clinical samples. Early studies (e.g., Bernstein & Garfinkel, 1986) linked anxiety, depression and

disruptive disorders to school attendance difficulties. More severe psychopathology, or more than one set of symptoms, commonly leads to a complicated and difficult course of school refusal behavior (Bernstein, 1991; Bernstein et al., 1997). More recent studies also reveal considerable overlap of psychopathology and school refusal behavior in clinical samples (Kearney, 2002; Kearney & Albano, 2004; McShane, Walter, & Rey, 2001; McShane, Walter, and Rey, 2004). Unfortunately, very little systematic work has involved the psychopathology of youths with school refusal behavior in community settings. Looking at these relationships in a community sample will allow treatment strategies to be applied to a more diverse population.

The primary aim of the current study was to investigate the relationship between various school refusal behavior functions and the primary symptoms associated with each function. Data from the current study utilizing a community sample was expected to link internalizing symptoms to functions of negative and positive reinforcement and externalizing symptoms to functions of positive reinforcement. No previous study has examined the relationship between these symptoms and the functions of school refusal behavior using child self-report or parent report measures in a community setting. The current study looked at whether specific symptom sets are linked to a specific function of school refusal behavior. Findings in this community sample were predicted to mirror those of past clinical samples, which would suggest that clinicians will have access to extant assessment and treatment strategies and be able to address a wider array of youths with school refusal behavior.

## *Hypotheses*

The first hypothesis was that youth who refuse school primarily for function 1 (avoidance of stimuli that provoke negative affectivity), as determined by the School Refusal Assessment Scale-Revised (SRAS-R; Kearney, 2002b), would report more symptoms of generalized anxiety and depression on the Revised Child Anxiety and Depression Scale (RCADS; Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000) than youth refusing school primarily for functions 2, 3, and 4. The relationship between anxiety, depression, and school refusal has been demonstrated by previous studies of clinical samples (Berg, 1992, Berg et al., 1993; Bernstein et al., 1999; Kearney, 2006b; Hans0en et al., 1998).

The second hypothesis was that youth who refuse school primarily for function 2 (escape from aversive social or evaluative situations), as determined by the School Refusal Assessment Scale-Revised (SRAS-R; Kearney, 2002b), would report more symptoms of social phobia on the Revised Child Anxiety and Depression Scale (RCADS; Chorpita et al., 2000) than youth refusing school primarily for functions 1, 3, and 4. The relationship between social phobia and school refusal behavior is commonly due to performance situations such as reading aloud in class, speaking before the class, or testing situations. Studies by Last and colleagues (1987) and McShane and colleagues (2004) have linked social phobia to school refusal but not to a specific function.

The third hypothesis was that youth who refuse school primarily for function 3 (attention-seeking behavior), as determined by the School Refusal Assessment Scale-Revised (SRAS-R; Kearney, 2002b), would report more symptoms of separation anxiety disorder on the Revised Child Anxiety and Depression Scale (RCADS; Chorpita et al.,

2000) than youth refusing school primarily for functions 1, 2, and 4. Kearney and Albano (2004) found separation anxiety disorder to be related to attention-seeking behavior in a clinical sample of youths with school refusal behavior.

The fourth hypothesis was that youth who refuse school primarily for function 4 (pursuit of tangible reinforcement outside of school), as determined by the School Refusal Assessment Scale-Revised (SRAS-R; Kearney, 2002), would have parents that report more oppositional symptoms on the Conners Parent Rating Scale-Revised (CPRS-R; Conners et al., 1998) than youth refusing school primarily for functions 1, 2, and 3. Kearney and Albano (2004) linked disruptive behaviors to the pursuit of tangible reinforcement outside of school in a clinical sample.

## CHAPTER 3

### METHODOLOGY

#### *Participants*

Participants included 200 middle and high school students aged 11-17 years ( $M = 14.04$  years;  $SD = 1.65$ ) and their parent/guardian. Youths were Hispanic (62.5%), European American (12.5%), African-American (9.9%), other (6.8%), Multiracial/biracial (4.7%), Native American (2.6%), and Asian-American (1%). Participants included 110 males (55%) and 90 females (45%). Families were recruited from Clark County Family Courts and Services Center ( $n = 121$ ) and the Truancy Diversion Program in the Clark County School District ( $n = 79$ ).

#### *Youth Measures*

##### *Revised Child Anxiety and Depression Scale*

The Revised Child Anxiety and Depression Scale (RCADS) (Chorpita, Yim, Moffitt, Umemoto, & Francis, 2000) is a 47-item measure of psychopathology in children and adolescents. The measure contains subscales for multiple anxiety disorders, including separation anxiety disorder (SAD), social phobia (SP), generalized anxiety disorder (GAD), obsessive-compulsive disorder (OCD), and panic disorder (PD), along with a scale for major depressive disorder (MDD). Items are answered on a 4-point scale from 0-3 (0 = “never,” 1 = “sometimes,” 2 = “often,” and 3 = “always”).

The RCADS was partly designed as a revision to a previous measure, the Spence Children’s Anxiety Scale (SCAS; Spence, 1998). The new measure (RCADS) was designed to more closely relate to various DSM-IV anxiety disorders. Thirty-eight of the

RCADS items were adopted from the SCAS. Seven items related to worry and 11 items related to major depression were also added (Chorpita et al., 2000).

Confirmatory factor analysis of the revised scale revealed six subscales: separation anxiety disorder, social phobia, obsessive-compulsive disorder, panic disorder, generalized anxiety disorder, and major depressive disorder. Test-retest reliability was found to be high over a 1-week period across all subscales: SAD ( $\alpha = .78$ ); SP ( $\alpha = 0.81$ ); OCD ( $\alpha = 0.71$ ); PD ( $\alpha = 0.85$ ); GAD ( $\alpha = 0.80$ ); MDD ( $\alpha = 0.76$ ) (Chorpita et al., 2000).

Validity was examined via correlational studies with other measures of youth depression and anxiety: the Child Depression Inventory (CDI; Kovacs, 1992) and the Revised Manifest Anxiety Scale for Children (RCMAS; Reynolds & Richman, 1978). The Child Manifest Anxiety Scale-Revised (RCMAS) contains three subscales: physiological anxiety (RCMAS-P), worry and oversensitivity (RCMAS-W), and concentration anxiety (RCMAS-C) (Reynolds & Paget, 1983). The MDD subscale on the RCADS correlated most significantly with the CDI, more than any other subscale of the RCADS ( $r = .70$ ). The RCADS SP subscale was expected to correlate greater with the RCMAS-W and RCMAS-P subscales than the RCMAS-C subscale. This was partially supported in that the RCADS- SP subscale correlated more significantly with the RCMAS-W subscale than the RCMAS-C subscale, but not as significantly with the RCMAS-P subscale when compared to the correlation between the RCADS SP subscale and the RCMAS-C subscale. The RCADS GAD subscale also correlated highly with the RCMAS Total Anxiety Scale, as predicted. The results support the reliability, structural validity, and convergent and discriminant validity of the RCADS (Chorpita et al., 2000).

### *School Refusal Assessment Scale-Revised-Child*

The School Refusal Assessment Scale-Revised-Child (SRAS-R-C) (Kearney, 2002b; 2006a) is a 24-item self-report measure that includes 6 questions relevant to each of four functions of school refusal behavior. The four functions of school refusal behavior include: avoidance of stimuli that provoke a sense of general negative affectivity, escape from aversive social or evaluative situations, attention-seeking behavior, and pursuit of tangible reinforcement outside of school. The measure uses a 7-point Likert scale from 0 to 6 where 0= “never” and 6 = “always” (Kearney, 2002b). An item mean score is calculated for each of the four functions based on child and parent responses. The function with the highest item mean score is considered to be the primary variable maintaining a child’s school refusal behavior (Kearney, 2002b).

The SRAS-R-C has demonstrated significant 7-14-day test-retest reliability for each of the four functions (.64, .73, .78, and .56, respectively). Concurrent validity was examined between all functional conditions in the original SRAS-C and the SRAS-R-C with a mean  $r = .68$ . Confirmatory factor analysis was used to examine the structure of the SRAS-R-C and investigate the validity of the four-factor model (two negative reinforcement factors and two positive reinforcement factors) (Kearney, 2006a). Confirmatory factor analysis revealed that 22 of the 24 items supported the four-factor model. With the weakest items removed (20 and 24), the model was supported, revealing Cronbach’s alphas of .82, .80, .87, and .74 for each of the four functions, respectively. Kearney (2006a) recommended using caution when including items 18, 20, and 24. Confirmatory factor analysis supported the four-factor model of the SRAS-R-C and the functional model of school refusal behavior (Kearney, 2006a).

## *Parent Measures*

### *Conners Parent Rating Scale-Revised Long*

The Conners Parent Rating Scale-Revised Long (CPRS-R:L) (Conners, Parker, Sitarenios, & Epstein, 1998) is an 80-item parent report measure of the severity of a child's behaviors over the last month (Conners et al., 1998). The measure assesses symptoms of internalizing and externalizing behaviors in children and contains the following subscales: cognitive problems, oppositional, hyperactive-impulsive, anxious-shy, perfectionism, social problems, and psychosomatic (Conners et al., 1998).

The CPRS-R was originally tested on 2200 students aged 3-17 years in regular education classes whose parents completed the measure. Parents rated their children's behavior over the past month on a 4-point Likert scale: 0 = "not true at all," 1 = "just a little true," 2 = "pretty much true," 3 = "very much true." All subscales were found to have high internal validity across all ages and genders. Coefficient alphas ranged from .75-.94 for males and .75-.93 for females. A 6-week test-retest evaluation yielded variable results across the subscales, ranging from .42-.78 (Conners et al., 1998).

### *School Refusal Assessment Scale-Revised-Parent*

The School Refusal Assessment Scale-Revised-Parent (SRAS-R-P) (Kearney, 2002b; 2006a) is a 24-item self-report measure that includes 6 questions relevant to each of four functions of school refusal behavior. The four functions of school refusal behavior include: avoidance of stimuli that provoke a sense of general negative affectivity, escape from aversive social or evaluative situations, attention-seeking behavior, and pursuit of tangible reinforcement outside of school. The measure uses a 7-point Likert scale from 0-6 where 0=never and 6=always (Kearney, 2002b). A mean item score is calculated for

each function based on child and parent responses. The function with the highest item mean score is considered to be the primary variable maintaining a child's school refusal behavior (Kearney, 2002b).

The SRAS-R-P has demonstrated significant 7-14-day test-retest reliability for each of the four functions (.63, .67, .78, and .61, respectively). Parent interrater reliability was found to be significant for 22 of 24 items, with a mean  $r = .54$ . Confirmatory factor analysis was used to examine the structure of the SRAS-R-P and to investigate the validity of the four-factor model (two negative reinforcement factors and two positive reinforcement factors) (Kearney, 2006a). Confirmatory factor analysis revealed that 21 of the 24 items supported the four-factor model. With the weakest items removed (18, 20, and 24), the model was supported, revealing Cronbach's alphas of .86, .86, .88, and .78 for each of the four functions, respectively. Confirmatory factor analysis supported the four-factor model of the SRAS-R-P and the functional model of school refusal behavior (Kearney, 2006a).

### *Procedure*

This study was conducted at two locations. One location was the Clark County Truancy Court, which is held at the Clark County Family Court and Services Center in Las Vegas, Nevada. This court addresses truants in middle school and high school from the Clark County School District who have been given a truancy citation by school police for chronic absence from individual classes or entire days of school. The number of absences prior to court referral varies for each student. Typically, after three unexcused absences from a single class or entire day of school, a letter is sent home to the child's parents. According to school district policy, a letter is to be sent home to the child's

parents for each additional absence or truancy. After three truancy notices, a child is issued a truancy citation and ordered to report to truancy court. This procedure is a general guideline, but may vary among schools.

Truancy court is in session on Thursday and Friday afternoons, during which time data collection occurred. Students appeared before a judge with their parent(s) or guardian(s) to plead “guilty” or “not guilty” to truancy. If a student pled guilty, the student was required to complete 8 weeks of perfect attendance to graduate the truancy program. The truancy program required that the student appear in court Thursday or Friday afternoons for 8 consecutive weeks or until 8 consecutive weeks of perfect attendance were achieved. The adolescents were required to keep daily attendance logs with teacher signatures for each class they attended each day. Some youth were also assigned community service when deemed appropriate by the judge. Following 8 weeks of perfect attendance, the youth was dismissed from the truancy program.

When sentenced to community service, the judge gave the parent and child the option to substitute two of the child’s community service hours for participation in this project. This substitution was of equal value to community service. Participation in this project did not enable youths to fulfill all community service hours. Youths were required to complete the remainder of their sentenced number of hours elsewhere. The project is ongoing and is IRB-approved (Protocol # 0511-1795).

If family members decided to complete the measures, they were escorted to a private room outside the courtroom following sentencing. A trained undergraduate research assistant and the primary researcher explained the purpose of the study to the parent and adolescent. The parent was asked to sign an informed consent form and the child asked

to sign an assent form to participate in the program. Parents and youth voluntarily completed a de-identified packet of measures regarding the child's internalizing and externalizing behaviors and school refusal behavior. Parents whose primary language was Spanish were asked to complete Spanish-translated versions of the same questionnaires. The parent and child were free to decide that they did not wish to participate at any time, and were then required to complete the full number of community service hours assigned by the judge. The process required 60-90 minutes. Spanish interpretation was available upon request. If there were questions or concerns, the primary researcher and/or trained undergraduate research assistants were present. After completion of all measures, the parent/guardian and adolescent were thanked and given the required signature on their community service form to indicate participation. All data were coded anonymously and stored in a secure location. Data collected from this site accounted for 60.5% (121 cases) of the sample.

Data collection also occurred at a community program to address truancy. The Truancy Diversion Program is run by the Court Appointed Special Advocates (CASA) program. CASA designed the Truancy Diversion Program to address middle school students who were at risk for truancy citations based upon prior absences. The program took place in 8 middle schools where problematic absenteeism tends to occur. The staff identified 15-20 students at their school who had poor attendance records. The program required that the student and their parent or guardian meet before a judge on a weekly basis. The judges were volunteer legal professionals (attorneys or family court judges). The court proceeded similarly to the Truancy Court, and addressed attendance, grades, and other difficulties at home.

Each school was assigned a CASA advocate who tracked each student from week to week. The schools also held two tutoring sessions and one group counseling session per week, which the students were assigned to attend. The parent/guardian and youth were given the opportunity to complete the measures at the start of the program. They were informed that their participation was voluntary and that there was no risk or benefit for participation. If the parent/guardian and student wished to participate they were given an explanation of the informed consent and assent. Similarly to the Truancy Court, parents and youth voluntarily completed a de-identified packet of measures regarding the child's internalizing and externalizing behaviors and school refusal behavior. Parents whose primary language was Spanish were permitted to complete Spanish-translated versions of the same questionnaires.

If a parent/guardian could not attend weekly meetings, then a parent permission slip was sent home. This allowed the child to complete the packet, but parent information was not available for those participants. A total of 20 children completed packets without having a parent or guardian complete the parent packet. The assessment process required 60-90 minutes. Spanish interpretation was available upon request. If there were questions or concerns, a graduate student and/or trained undergraduate research assistants were present. After completion of all measures, the parent/guardian and adolescent were thanked for their participation. Data collected from this site accounted for 39.5% (79 cases) of the sample. All data were coded anonymously and stored in a secure location. This project is ongoing and is IRB approved (Protocol # 0801-2585).

## CHAPTER 4

### DATA ANALYSIS

#### *Overview*

Data analyses involved scaled scores on the generalized anxiety, depression, social phobia, and separation anxiety subscales of the RCADS (reported by the child) and the oppositional scale of the CPRS:R (reported by the parent). The primary function of school refusal behavior for hypotheses 1-3 was determined by child report using the highest reported mean item score on the School Refusal Assessment Scale-Revised-Child. The primary function of school refusal behavior for hypothesis four was determined by parent report using the highest reported mean item score on the School Refusal Assessment Scale-Revised-Parent. Mean item scores within 0.25 points of one another were considered equivalent (function 5). Function 5 thus indicates a mixed functional profile.

A one-way ANOVA revealed no significant differences between data collection sites regarding RCADS and CPRS:R symptom subscale scores. A chi-square test for independence (with Yates Continuity Correction) revealed no significant differences between data collection sites regarding gender. A chi-square test for independence revealed no significant differences between data collection sites regarding the most frequently reported ethnicities (African American, European-American, and Hispanic).

Child-reported function varied as follows: function 1 = 4.5%, function 2 = 3.5%, function 3 = 15.2%, function 4 = 61.6%, and function 5 = 15.2%. Parent-reported function varied as follows: function 1 = 10.0%, function 2 = 2.2%, function 3 = 17.2%, function 4 = 51.1%, and function 5 = 19.4%. These reports revealed a high number of

cases primarily involving function 4, or pursuit of tangible reinforcement outside of school. This finding may be attributed to the data collection sites; both are community settings where participants were not seeking treatment for psychological distress and tended to demonstrate more externalizing disorders. There were notably less parent and child reports endorsing functions one and two as the primary reinforcing function of school refusal behavior, which are typically associated with internalizing disorders and clinical samples. The relationship between parent reported mean item scores and child reported mean item scores were investigated using Pearson product-moment correlation coefficient. There was a positive relationship between parent and child report for each of the four functions as follows; function 1 ( $r = .20, p = .01$ ), function 2 ( $r = .38, p = .01$ ), function 3 ( $r = .31, p = .01$ ), and function 4 ( $r = .28, p = .01$ ).

Due to the smaller number of participants endorsing functions one and two as the primary function of school refusal behavior, a secondary ANOVA (for hypothesis three only) was performed with functions 1 and 2 combined into one function of negative reinforcement (shown as function 2 in Table 4). A combined function of negative reinforcement allowed for examination of differences between functions of negative reinforcement and each individual function of positive reinforcement (functions 3 and 4) and mixed functional profiles (function 5).

Because youths were disproportionately represented in function 4, data were analyzed categorically and dimensionally. Categorical analyses included multivariate analysis of variance of child variables to control for Type 1 error as well as subsequent one-way ANOVAs for hypotheses 1-3 and one-way ANOVA for the singular variable in hypothesis 4. Data were also examined dimensionally via stepwise multiple regression

analyses. Dimensional analyses were performed to address potential data loss due to differences in  $N$  across the primary functional groups. Multiple regression analyses allowed for investigation of whether high scores across functions predicted high scores on certain symptom scales.

### *Multivariate Analysis of Variance*

The independent variable for the multivariate analysis of variance was function of school refusal behavior (5 levels: avoidance of stimuli that provoke negative affectivity/escape from aversive social or evaluative situations/attention seeking behavior/pursuit of tangible reinforcement outside of school/mixed functional profile). The dependent variables were mean RCADS scores on the generalized anxiety, depression, social anxiety, and separation anxiety subscales (Table 3). The multivariate test revealed significant differences in symptom sets with respect to function of school refusal behavior (Wilks' Lambda = .78,  $p < .01$ ). Given the overall MANOVA finding, more specific comparisons were made and are described next.

### *Hypothesis One*

The first hypothesis was that youth who refuse school primarily for function 1 (avoidance of stimuli that provoke negative affectivity) would report more symptoms of generalized anxiety and depression than youth refusing school for functions 2, 3, or 4. A one-way analysis of variance (ANOVA) was conducted to compare child self-report scores on the RCADS generalized anxiety and depression scales across the functions of school refusal behavior (Table 3). Significant results were found with respect to generalized anxiety ( $F(4, 193) = 5.35, p < .01$ , Cohen's  $f = .11$ ) but not depression. Significant differences were found with respect to mean scores on the generalized anxiety

scale between functions 2 and 4 ( $p = .05$ ). Youths who refused school primarily due to function 2 reported higher mean scores on the generalized anxiety scale than youths who refused school primarily due to function 4.

A stepwise multiple regression analysis was conducted to investigate whether functional scores (independent variable) predicted scores on (1) the generalized anxiety scale and (2) the depression scale (dependent variables). A significant amount of variance in generalized anxiety scores was explained by scores on function 1 ( $R^2 = .281$ ;  $F(1, 196) = 76.59, p < .01$ ). A significant amount of variance in depression scores was also explained by scores on function 1 ( $R^2 = .302$ ;  $F(1, 196) = 84.81, p < .01$ ). These findings supported hypothesis one.

#### *Hypothesis Two*

The second hypothesis was that youth who refuse school primarily for function 2 (escape from aversive social or evaluative situations) would report more symptoms of social phobia than youth refusing school for functions 1, 3, and 4. A one-way analysis of variance (ANOVA) was conducted to compare child self-report scores on the RCADS social phobia scale across the functions of school refusal behavior (Table 3). Social phobia scores differed significantly across the functions of school refusal behavior ( $F(4,193) = 7.12, p < .01$ , Cohen's  $f = .13$ ). Significant differences were found on the social phobia scale between functions 2 and 4 ( $p = .05$ ), functions 3 and 4 ( $p = .05$ ), and functions 4 and 5 ( $p = .05$ ). Youths primarily endorsing functions 2, 3, or 5 reported higher mean scores on the social phobia scale than youths primarily endorsing function 4. These results, especially those pertaining to function 2, provided partial support for hypothesis two.

A stepwise multiple regression analysis was conducted to investigate whether functional scores (independent variable) predicted scores on the social phobia scale (dependent variable). A significant amount of variance in social phobia scores was explained by scores on function 2 alone ( $R^2 = .327$ ;  $F(1, 196) = 95.31, p < .01$ ) and functions 2 and 3 combined ( $R^2 = .374$ ;  $F(1, 196) = 58.32, p < .01$ ). These results supported hypothesis two in that function 2 was a primary predictor of high scores on the social phobia scale.

### *Hypothesis Three*

The third hypothesis was that youth who refuse school primarily for function 3 (attention-seeking behavior) would report more symptoms of separation anxiety disorder than youth refusing school for functions 1, 2, and 4. A one-way analysis of variance (ANOVA) was conducted to compare child self-report scores on the RCADS separation anxiety scale across the functions of school refusal behavior (see Table 3). Significant differences were found between child reported scores on the separation anxiety scale with respect to function of school refusal behavior ( $F(4, 193) = 8.71, p < .01$ , Cohen's  $f = .18$ ). Significant differences were found with respect to mean scores on the separation anxiety scale between functions 2 and 4 ( $p = .05$ ), functions 3 and 4 ( $p = .05$ ), and functions 4 and 5 ( $p = .05$ ). Youths primarily endorsing functions 2, 3, or 5 reported higher mean scores on the separation anxiety scale than youths primarily endorsing function 4. These results, especially those pertaining to function 3, provided support for hypothesis three.

A second one-way ANOVA was conducted to address hypothesis three by combining the negative reinforcement functions (1 and 2) into one function (labeled as function 2 in

Table 4). This analysis revealed a greater mean score for separation anxiety ( $M = 56.9$ ) on function 3 than function 1 and 2 combined ( $M = 55.9$ ), a difference that was significant ( $F(3, 194) = 10.29, p < .01$ ). Significant differences were found with respect to mean scores on the separation anxiety scale between functions 2 and 4 ( $p = .05$ ), functions 3 and 4 ( $p = .05$ ), and functions 4 and 5 ( $p = .05$ ). Youths who refused school for function 3 reported more symptoms of separation anxiety than youths who refused school for function 4, which provided further support for hypothesis three.

A stepwise multiple regression analysis was conducted to investigate whether functional scores (independent variable) predicted scores on the separation anxiety scale (dependent variable). A significant amount of variance in separation anxiety scores was explained by scores on function 3 alone ( $R^2 = .259; F(1, 196) = 68.62, p < .01$ ) and functions 3 and 4 combined ( $R^2 = .329; F(1, 196) = 47.73, p < .01$ ). These results provided further support for hypothesis three.

#### *Hypothesis Four*

The fourth hypothesis was that youth who refuse school primarily for function 4 (pursuit of tangible reinforcement outside of school) would have parents that report more oppositional symptoms than youth whose parents indicate that they refuse school due to functions 1, 2, or 3. A one-way analysis of variance (ANOVA) was conducted to compare parent reported scores on the oppositional scale of the Conners' Parent Rating Scale-Revised across functions of school refusal behavior (see Table 5). No significant findings were evident.

A stepwise multiple regression analysis was conducted to investigate whether functional scores (independent variable) predicted scores on the oppositional scale

(dependent variable). A significant amount of variance in oppositional scores was explained by scores on function 4 alone ( $R^2 = .135$ ;  $F(1, 178) = 27.85, p < .01$ ), and functions 1 and 4 combined ( $R^2 = .190$ ;  $F(1, 178) = 20.77, p < .01$ ). These results provided support for hypothesis four.

#### *Post Hoc Analysis*

Other parent-based data were examined in post hoc fashion to peripherally examine hypotheses 1-3. A one-way ANOVA was conducted regarding Conners' Parent Rating Scale-Revised subscale scores across functions of school refusal behavior (see Table 5). Significant differences were found on the Anxious-Shy ( $F(4, 175) = 4.69, p < .01$ ) and psychosomatic ( $F(4, 175) = 3.23, p = .014$ ) scales. Anxious-Shy and Psychosomatic mean scores were highest on function 1, further supporting hypothesis one. Social problems mean scores were highest on function 2 ( $F(4, 175) = 3.11, p = .017$ ), further supporting hypothesis two.

## CHAPTER 5

### DISCUSSION

This investigation involved the relationship between functions of school refusal behavior and internalizing and externalizing behaviors in a community sample of 200 youth and their parent or guardian. Recruitment occurred at two community settings: a truancy court and a truancy diversion program. Youths and their parents individually reported the function of the youth's school refusal behavior. In addition, youths and parents reported internalizing and externalizing behaviors on separate measures.

The study revealed numerous key findings. The first predicted result was that youth who reportedly refused school to avoid stimuli that provoke negative affectivity (function 1) would endorse more symptoms of generalized anxiety and depression than youth who reportedly refused school primarily due to another function. Results revealed significant differences with respect to generalized anxiety scores across functions of school refusal behavior, but did not reveal significant differences with respect to depression scores across the functions of school refusal behavior. Regression analysis revealed that greater scores on function 1 did relate to increased symptoms on the generalized anxiety and depression scales, however. Analysis of parental report of symptoms provided further support for this hypothesis. Symptom scores related to anxious-shy and psychosomatic behavior were highest on function 1. Youth and parents generally endorsed the relationship between function 1 and anxiety and depressive symptoms.

The second predicted result was that youth who reportedly refused school to escape aversive social or evaluative situations (function 2) would endorse more symptoms of social phobia than youth who refused school due to other functions. Results revealed

significant differences in social phobia scores across functions of school refusal behavior. In addition, regression analysis revealed that scores on function 2 were closely associated with the social phobia scale. Parental report of social problems also revealed that social problems were highest on function 2, providing further evidence for this hypothesis.

The third predicted result was that youth who reportedly refused school to pursue attention (function 3) would endorse more symptoms of separation anxiety than youth who refused school due to other functions. Examination of separation anxiety scores across the functions of school refusal behavior revealed significant differences. Further analysis with functions of negative reinforcement combined (functions 1 and 2) revealed that mean scores of separation anxiety related to function 3 were significantly higher than mean scores of separation anxiety related to negative reinforcement. Additional analysis revealed that higher scores on function 3 were associated with higher scores on the separation anxiety scale.

The fourth predicted result was that youth who reportedly refused school to pursue tangible reinforcement outside of school (function 4) would show greater oppositional symptoms, as reported by their parent or guardian, than youth who refused school primarily for other functions. No significant differences across functions of school refusal behavior were found. However, regression analysis revealed that function 4 was associated with higher scores on the oppositional scale. The sample may account for the inconsistent findings. A community sample is likely predisposed to oppositional symptoms because youth in this group are generally older than clinical samples and because recruiting occurred at a truancy court or truancy diversion setting, which indicates the presence of behavioral difficulties. As a whole, the results provide

important information regarding function of school refusal behavior and the relationship between symptom sets, using both child and parent report.

#### *Relationship to Previous Research*

Previous research by Kearney and Albano (2004) investigated similar relationships in a clinical sample, and the findings here have some similarities. The current study and previous work by Kearney and Albano (2004) provide evidence that anxiety symptoms are related to functions of negative reinforcement. Both studies also support the notion that separation anxiety disorder is most strongly related to function 3, attention-seeking behavior. These similar results may allow mental health professionals to assume that youth with symptoms of separation anxiety would likely demonstrate an attention getting component to their school refusal behavior, an important consideration during treatment. Finally, the current study and Kearney and Albano (2004) demonstrated a relationship between oppositional behavior and function 4, pursuit of tangible reinforcement outside of school. Kearney and Albano (2004) also found a relationship between function 4 and conduct disorder, which was outside the scope of this study, based upon the diagnostic measure used to assess symptoms.

Despite confirmatory factor analysis revealing that items 20 and 24 on the School Refusal Assessment Scale – Revised – Child, and items 18, 20, and 24 on the School Refusal Assessment Scale – Revised – Parent were weak, all 24 items on each version were included in this study. This study included all 24 items since the previous clinical study (Kearney & Albano, 2004) included all items, which allowed for comparisons between the two studies. The previous clinical study also found that the relationships

between symptoms and functions were in the expected direction, which further supported including these items in the current study.

One notable difference between these two studies is the setting (clinical versus community) and, therefore, the sample composition. In the Kearney and Albano (2004) sample the mean age was 11.60 years. The current study included participants whose mean age was 14.04 years. This age difference may have accounted for the increase in function 4 as the primary function of school refusal behavior, as children's behavior may be more notably defiant during later adolescence. Additionally, the ethnic composition of the two samples varied. The previous clinical study included primarily Caucasian participants (89.5%) and the current community study included primarily Hispanic participants (62.5%). Ethnic differences may account for some differences in functional groups as well as reported symptoms, including the large number of participants endorsing primarily function 4 in the community sample and the more heterogeneous presentation of functions in the clinical sample. A final difference between the two studies is that the previous clinical study examined multiple diagnoses, while the current study only considered the relationship between functions and the proposed related symptoms.

Community studies conducted previously have not examined the specific relationship between functions of school refusal behavior and symptom sets, but have identified relationships between truancy and behavioral difficulties and school refusal and emotional difficulties. Bools and colleagues (1990) reported findings similar to the current study. Bools included 100 youth with a mean age nearly identical to that of the current study, 14.0 years. This community study utilized a parent interview, ICD-9

criteria, and determination of either school refusal, truancy, mixed pattern, or neither (based upon predetermined criteria) to analyze the relationship between school nonattendance and psychological disorders.

The study revealed three specific patterns of attendance and psychological difficulties. The first group appeared to have school refusal traits and related generalized neurotic disorders, similar to findings with respect to hypothesis one in the current study where function 1 related to generalized anxiety disorder. A second group consisted of youth whose parents reported truancy and conduct disorders, similar to hypothesis 4 where function 4 relates to oppositional behavior. The final group included youth with truancy that had no diagnoses. Bools and colleagues (1990) also noted that the school refusal/neurotic group was primarily female, while the truancy/conduct disorder group was primarily male. The current study did not distinguish between males and females within the functional and symptom groups, but this would be an area of investigation for future studies.

Berg and colleagues (1993) conducted a similar community study that included 80 youth with a mean age of 14.8 years. Berg and colleagues included both parent and child reports, similar to the current study. This study also divided youth into truancy and school refusal groups, and based diagnoses on the DSM-III-R. As with previous studies, Berg and colleagues (1993) reported a relationship between school refusal and anxiety/mood disorders, similar to findings from the current study with respect to function 1 and generalized anxiety and depression. They also identified a second relationship between truancy and disruptive behavior disorder, similar to findings from the current study relevant to function 4 and oppositional behavior.

A more recent large scale community study by Egger and colleagues (2003) utilized parent and child interviews and DSM-IV diagnostic criteria to investigate the relationship between school nonattendance and psychological disorders. The study included mixed school refusers, pure anxious school refusers, pure truants, and non-school refusers. Youth and/or parents of youth with anxious school refusal reported high levels of depression and separation anxiety disorder, similar to results provided for hypotheses 1 and 3 in the current study. Egger and colleagues (2003) also found high levels of behavioral difficulties in youth with truancy, including oppositional defiant disorder and conduct disorder, similar to results regarding hypothesis 4. The study also revealed that mixed school refusers had high rates of emotional and behavioral difficulties. This finding may direct future research related to the current study, where mixed profiles (function 5) could be investigated further. The current study advances these earlier findings by associating functions of school refusal behavior with patterns of nonattendance and psychological disorders.

#### *Clinical Implications*

School refusal research in community settings is limited, especially with respect to examining function of school refusal behavior and psychopathology. The current study provided support for the School Refusal Assessment Scale – Revised (SRAS-R; Kearney 2002b; 2006a) and the ability to link functions of school refusal behavior to specific symptom sets. Based upon the findings of the current study, utilizing the School Refusal Assessment Scale – Revised as an assessment measure in community settings could give a basic indicator of an individual’s clinical symptoms after a very brief assessment. A clinician could determine the highest or primary function of school refusal behavior

based upon child or parent report. Then, using data from the current study or the related clinical study (Kearney & Albano, 2004), a clinician could predict what type of symptoms would likely accompany the endorsed primary function. This screening process would enable clinicians to have a general idea of the individual's presenting symptoms, and when combined with other brief assessment strategies could quickly indicate the clinical picture and severity of the case.

The demonstrated link between clinical studies, such as Kearney and Albano (2004), and the current community study suggest that the connection between symptoms of psychopathology and functions of school refusal behavior is an important one. This information could be very useful in a clinical or community setting for not only assessment purposes, as previously mentioned, but for treatment as well. Clinical treatment studies have examined and provided evidence for very specific prescriptive treatments related to the functions of school refusal behavior (Kearney & Silverman, 1990; Chorpita et al., 1996; Kearney & Silverman, 1996; Kearney, 2002b; Tolin et al., 2009). These strategies may include, but are not limited to, child-based psychoeducation, hierarchy development, parent-based contingency management, daily routines, and escorting youth to school (Kearney, 2001). Community findings closely replicate clinical findings, so treatment strategies can generalize to larger community settings. One key difference is the notably larger number of individuals endorsing function 4 in a community setting versus a more heterogeneous presentation of functions in a clinical setting. Nonetheless, using basic assessment information regarding primary function of school refusal behavior would enable school or other mental health personnel to make specific treatment referrals for youth with school refusal based upon the symptoms most

commonly associated with the endorsed primary function. According to Kearney (2001), treatment of function 4 will generally include family-based contracting, communication and peer refusal skills training, and escorting youth to school. Some techniques, such as communication and peer refusal skills training, may be modified and treated in a group setting to address the larger community sample endorsing function 4. These implications could result in a much faster assessment and treatment process, allowing for more individuals to receive treatment and reintegrate into the school system as quickly as possible.

Further, the results of this study indicate that a majority of youth choose not to attend school in order to pursue tangible reinforcement outside of school. This suggests that systemic interventions should be implemented in order to get youth more interested in and more invested in their education. According to Azzam (2007), the top five reasons that students drop out of school are boredom, having missed too many days and being unable to catch up, spending time with people who are not interested in school, having too much freedom and too few rules in general, and school failure. School climate is an important aspect, which should be considered in treatment. By adapting school curriculum to student's interests, enlisting teachers to reach out to at-risk students, and increasing school discipline, school refusal behavior could be addressed and treated before legal action or drop out occurs.

#### *Limitations and Recommendations for Future Study*

Several limitations are evident in the current study. First, the study utilized only a small number of variables in the analysis portion of this study. Looking at such a narrow scope may have limited the results and therefore the ability to generalize findings.

Further, the study only included child and parent report of primary function and symptoms and did not consider behavioral observation, teacher report, or specific attendance data. Utilizing more information from a greater number of resources may have broadened the results and allowed for a greater understanding of youth with truancy in a community setting. In addition, this study found a heavy skew towards function 4. This limits the number of conclusions that can be drawn from the small number of participants in the other three functional groups. Finally, the ANOVAs and regression analyses provided varying results in some cases. These may have been associated with the difference in sample size of primary functional groups. Although this limitation is evident, primary emphasis is on the regression analyses, which provide strong evidence for the proposed hypotheses.

The current study contains important implications for future research. First, examining individual items and their association to the functions of school refusal behavior could provide researchers with very specific profiles for youth with school refusal behavior. Examining these profiles may allow researchers to determine whether specific patterns are seen with respect to pure profiles (endorsing one high function) or mixed profiles (endorsing two or more nearly equal functions). Further, using specific cut off points for functional values will allow investigators to determine if differences exist using only highly endorsed functions and their related symptoms. In addition, examining certain variables, such as gender, ethnicity and number of days of school missed may provide further information regarding specific profiles and case severity.

This community study has provided convincing support for previous related clinical studies with respect to function of school refusal behavior and associated

psychopathology or symptom sets. More importantly, this suggests that clinical prescriptive treatment strategies might be useful for treatment of cases presenting to community settings. This would not only increase the amount of youth that receive treatment, but also suggests that brief assessment would be feasible and referrals and treatment could take place within a short time frame. This study suggests that these important findings should guide research and encourages further replication of the aforementioned findings.

## TABLES

Table 1  
*Key Definitions Related to Problematic School Absenteeism* (From Kearney, 2008a)

Term	Definition
<i>School phobia</i>	Fear-based absenteeism, as when a child refuses school due to fear of some specific stimulus such as a classroom animal or fire alarm (Tyrell, 2005)
<i>Separation anxiety</i>	Excessive worry about detachment from primary caregivers and reluctance to attend school (Hanna, Fischer, & Fluent, 2006)
<i>School refusal</i>	A broader term referring to anxiety-based absenteeism, including panic and social anxiety, and general emotional distress or worry while in school (Suveg, Aschenbrand, & Kendall, 2005)
<i>School refusal behavior</i>	An even broader term referring to any child-motivated refusal to attend school or difficulty remaining in classes for an entire day, whether anxiety-related or not (Kearney & Silverman, 1996)
<i>Delinquency</i>	Akin to conduct disorder, refers to rule-breaking behaviors and status offenses such as stealing, physical and verbal aggression, property destruction, underage alcohol or tobacco use, and violations of curfew and expectations for school attendance (Frick & Dickens 2006; McCluskey, Bynum, & Patchin, 2004)
<i>Truancy</i>	Illegal, unexcused absence from school; the term may also be applied to youth absenteeism marked by surreptitiousness, lack of parental knowledge or child anxiety, criminal behavior and academic problems, intense family conflict or disorganization, or social conditions such as poverty (Fantuzzo, Grim, & Hazan, 2005; Fremont, 2003; Reid, 2000)

Table 2

*Function of school refusal behavior and personalized treatment*

Function of school refusal behavior	Personalized treatment
To avoid school-based stimuli that provoke negative affectivity	Child-based psychoeducation, hierarchy development, and somatic management and exposure-based techniques.
To escape aversive school-based social/evaluative situations	Child-based psychoeducation, hierarchy development, cognitive restructuring, and somatic management and exposure-based techniques.
To pursue attention from significant others	Parent-based contingency management procedures to modify parent commands, establish daily routines, set appropriate consequences for child behavior, decrease excessive reassurance-seeking behavior, and bring a child to school.
To pursue tangible rewards outside of school	Family-based contracting, communication and peer refusal skills training, and escorting youths to school.

Table 3

*Means and Standard Deviations for RCADS Subscales across Functions*

	Function	N	Mean	Standard Deviation
Separation Anxiety	1	9	51.78	13.40
	2	7	61.29	14.08
	3	30	56.87	11.66
	4	122	47.54	8.37
	5	30	54.07	12.19
Generalized Anxiety	1	9	50.89	13.80
	2	7	55.00	7.72
	3	30	45.97	12.82
	4	122	41.54	9.19
	5	30	46.50	11.71
Social Phobia	1	9	43.44	10.51
	2	7	55.00	6.73
	3	30	45.40	11.46
	4	122	39.39	9.37
	5	30	46.13	11.75
Depression	1	9	55.22	16.50
	2	7	59.29	13.35
	3	30	51.77	16.08
	4	122	48.24	11.37
	5	30	52.33	15.44

Table 4

*Means and Standard Deviations for RCADS Subscales with Functions 1 and 2 Combined*

	Function	N	Mean	Standard Deviation
Separation Anxiety	2	16	55.94	14.10
	3	30	56.87	11.66
	4	122	47.54	8.37
	5	30	54.07	12.19
Generalized Anxiety	2	16	52.69	11.39
	3	30	45.97	12.82
	4	122	41.54	9.19
	5	30	46.50	11.71
Social Phobia	2	16	48.50	10.59
	3	30	45.40	11.46
	4	122	39.39	9.37
	5	30	46.13	11.75
Depression	2	16	57.00	14.86
	3	30	51.77	16.08
	4	122	48.24	11.37
	5	30	52.33	15.44

*Note:* Function 2 in this table refers to functions 1 and 2 combined

Table 5

*Means and Standard Deviations for Conners Parent Rating Subscales across Functions*

	Function	N	Mean	Standard Deviation
Oppositional	1	18	63.72	13.49
	2	4	68.00	17.63
	3	31	58.77	15.60
	4	92	62.59	14.71
	5	35	63.89	13.99
Anxious-Shy	1	18	67.00	16.96
	2	4	63.50	17.82
	3	31	61.19	14.87
	4	92	54.72	10.34
	5	35	57.17	11.91
Social Problems	1	18	64.78	13.30
	2	4	75.75	11.33
	3	31	58.16	15.09
	4	92	57.38	12.66
	5	35	57.37	11.09
Psychosomatic	1	18	72.83	17.00
	2	4	61.25	16.58
	3	31	63.48	14.90
	4	92	59.26	14.36
	5	35	63.83	16.43

## APPENDIX

### MEASURES

#### School Refusal Assessment Scale (C)

1. How often do you have bad feelings about going to school because you are afraid of something related to school (for example, tests, school bus, teacher, fire alarm)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

2. How often do you stay away from school because it is hard to speak with the other kids at school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

3. How often do you feel you would rather be with your parents than go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

4. When you are not in school during the week (Monday to Friday), how often do you leave the house and do something fun?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

5. How often do you stay away from school because you will feel sad or depressed if you go?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

6. How often do you stay away from school because you feel embarrassed in front of other people at school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

7. How often do you think about your parents or family when in school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

8. When you are not in school during the week (Monday to Friday), how often do you talk to or see other people (other than your family)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

9. How often do you feel worse at school (for example, scared, nervous, or sad) compared to how you feel at home with friends?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

10. How often do you stay away from school because you do not have many friends there?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

11. How much would you rather be with your family than go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

12. When you are not in school during the week (Monday to Friday), how much do you enjoy doing different things (for example, being with friends, going places)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

13. How often do you have bad feelings about school (for example, scared, nervous, or sad) when you think about school on Saturday and Sunday?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

14. How often do you stay away from certain places in school (e.g., hallways, places where certain groups of people are) where you would have to talk to someone?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

15. How much would you rather be taught by your parents at home than by your teacher at school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

16. How often do you refuse to go to school because you want to have fun outside of school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

17. If you had less bad feelings (for example, scared, nervous, sad) about school, would it be easier for you to go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

18. If it were easier for you to make new friends, would it be easier to go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

19. Would it be easier for you to go to school if your parents went with you?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

20. Would it be easier for you to go to school if you could do more things you like to do after school hours (for example, being with friends)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

21. How much more do you have bad feelings about school (for example, scared, nervous, or sad) compared to other kids your age?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

22. How often do you stay away from people at school compared to other kids your age?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

23. Would you like to be home with your parents more than other kids your age would?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

24. Would you rather be doing fun things outside of school more than most kids your age?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

## Revised Child Anxiety and Depression Scale (RCADS)

1. I worry about things .....	Never	Sometimes	Often	Always
2. I feel sad or empty .....	Never	Sometimes	Often	Always
3. When I have a problem, I get a funny feeling in my stomach .....	Never	Sometimes	Often	Always
4. I worry when I think I have done poorly at something .....	Never	Sometimes	Often	Always
5. I would feel afraid of being on my own at home	Never	Sometimes	Often	Always
6. Nothing is much fun anymore .....	Never	Sometimes	Often	Always
7. I feel scared when I have to take a test .....	Never	Sometimes	Often	Always
8. I feel worried when I think someone is angry with me .....	Never	Sometimes	Often	Always
9. I worry about being away from my parents .....	Never	Sometimes	Often	Always
10. I get bothered by bad or silly thoughts or pictures in my mind .....	Never	Sometimes	Often	Always
11. I have trouble sleeping .....	Never	Sometimes	Often	Always
12. I worry that I will do badly at my school work .	Never	Sometimes	Often	Always
13. I worry that something awful will happen to someone in my family .....	Never	Sometimes	Often	Always
14. I suddenly feel as if I can't breathe when there is no reason for this .....	Never	Sometimes	Often	Always
15. I have problems with my appetite .....	Never	Sometimes	Often	Always
16. I have to keep checking that I have done things right (like the switch is off, or the door is locked) .....	Never	Sometimes	Often	Always
17. I feel scared if I have to sleep on my own. ....	Never	Sometimes	Often	Always

18. I have trouble going to school in the mornings because I feel nervous or afraid . . . . .	Never	Sometimes	Often	Always
19. I have no energy for things . . . . .	Never	Sometimes	Often	Always
20. I worry I might look foolish . . . . .	Never	Sometimes	Often	Always
21. I am tired a lot . . . . .	Never	Sometimes	Often	Always
22. I worry that bad things will happen to me . . . . .	Never	Sometimes	Often	Always
23. I can't seem to get bad or silly thoughts out of my head. . . . .	Never	Sometimes	Often	Always
24. When I have a problem, my heart beats really fast . . . . .	Never	Sometimes	Often	Always
25. I cannot think clearly . . . . .	Never	Sometimes	Often	Always
26. I suddenly start to tremble or shake when there is no reason for this . . . . .	Never	Sometimes	Often	Always
27. I worry that something bad will happen to me . . . . .	Never	Sometimes	Often	Always
28. When I have a problem, I feel shaky . . . . .	Never	Sometimes	Often	Always
29. I feel worthless . . . . .	Never	Sometimes	Often	Always
30. I worry about making mistakes . . . . .	Never	Sometimes	Often	Always
31. I have to think of special thoughts (like numbers or words) to stop bad things from happening. . . . .	Never	Sometimes	Often	Always
32. I worry what other people think of me . . . . .	Never	Sometimes	Often	Always
33. I am afraid of being in crowded places (like shopping centers, the movies, buses, busy playgrounds) . . . . .	Never	Sometimes	Often	Always
34. All of a sudden I feel really scared for no reason at all . . . . .	Never	Sometimes	Often	Always
35. I worry about what is going to happen . . . . .	Never	Sometimes	Often	Always
36. I suddenly become dizzy or faint when there is no reason for this . . . . .	Never	Sometimes	Often	Always
37. I think about death . . . . .	Never	Sometimes	Often	Always
38. I feel afraid if I have to talk in front of my class . . . . .	Never	Sometimes	Often	Always

My heart suddenly starts to beat too quickly for no reason .....	Never	Sometimes	Often	Always
I feel like I don't want to move .....	Never	Sometimes	Often	Always
I worry that I will suddenly get a scared feeling when there is nothing to be afraid of .....	Never	Sometimes	Often	Always
I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order) .....	Never	Sometimes	Often	Always
I feel afraid that I will make a fool of myself in front of people .....	Never	Sometimes	Often	Always
I have to do some things in just the right way to stop bad things from happening .....	Never	Sometimes	Often	Always
I worry when I go to bed at night .....	Never	Sometimes	Often	Always
I would feel scared if I had to stay away from home overnight .....	Never	Sometimes	Often	Always
I feel restless .....	Never	Sometimes	Often	Always

Conners' Parent Rating Scale

	Not True at All	Just a little True	Pretty Much True	Very True
1. Angry and resentful	0	1	2	3
2. Difficulty doing or completing homework	0	1	2	3
3. Is always "on the go" or acts as if driven by a motor	0	1	2	3
4. Timid, easily frightened	0	1	2	3
5. Everything must be just so	0	1	2	3
6. Has no friends	0	1	2	3
7. Stomach aches	0	1	2	3
8. Fights	0	1	2	3
9. Avoids, expresses reluctance about, or has difficulties engaging in tasks that sustained mental effort (such as schoolwork or homework)	0	1	2	3
10. Has difficulty sustaining attention in tasks or play activities	0	1	2	3
11. Argues with adults	0	1	2	3
12. Fails to complete assignments	0	1	2	3
13. Hard to control in malls or while grocery shopping	0	1	2	3
14. Afraid of people	0	1	2	3
15. Keeps checking things over again and again	0	1	2	3
16. Loses friends quickly	0	1	2	3
17. Aches and	0	1	2	3
18. Restless or overactive	0	1	2	3
19. Has trouble concentrating in class	0	1	2	3
20. Does not seem to listen to what is being said to him/her	0	1	2	3
21. Loses temper	0	1	2	3
22. Needs close supervision to get through assignments	0	1	2	3
23. Runs about or climbs excessively in situations where it is inappropriate	0	1	2	3
24. Afraid of new situations	0	1	2	3
25. Fussy about cleanliness	0	1	2	3
26. Does not know how to make friends	0	1	2	3
27. Gets aches and pains or stomachaches before school	0	1	2	3
28. Excitable, impulsive.....	0	1	2	3
29. Does not follow through on instructions and fails to finish schoolwork, chores or duties in the workplace (not due to oppositional behavior or failure to understand instructions) .....	0	1	2	3
30. Has difficulty organizing tasks and activities	0	1	2	3
31. Irritable	0	1	2	3
32. Restless in the "squirmy sense"	0	1	2	3
33. Afraid of being alone	0	1	2	3
34. Things must be done the same way every time	0	1	2	3
35. Does not get invited over to friends' houses	0	1	2	3
36. Headaches	0	1	2	3
37. Fails to finish things he/she starts	0	1	2	3

	Not True At All	Just a Little True	Pretty Much True	Very True
38. Inattentive, easily distracted	0	1	2	3
39. Talks excessively	0	1	2	3
40. Actively defies or refuses to comply with adults' requests	0	1	2	3
41. Fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities	0	1	2	3
42. Has difficulty waiting in lines or awaiting turn in games or group situations	0	1	2	3
43. Has a lot of fears	0	1	2	3
44. Has rituals that he/she must go through	0	1	2	3
45. Distractibility or attention span a problem	0	1	2	3
46. Complains about being sick even when nothing is wrong	0	1	2	3
47. Temper outbursts	0	1	2	3
48. Gets distracted when given instructions to do something	0	1	2	3
49. Interrupts or intrudes on others (e.g., butts into others' conversations or games)	0	1	2	3
50. Forgetful in daily activities	0	1	2	3
51. Cannot grasp arithmetic	0	1	2	3
52. Will run around between mouthfuls at meals	0	1	2	3
53. Afraid of the dark, animals, or bugs	0	1	2	3
54. Sets very high goals for self	0	1	2	3
55. Fidgets with hands or feet or squirms in seat	0	1	2	3
56. Short attention span	0	1	2	3
57. Touchy or easily annoyed by others	0	1	2	3
58. Has sloppy handwriting	0	1	2	3
59. Has difficulty playing or engaging in leisure activities quietly	0	1	2	3
60. Shy, withdrawn	0	1	2	3
61. Blames others for his/her mistakes or misbehavior	0	1	2	3
62. Fidgeting	0	1	2	3
63. Messy or disorganized at home or school	0	1	2	3
64. Gets upset if someone rearranges his/her things	0	1	2	3
65. Clings to parents or other adults	0	1	2	3
66. Disturbs other children	0	1	2	3
67. Deliberately does things that annoy other people	0	1	2	3
68. Demands must be met immediately — easily frustrated	0	1	2	3
69. Only attends if it is something he/she is very interested in	0	1	2	3
70. Spiteful or vindictive.	0	1	2	3
71. Loses things necessary for tasks or activities (e.g., school assignments, pencils, books, tools or toys)	0	1	2	3
72. Feels inferior to others	0	1	2	3
73. Seems tired or slowed down all the time	0	1	2	3
74. Spelling is poor	0	1	2	3
75. Cries often and easily	0	1	2	3
76. Leaves seat in classroom or in other situations in which remaining seated is	0	1	2	3
77. Mood changes quickly and drastically	0	1	2	3
78. Easily frustrated in efforts	0	1	2	3
79. Easily distracted by extraneous stimuli	0	1	2	3
80. Blurts out answers to questions before the questions have been completed	0	1	2	3

## School Refusal Assessment Scale-Revised (P)

1. How often does your child have bad feelings about going to school because he/she is afraid of something related to school (for example, tests, school bus, teacher, fire alarm)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

2. How often does your child stay away from school because it is hard for him/her to speak with the other kids at school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

3. How often does your child feel he/she would rather be home with you or your spouse than go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

4. When your child is not in school during the week (Monday to Friday), how often does he/she leave the house and do something fun?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

5. How often does your child stay away from school because he/she will feel sad or depressed if he/she goes to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

6. How often does your child stay away from school because he/she feels embarrassed in front of other people at school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

7. How often does your child think about you or your spouse or family when in school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

8. When your child is not in school during the week (Monday to Friday), how often does he/she talk to or see other people (other than your family)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

9. How often does your child feel worse at school (for example, scared, nervous, or sad) compared to how he/she feels at home with friends?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

10. How often does your child stay away from school because he/she does not have many friends there?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

11. How much would your child rather be with his/her family than go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

12. When your child is not in school during the week (Monday to Friday), how much does he/she enjoy doing different things (for example, being with friends, going places)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

13. How often does your child have bad feelings about school (for example, scared, nervous, or sad) when he/she thinks about school on Saturday and Sunday?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

14. How often does your child stay away from certain places in school (e.g., hallways, places where certain groups of people are) where he/she would have to talk to someone?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

15. How much would your child rather be taught by you or your spouse at home than by his/her teacher at school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

16. How often does your child refuse to go to school because he/she wants to have fun outside of school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

17. If your child had less bad feelings (for example, scared, nervous, sad) about school, would it be easier for him/her to go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

18. If it were easier for your child to make new friends, would it be easier for him/her to go to school?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

19. Would it be easier for your child to go to school if you or your spouse went with him/her?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

20. Would it be easier for your child to go to school if he/she could do more things he/she liked to do after school hours (for example, being with friends)?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

21. How much more does your child have bad feelings about school (for example, scared, nervous, or sad) compared to other kids his/her age?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

22. How often does your child stay away from people at school compared to other kids his/her age?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

23. Would your child like to be home with you or your spouse more than other kids his/her age would?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

24. Would your child rather be doing fun things outside of school more than most kids his/her age?

0	1	2	3	4	5	6
Never	Seldom	Sometimes	Half The Time	Usually	Almost Always	Always

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Kearney, C.A., **Gauger, M.**, Schafer, R., & Day, T. (in press). Social and performance anxiety and oppositional and school refusal behavior in youth. In C.A. Alfano & D.C. Beidel (Eds.), *Social anxiety disorder in adolescents and young adults: Translating developmental science into practice*. Washington, DC: American Psychological Association.

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Kearney, C.A., Turner, D., & **Gauger, M.** (2010). School refusal behavior. In I. Weiner & E. Craighead (Eds.), *Corsini's encyclopedia of psychology* (4th ed.) (pp. 1517-1519). New York: Wiley.

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