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# Differences in Absenteeism Severity among Community Youth 

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# DIFFERENCES IN ABSENTEEISM SEVERITY AMONG COMMUNITY YOUTH 

By

Kyleigh K. Sheldon

Bachelor of Arts - Psychology<br>Hope College<br>2013

# A thesis submitted in partial fulfillment of the requirements for the 

Master of Arts - Psychology

Department of Psychology
College of Liberal Arts
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## Thesis Approval

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Differences in Absenteeism Severity among Community Youth
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# ABSTRACT <br> Differences in Absenteeism Severity among Community Youth 

by

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This study examined the relationship between school absenteeism severity and specific clinical and family variables in 118 middle and high school youth aged 11-19 years recruited from two truancy settings. The primary aim was to determine specific clinical and family variables that may be predictive of absenteeism severity in community youth. A secondary aim was to examine the level of absenteeism that warrants the most clinical concern. Hypotheses for the proposed study were based on the premise that characteristics of a community sample of youth with problematic absenteeism would generally resemble those identified in previous clinical samples. The first set of hypotheses involved specific clinical and family variables that may predict absenteeism severity evaluated on a dimensional basis. The second set of hypotheses involved potential differences in specific clinical and family variables between categorically defined levels of absenteeism. The first categorically defined levels of absenteeism were based on a definition of "high absence" as equal to or greater than $15 \%$ of days missed (Ingul et al., 2012). The second categorically defined levels of absenteeism were based on equivalent sample size distributions ( $0-19 \%, 20-53 \%$, and $54-100 \%$ ). Results revealed obsessions and compulsions as significant predictors of absenteeism severity on a dimensional basis. Results also revealed significant differences between categorically
defined levels of absenteeism among various clinical variables, specifically internalizing symptoms. A majority of these differences occurred between the first and second levels of absenteeism severity, suggesting that youth with a level of absenteeism severity between $15-60 \%$ may be of the most clinical concern. These findings have important implications for the early identification and treatment of at-risk youth.

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## CHAPTER 1

## INTRODUCTION

## School Absenteeism

School absenteeism refers to excused or unexcused absences from elementary, middle, or high school in youth aged 5-17 years (Kearney, 2008a). Hersov (1985) estimated that $80 \%$ of school absenteeism may be due to excused or legitimate reasons such as illness, religious holidays, family funeral, and hazardous weather conditions. Unexcused absences from school can occur for reasons such as school withdrawal, or parent-motivated absenteeism, to secure economic support or conceal child maltreatment, among other reasons (Kearney, 2001). Unexcused absences may also be due to child-motivated refusal to attend school, difficulties remaining in class for an entire day, or both (school refusal behavior) (Kearney \& Silverman, 1996).

Most instances of school absenteeism are temporary and non-problematic (Hersov, 1985). However, excessive and persistent absences from school can become troublesome for a youth and the youth's family. Researchers, psychologists, and educators have labeled this problem in various ways over time (Table 1). Kearney (2008a) defined problematic absenteeism as those youth who missed more than $25 \%$ of school time during the past 2 weeks, experienced severe difficulty attending classes for at least 2 weeks with significant interference in the family's daily routine, or had more than 10 days absent during any 15 week-period in the school year.

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

Delinquency 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)

Truancy 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)

School phobia 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)

Separation Excessive worry about detachment from primary caregivers and anxiety reluctance to attend school (Hanna, Fischer, \& Fluent, 2006)

School refusal 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)

School refusal An even broader term referring to any child-motivated refusal to behavior attend school or difficulty remaining in classes for an entire day, whether anxiety-related or not (Kearney \& Silverman, 1996)

## Historical Perspective

## Truancy

Truancy generally refers to unexcused, illegal, surreptitious absences from school
(Kearney, 2001). Kline (1897) stated that truancy represented protests against the narrow and artificial methods of the classroom, such that truant youth have an unwillingness to conform to school expectations and codes of behavior (Elliot, 1999). A proposed key feature of youth who
are truant is that they rarely exhibit anxious distress or somatic complaints (Pilkington \& Piersel, 1991). Truancy is thus sometimes referred to as non-anxiety-based absenteeism (Fremont, 2003). Truancy is often thought of as a symptom, precursor, or separate condition related to delinquency (Kearney, 2001). Delinquency refers to criminal behaviors and status offenses such as stealing, verbal or physical aggression, property destruction, underage alcohol and other drug use, and curfew violations (Kearney, 2001). Youth who are truant tend to engage in these behaviors with antisocial peers and attempt to conceal school absences from their parents (Elliot, 1999). Truancy is also frequently associated with conduct disorder in youth (Kearney, 2001). Conduct disorder involves "repetitive and persistent patterns of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated." (American Psychiatric Association [APA], 2013, pg. 472). One symptom of conduct disorder is truancy from school beginning before age 13 years (APA, 2013, pg. 469). Other key defining features of truancy include poor motivation and academic progress, lower intelligence, unwillingness to conform to expectations, extreme family conflict and disorganization, and poor social conditions such as homelessness and poverty (Fremont, 2003; Kearney, 2001; Pilkington \& Piersel, 1991; Williams, 1927).

## School Phobia

Broadwin (1932) described absences from school due to fearfulness and anxiety, introducing the idea that problematic school absenteeism is not necessarily truant. Partridge (1939) delineated a subtype of truancy (psychoneurotic truancy) to encompass youth who displayed problematic absenteeism as a symptom of neurosis or personality disorder. Johnson and colleagues (1941) coined the term school phobia, a subset of psychoneurotic truancy. Three main elements characterize school phobia: acute youth anxiety marked by hypochondriacal and
compulsive symptoms caused by organic disease or emotional conflict, increased anxiety in a youth's mother due to a life stressor involving a threat to her security (i.e., marital or financial problems), and a historically unresolved, over-dependent mother-youth relationship.

The term school phobia is associated with two types of school absenteeism: separation anxiety and specific phobia. The emphasis of early literature on the role of the mother as the reason for problematic absenteeism led to school phobia being seen as synonymous with separation anxiety (Elliot, 1999; Pilkington \& Piersel, 1991). However, several studies indicate that separation anxiety and school phobia are not synonymous disorders (Bernstein \& Garfinkel, 1986; Last \& Strauss, 1990). Separation anxiety involves "developmentally inappropriate and excessive fear or anxiety concerning separation from those to whom the individual is attached" (APA, 2013, pg. 190). One symptom of separation anxiety disorder in youth is the persistent reluctance or refusal to go to school because of fear of separation (APA, 2013, pg. 191). However, a youth with school phobia experiences distress and a reluctance to attend school because of a distinguishable fear-stimulus within the school system. This distinguishable fearstimulus prompted the conceptualization of school phobia as a type of specific phobia (Waldfogel, Coolidge, \& Hahn, 1957). Specific phobia involves "marked and persistent fear or anxiety about a specific object or situations" (APA, 2013, pg. 197). Phobias in youth are (1) out of proportion to the demands of the situation, (2) not explained or reasoned away, (3) beyond voluntary control, (4) related 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, 1998). Common examples of specific school-related fear-stimulus objects or situations include buses, tests, teachers, hallways, or social evaluations from peers (Dumas \& Nilsen, 2003; Kearney, 2001).

## School Refusal Behavior

School refusal behavior is an umbrella term used to describe child-motivated refusal to attend school and/or difficulties remaining in class for an entire day in youth aged 5-17 years (Kearney \& Silverman, 1996). School refusal behavior encompasses truancy and school phobia and is usually viewed along a spectrum of school attendance problems. The continuum of behaviors includes youth who attend school with great dread and somatic complaints that precipitate pleas for future nonattendance, youth who display severe morning misbehaviors in an attempt to refuse school, youth who miss sporadic periods of school time, and youth who miss long periods of school time (Figure 1) (Kearney \& Bates, 2005). School refusal behavior thus includes youth who "successfully" miss school time, as well as youth whose behavior is geared toward missing school time but who have not yet reached that goal (Kearney, 2001).


Figure 1. Continuum of school refusal behavior based on attendance.

Youth with school refusal behavior often experience emotional distress or anxiety at the prospect of school, which may involve fear of separating from a significant other, fear of peer or social interactions, or fear of some aspect of the school itself (Hansen, Sanders, Massaro, \& Last, 1998). The behavior is often viewed as a symptom of anxiety disorders in children and anxiety
and affective disorders in adolescents (McShane, Walter, \& Rey, 2001). A common trait of school refusal behavior in youth is the presence of somatic symptoms, which tend to exist on school days and may remit on weekends and holidays (Stroobant \& Jones, 2006). Youth with school refusal behavior also stay at home with the knowledge of their parents, unlike youth with truancy, and often their family has taken reasonable measures to solicit attendance (Berg, Nichols, \& Pritchard, 1969; Walter, McShane, \& Rey, 2001). Youth with school refusal behavior also display little antisocial behavior, unlike youth with truancy (Berg et al., 1969).

Kearney and Silverman (1996) suggested an atheoretical approach to subtyping youth with school refusal behavior based simply on the length of the problem. Self-corrective school refusal behavior refers to youth whose problematic absenteeism remits spontaneously within 2 weeks, acute school refusal behavior refers to youth whose problematic absenteeism lasts from 2 weeks to 1 calendar year (i.e., 2-52 weeks), and chronic school refusal behavior refers to youth whose problematic absenteeism lasts longer than 1 calendar year (i.e., 53+ weeks) (Kearney, 2001).

## Classification Systems

Psychologists have long investigated and attempted to classify problematic absenteeism.
However, little consensus has emerged on the most effective way to organize this population due to various terminologies and diagnostic categories. Major classifications include historical, diagnostic, empirical, and functional systems that are discussed next.

## Historical

Psychoneurotic vs. Traditional Truancy. Early classification researchers focused on the legal definition of problematic absenteeism (i.e., days missed from school without legitimate or legal exemption). Early organizational strategies were thus directed at youth recognized as
truant (Kearney, 2001). Partridge (1939) outlined 5 different subtypes of truancy. The first 4 subtypes (undisciplined, hysterical, desiderative, and rebellious) were associated with antisocial behaviors, detached family relationships, and key features such as a lack of discipline, running away from difficult situations, a desire for something, and oppositional behavior toward domineering parents, respectively (Kearney, 2001). The fifth subtype, psychoneurotic truancy, referred to youth who demonstrated timidity, guilt, anxiety, tantrums, aggression, and desires for attention within an overprotective youth-parent relationship (Partridge, 1939). These distinctions guided the separation of the study of problematic absenteeism into two camps: (1) a "contemporary" camp that viewed school absenteeism as a more complex neurotic condition (referred to as psychoneurotic truancy or school refusal) and (2) a "traditional" camp that viewed the problem as illegal, delinquent behavior (referred to as truancy) (Kearney, 2001). The formation of this school refusal-truancy dichotomy sparked an interest in the construct of fear as a way to further classify youth with psychoneurotic problematic absenteeism.

Neurotic vs. Characterological. Coolidge and colleagues (1957) proposed two groups of problematic absenteeism based on commonly endorsed symptomatology: neurotic and characterological. The neurotic type represented the original concept of school phobia, whereas the characterological type represented the original concept of psychoneurotic truancy or school refusal (Kearney, 2001). Youth of the neurotic type generally experienced a sudden onset, were younger, and highly anxious and fearful of separating from familiar surroundings. Youth of the characterological type generally experienced a gradual onset, were older, and displayed more serious antisocial behaviors (Kearney \& Silverman, 1993). Considerable overlap among these proposed classifications led to the development of other school absenteeism taxonomies that focused more specifically on overt youth behaviors.

Acute vs. Chronic. Kennedy (1965; 1971) outlined two subgroups of problematic absenteeism based on onset and course. Type I was characterized by rapid onset of the problem, low grades, concerns about death, questionable maternal physical health, good parental relations, and no prior history of similar problems. Type II was characterized by gradual onset over months or years, good grades, no concerns about death, irrelevance of maternal physical health, poor parental relations, and a history of poor adjustment (Kennedy, 1971). Common symptoms across both types included fears, somatic complaints, separation anxiety, and parent-school official conflict (Kennedy, 1965).

Outcome studies on the early attempts at the classification of problematic absenteeism have yielded insufficient population coverage and inconsistent findings with questionable validity. These studies thus had impractical utility for clinicians, social workers, and school personnel working with these youth (Kearney, 2001).

## Diagnostic

Later classification systems involved the diagnostic grouping of youth with problematic absenteeism. Anxiety and affective disorders are recognized frequently among this population. Bernstein and Garfinkel $(1986,1988)$ classified youth with problematic absenteeism into 4 subgroups based on DSM categories: (1) anxiety disorder only, (2) affective disorder only, (3) anxiety and affective disorder, and (4) no anxiety or affective disorder. Last and colleagues (1987a) supported Bernstein and Garfinkel's conclusions when they reported that youth with a primary diagnosis of school phobia often met DSM-III criteria for a secondary anxiety or affective disorder such as separation anxiety ( $52.6 \%$ ), overanxious disorder ( $15 \%$ ), social phobia of school (15\%), or major depression (15\%). The Diagnostic Statistical Manual of Mental Disorders ( $5^{\text {th }} \mathrm{ed}$; DSM-5; APA, 2013) provides no formal diagnosis of problematic
absenteeism. However, the DSM-5 incorporates problematic school absenteeism as a symptom of separation anxiety (i.e., "persistent reluctance or refusal to go to school") and conduct (i.e., "often truant from school") disorder (APA, 2013, pp. 191, 470).

A proposed advantage to a diagnostic classification of problematic absenteeism is the facilitation of information gathering regarding symptoms, treatment options, course, and outcomes (Marcella, Miltenberger, \& Raymond, 1996). However, a major criticism is that current diagnostic categories and definitions related to problematic absenteeism target younger youth whose absenteeism is anxiety-related and tend to deemphasize non-anxiety-related symptoms and behaviors (Kearney \& Silverman, 1996).

## Empirical

Achenbach and Edelbrock (1978) empirically classified youth behavior into two broadband factors: over-controlled (internalizing disorders) and under-controlled (externalizing disorders). Over-controlled behaviors included fear, anxiety, and depressive symptoms, whereas under-controlled behaviors included aggression, fighting, and stealing. Young and colleagues (1990) later distinguished "internalizing school refusal disorders" from "externalizing truant disorders." Internalizing school refusal disorders referred to phobia, anxiety, fears, fatigue, withdrawal, depression, or somatic complaints (Kearney, 2002a). Externalizing truant disorders encompassed impulsivity, manipulativeness, noncompliance, and other symptoms of conduct disorder or delinquency (Young, Brasic, Kisnadwala, \& Leven, 1990). However, Lambert and colleagues (1989) found factor analyses to yield a separate school avoidance factor from the proposed internalizing and externalizing child behavior problems. Mental health professionals thus did not generally adopt a single diagnostic or empirical method of classification. A universal classification system that encompasses all youth with absenteeism-related behaviors, including
those found in clinical and community settings, and that may guide specific assessment and intervention strategies is necessary.

## Functional

Kearney and Silverman (1996) suggested a functional approach to the classification of problematic absenteeism. The functional approach has several advantages over previously formulated organizational systems. These advantages involve inclusion of all youth with attendance-related behaviors, adequate discriminant validity, and specifically linked treatment strategies (Kearney, 2006a; Kearney, 2007a; Kearney \& Albano, 2007). The functional approach utilizes categorical and dimensional aspects of classification to help identify the primary maintaining variables of a youth's problematic absenteeism. Singular or multiple types of reinforcement may apply to a particular case of problematic absenteeism. The 4 functions of problematic absenteeism are outlined next.

Negative Reinforcement. Negative reinforcement refers to the termination of an aversive event (Kearney, 2001). Two negative reinforcement functions may contribute to problematic absenteeism. The first function refers to avoidance of school-based stimuli that provokes negative affectivity. Youth in this category do not like attending school due to specific fear stimuli related to the school building. Examples include buses, fire alarms, teachers, peers, or animals in the classroom. Some youth may not be able to identify specific fear-related stimuli and instead report feelings of general "malaise" or "misery" while at school (Kearney, 2001). Many of these youth are younger and tend to endorse somatic complaints, such as headaches, nausea, and dizziness. Youth with problematic absenteeism to avoid negative affectivity tend to score higher on anxiety and stress measures than youth who refuse school for positive reinforcement (Kearney, 2001). Youth in this category also have less attention, aggression, and
delinquent difficulties than those who refuse school for positive reinforcement. Families of youth in this function are more cohesive than families of youth of other functions (Kearney \& Silverman, 1996).

The second function refers to youth who display problematic absenteeism to escape aversive social and/or evaluative situations. These youth do not like attending school due to anxiety-provoking school-based situations, such as walking in the hallways, public speaking, and attending classes that involve performance before others (e.g., physical education) (Beidel, Turner, \& Morris, 1999). Youth of this function are generally older and show higher levels of general and social anxiety, stress, and depressive symptoms than youth who refuse school for positive reinforcement (Kearney, 2001). These youth also endorse lower delinquent behavior scores than youth who refuse school for positive reinforcement and higher scores on withdrawn and somatic complaint factors than youth of other functions (Tillotson \& Kearney, 1998). Youth with problematic absenteeism to escape aversive social/evaluative situations are marked by family detachment associated with lower scores on active-recreational orientation, cohesion, and independence (Kearney \& Silverman, 1995).

Positive Reinforcement. Problematic absenteeism may also be maintained through positive reinforcement that can include intangible or tangible rewards (Kearney, 2001). Intangible rewards may include verbal attention and reassurance, whereas tangible rewards may include sleeping late and playing with friends. Two positive reinforcement functions may contribute to problematic absenteeism. The first refers to intangible attention from significant others. Youth in this category are often younger and demonstrate various morning misbehaviors to receive attention and stay home from school. Examples include tantrums, reassurance-seeking, exaggerated complaints of physical symptoms, and running away from others. Youth who
display problematic absenteeism for attention may have elevated levels of overall fear and social anxiety, and some exhibit signs of separation anxiety (Tillotson \& Kearney, 1998). However, these youth also endorse the lowest levels of overall stress compared to youth of other functions. Such variability in symptoms may reflect the manipulativeness of these youth (Kearney, 2001). Youth of this function often demonstrate externalizing behaviors and tend to have enmeshed families marked by low levels of cohesion and independence (Kearney \& Silverman, 1995).

The second positive reinforcement function refers to tangible benefits outside of school. Youth of this function are often older and skip classes, whole sections of the day (e.g., an afternoon), or the entire day to pursue outside reinforcers. Common examples of outside reinforcers include watching television or playing video games, hanging out with friends, and engaging in drug or alcohol use, among others. Youth who refuse school for tangible reinforcement generally have lower levels of internalizing distress than youth of other functions and represent non-anxiety-based problematic absenteeism (Tillotson \& Kearney, 1998). Youth in this category generally have more attention, aggression, and delinquent behavior problems than youth who refuse school for negative reinforcement. Families of these youth generally report low levels of cohesion and are significantly more conflictive than families of other functions (Kearney \& Silverman, 1995).

Pure vs. Mixed Profiles. Less attention has focused on youth who display problematic absenteeism for multiple reasons (Kearney, 2002a). Some youth may initially endorse negative affectivity while attending school and persuade their parents to let them stay home. These youth may enjoy the benefits of sleeping late and watching television and begin to display problematic absenteeism to avoid school and to pursue rewards at home. Other youth may initially display problematic absenteeism to be with friends during school hours. After an extended period of time
away from school, they may experience distress about returning to school with new teachers, peers, and classrooms. Both examples refer to children who refuse school for negative and positive reinforcement (Kearney, 2002a).

## Epidemiology

## Prevalence

The overall prevalence of problematic absenteeism has been estimated as greater than most childhood mental disorders (Kearney, 2008a). The median prevalence of most major mental disorders in children and adolescents is less than 5\% (Costello, Egger, \& Angold, 2005). School refusal is a problem affecting approximately $1-2 \%$ of all school-aged children and about $5 \%$ of all clinic-referred children and adolescents (McShane, Walter, \& Rey, 2001). However, the exact prevalence of problematic absenteeism is difficult to estimate due to varying definitions and multiple components.

Kearney (2001) estimated that 5-28\% of youth display some aspect of school refusal behavior at some point. An important component of problematic absenteeism includes youth who attend school with significant emotional duress. This is often a precursor to problematic absenteeism and may precipitate pleas for further school nonattendance (Kearney, 2001). Kearney (2001) estimated the range of school attendance with significant duress to be $1.7 \%$ 5.4\%. Granell de Aldez and colleagues (1984) found a mean prevalence rate for fear of school to be $4.9 \%$ with a reported range of $.01 \%-25 \%$. Kearney and Beasley (1994) reported youth who refuse school as a way to escape aversive, anxiety-provoking stimuli to be at a rate of $35 \%$ and youth who refusal school as the result of a specific phobia to be at a rate of $10 \%$.

Partial absences, including cutting classes or tardiness, are also an important component of problematic absenteeism. Rates of these behaviors vary considerably and depend on a school
system's consistency in recording. Inner city schools (7.6\%) have reportedly higher rates of partial absenteeism than rural schools ( $2.4 \%$ ), while public schools (5.1\%) have a greater partial absenteeism problem than private schools ( $0.7 \%$ ) (Kearney, 2001). A $4.4 \%$ rate of class cutting is assumed for high school youth. However, the overall rate may be $8.8 \%$ when class cutting in elementary and middle school youth is added (Kearney, 2001). Guare and Cooper (2003) found that $54.6 \%$ of middle school youth and $13.1 \%$ of high school youth sometimes or often skip classes. Many teachers and other school officials overlook minor infractions that occur during the chaotic course of a school morning, so rates of tardiness are likely higher than class cutting and may be 4.4\%-9.5\% (Kearney, 2001).

Simple absenteeism, the rate of complete days missed from school, in the United States is estimated at $1.1 \%-4 \%$ (Kearney, 2001). However, simple absenteeism rates rise substantially in large schools, public schools, inner-city schools, schools with significant minority populations, and schools whose students are largely impoverished (Kearney, 2001; Teasley, 2004). Simple absenteeism rates are generally highest in public inner-city high schools and lowest in rural elementary schools (Kearney, 2001). Chronic absenteeism, defined as missing at least $10 \%$ or 18 school days per year, in the United States is estimated to be $10 \%$ (Balfanz \& Byrnes, 2012). This translates to 5.0-7.5 million youth not attending school on a regular basis. Chronic absenteeism is most prevalent among low-income and older youth. Chronic absenteeism rates are lowest in elementary school, begin to rise in middle school, and continue to increase in high school (Balfanz \& Byrnes, 2012).

Problematic absenteeism is a strong predictor of school dropout or permanent withdrawal from school prior to high school graduation (Bryk \& Thum, 1989; Ingul, Klockner, Silverman, \& Nordahl, 2012; Kearney, 2001). The U.S. National Center for Education Statistics (2013)
reported that the nation's status dropout rate, or percentage of youth out of high school and who have not earned a high school credential, is approximately $7.0 \%$. This is an improvement from a status dropout rate of $12 \%$ in 1990.

Dropout rates vary by geographic location. The event dropout rate is the estimated percentage of students who left high school between the beginning of one school year and the beginning of the next without earning a high school diploma or an alternative credential (i.e., GED). The event dropout rate for Nevada public schools appears to be on a downward trend (NCES, 2011). The U.S. National Center for Education Statistics (2011) reported that the event dropout rate for Nevada public school students in grades 9-12 in 2008-09 was approximately $5.1 \%$. This number decreased in 2011-12 to approximately $3.9 \%$ (NCES, 2014). In the Clark County School District of Nevada, the event dropout rate of public school students' grades 9-12 in 2011-12 was $4.4 \%$ and this decreased to $3.9 \%$ in 2012-13 (Nevada Department of Education, 2014).

Problematic absenteeism remains a serious and pervasive issue for many of the nation's youth. The trends and course of problematic absenteeism are affected by several of a youth's characteristics such as age, gender, ethnicity, and socioeconomic status. These characteristics are discussed in the next section.

## General Characteristics

## Age

Youth may show problematic absenteeism anytime between the ages of 5-17 years. However, most youth with problematic absenteeism are aged 10-13 years (Kearney \& Albano, 2007). Specific patterns of problematic absenteeism are associated with age and transition periods. Ollendick and Mayer (1984) concluded that problematic absenteeism is more likely to
occur at ages 5-6 years and 10-11 years. Kearney and Albano (2007) suggested that problematic absenteeism peaks around ages 5-6 years and 14-15 years. These patterns in age may reflect specific transitional periods in a youth's life. Problematic absenteeism is more common among younger adolescents and among students entering a new school building, such as kindergarten/first grade, middle school, and high school (Kearney \& Bates, 2005). An increase in school absences also accompanies advancement in grade level (Honjo et al., 2003).

## Gender

Problematic absenteeism occurs fairly equally among male and female youth (Hansen et al., 1998; Kearney \& Bates, 2005; Last, Strauss, \& Francis, 1987b; McShane, Walter, \& Rey, 2001). The rates of male and female youth leaving school before receiving a diploma are fairly equal as well. The U.S. National Center for Education Statistics (2013) reported that the status dropout rate for male and female youth, respectively, is approximately $7 \%$ and $6 \%$. However, the motive behind these absenteeism-related behaviors may vary. Females may be more likely to refuse school due to anxiety and fear, whereas males may be more likely to be absent due to conduct problems (Kearney, 2001).

## Ethnicity

Problematic absenteeism is fairly equivalent among different ethnic groups in clinical settings (Kearney \& Bates, 2005). However, ethnic differences are difficult to determine because minority youth do not seek clinical treatment as frequently as non-minority youth (Kearney, 2001). Minority youth exhibit significantly more problematic absenteeism than non-minority youth in nonclinical settings. The percentage of $8^{\text {th }}$ grade youth exhibiting 3 or more days absent from school in a 1-month time period is highest for American Indian/Alaska Native youth (30\%), Black youth (25\%), and Hispanic youth (24\%), followed by White youth (20\%) (NCES, 2007).

School dropout rates also vary significantly among minority and non-minority youth. Hispanic youth have the highest status dropout rate (13.0\%), followed by Black youth (8\%) and White youth (4\%) (NCES, 2013).

## Socioeconomic Status

Absenteeism rates also vary with respect to the socioeconomic status of youth and a youth's family. Elementary, middle, and high schools with a greater number of youth from low socioeconomic backgrounds tend to have higher absenteeism rates than schools with youth from higher socioeconomic backgrounds (Kearney, 2001). Youth from the lowest $20 \%$ of all family incomes are also 5 times more likely to drop out of high school than youth from the highest $20 \%$ of all family incomes ( 7.4 percent vs. 1.4 percent) (NCES, 2011). Schools with a greater number of youth who receive free or reduced-price lunches also tend to have higher rates of absenteeism (Kearney, 2008a).

## Course

The prognosis of problematic absenteeism can be categorized as acute or chronic (Kearney \& Albano, 2007). Acute problematic absenteeism includes cases lasting 2 weeks to 1 calendar year. Chronic problematic absenteeism includes cases lasting longer than 1 calendar year or across 2 academic years with problems present for a majority of the time. Youth tend to exhibit attendance problems 1 to 2 years before treatment and more than $40 \%$ of youth exhibit problems for more than 2 years (Kearney \& Bates, 2005). High risk times for the onset of problematic absenteeism occur when youth move to a different community or to a new school and after major social events or holidays (King, Tonge, Heyne, \& Ollendick, 2000). Bernstein and colleagues (1990) found the percentage of youth with school phobia that had demonstrated absenteeism-related behaviors for less than 2 years to be $54 \%$. The percentage of youth with
school phobia that had demonstrated absenteeism-related behaviors for more than 2 years was found to be $42 \%$, whereas $4 \%$ of youth with school phobia were found to demonstrate absenteeism-related behaviors for an unknown period of time. McShane and colleagues (2001) found $80 \%$ of youth reported that their problematic absenteeism had been present for 2 years or less prior to assessment and $78 \%$ reported that their refusal to attend school began in the first or second year of high school. Problematic absenteeism may remit spontaneously or otherwise be readily addressed by parents in up to $25 \%$ of cases (Tillotson \& Kearney, 1998). In most cases, however, formal interventions may be necessary for improved attendance and successful reintegration into the school system. Youth with severe problematic absenteeism that do not receive appropriate treatment may be subject to even more negative outcomes. Examining the short- and long-term effects of excessive school absences is thus critical. A review of individual, family, and community consequences of problematic absenteeism is discussed next.

## Effects of Problematic Absenteeism

## Short-Term

Common short-term consequences of problematic absenteeism include academic performance decline, social alienation, and family distress and conflict (Kearney, 2007a). School absences have been found to be associated with a youth's IQ score and educational aspirations (Lounsbury et al., 2004). Negative outcomes, such as a lack of supervision of the youth, legal and financial difficulties, gang membership, and juvenile delinquency may result from problematic absenteeism as well (Dube \& Orpinas, 2009; Kearney, 2007a; Kearney \& Bates, 2005; Lounsbury et al., 2004). School absenteeism is also a main predictor for school dropout (Ingul et al., 2012). School dropout and unaddressed problematic absenteeism can lead to several serious social, economic, and health-related problems into adulthood.

## Long-Term

Common long-term consequences of problematic absenteeism include social maladjustment, marital, family, and occupational difficulties, psychiatric and physical health problems, economic deprivation, and poor school performance of one's own children (i.e., less achievement of academic benchmarks) (Dube \& Orpinas, 2009; Ingul et al., 2012; Kearney, 2006a; Kearney \& Bates, 2005; Lounsbury et al., 2004). Hibbett and Fogelman (1990) found that formerly truant youth often married and had children at an earlier age and experienced marital breakdown more often than former non-truant youth. Former truants were also more likely to be heavy smokers and depressed. Hibbett and colleagues (1990) found a history of truancy to be a predictor of employment problems, more severe than those experienced by non-truants. A history of truancy was associated with an unstable job history, a shorter mean length of jobs, and a higher total number of jobs as well. Formerly truant youth also held lower status occupations, experienced more unemployment, and reported a lower family income among those employed.

Concurrent psychopathology is thus common among youth with problematic absenteeism. Psychopathology can be a useful indicator of the presence of problematic absenteeism in youth and vice versa. This study aims to identify specific internalizing (e.g., anxiety and depression) and externalizing (e.g., inattention/hyperactivity, rule-breaking behavior, and aggressive behavior) symptoms that may predict absenteeism severity in an ethnically diverse, community-based, and gender-balanced sample of youth. The following section describes relevant psychopathology among youth with problematic absenteeism.

## Psychopathology

Youth refusing to attend school often have emotional distress related to school attendance and a key feature of problematic absenteeism is heterogeneity of internalizing and/or
externalizing behavior problems (Kearney, 2007a; McShane, Walter, \& Rey, 2001). Specific psychiatric diagnoses have also been found to be associated with particular functions of school refusal behavior (Kearney \& Albano, 2004). Relevant internalizing disorders, externalizing disorders, and associated psychiatric disorders are discussed next.

## Internalizing Disorders

Common internalizing psychiatric disorders comorbid with problematic absenteeism include generalized anxiety disorder, separation anxiety disorder (SAD), and depression (Kearney \& Bates, 2005). Last and colleagues (1987b) found that youth with school phobia also endorsed social phobia (27.3\%), specific phobia (18.2\%), overanxious disorder (18.2\%), panic disorder (18.2\%), major depression (18.2\%), and dysthymia (9.1\%). Hansen and colleagues (1998) reported that youth with anxiety-based school refusal also met criteria for phobic disorder (54\%), SAD (29\%), panic disorder (7\%), and anxiety disorder not otherwise specified (1\%). McShane and colleagues (2001) found comorbid major depression (30\%), dysthymia (22\%), and SAD (20\%) among school-refusing youth as well. Kearney and Albano (2004) reported that youth with primary school refusal behavior also met criteria for separation anxiety (22.4\%), generalized anxiety (10.5), major depression (4.9\%), specific phobia (4.2\%), social anxiety (3.5\%), and panic (1.4\%) disorders.

Youth with problematic absenteeism often endorse additional internalizing symptomatology. Egger and colleagues (2003) found that youth with problematic absenteeism experienced fears and worries, sleep difficulties, and somatic complaints. Other common symptoms include fatigue, self-consciousness, and perfectionism (Kearney, 2006b; 2008a).

## Externalizing Disorders

Disruptive behaviors are also frequently associated with problematic absenteeism. Comorbid externalizing psychiatric disorders include oppositional defiant disorder (ODD), conduct disorder (CD), and attention deficit hyperactivity disorder (ADHD) (Kearney \& Bates, 2005). Hansen and colleagues (1998) reported that $11 \%$ of youth with school refusal behavior received a diagnosis of ODD. McShane and colleagues (2001) found that youth with school attendance difficulties also met criteria for ODD (24\%), CD (3\%), and ADHD (6.5\%). Harada and colleagues (2002) found that the presence of school refusal behavior was highest in youth with only ODD ( $80 \%$ ), followed by youth with comorbid ODD and ADHD (42\%) and youth with only ADHD (17\%). Kearney and Albano (2004) found that youth with primary school refusal behavior also met criteria for ODD (8.4\%), CD (2.8\%), and ADHD (1.4\%).

## Relation to School Refusal Function

Specific psychiatric disorders have been linked to particular functions of school refusal behavior. Kearney and Albano (2004) assessed 143 youth with primary school refusal behavior and found internalizing disorders (i.e., anxiety and depression) to be associated with negatively reinforced school refusal behavior (functions 1 and 2), SAD to be associated with attentionseeking behavior (function 3), and ODD and CD to be associated with the pursuit of tangible reinforcement outside of school (function 4). The vast and considerable heterogeneity of internalizing and externalizing symptoms among youth with problematic absenteeism requires familiarity with the associated risk factors. Problematic absenteeism is associated with many overlapping variables relating to the youth, parents, family, peers, school, and community. The next sections outline these major risk factors.

## Risk Factors

## Youth Factors

The main cause of school absence is youth illness or chronic disease (Kearney, 2008b). Physical illness is associated with the onset of school refusal behavior in at least $20 \%$ of problematic absenteeism cases (McShane, Walter, \& Rey, 2001). Common medical conditions and somatic complaints associated with problematic absenteeism include asthma and respiratory illness, diabetes, influenza, dysmenorrhea, diarrhea, irritable bowel, headache, stomachache, nausea and vomiting, palpitations and perspiration, and trembling (Kearney, 2006b). Youth psychiatric illness is also often associated with problematic absenteeism. Egger and colleagues (2003) found that $88.2 \%$ of anxious school refusers and purely truant youth combined had at least one psychiatric diagnosis. Ingul and colleagues (2012) found indicators of internalizing and externalizing behavior in youth to be associated with problematic absenteeism. Externalizing behavior, specifically, was found to be the main predictor of school absences.

Youth learning and emotional difficulties have been identified as risk factors for problematic absenteeism as well. Naylor and colleagues (1994) reported that school refusing psychiatric youth had more learning disabilities and language impairments than psychiatric controls. School refusing psychiatric youth also achieved a lower academic level in all areas of math, reading, and written language than psychiatric controls. Lane and colleagues (2006) found that students with learning disabilities and emotional disturbances, respectively, missed an average of 10.19 and 24.00 school days over the past 12 months. Redmond and Hosp (2009) found that students receiving special education services for learning disorders and emotional disturbances exhibited elevated levels of absenteeism compared to students receiving general education services, especially in $9^{\text {th }}$ grade.

Specific personality traits have been linked to problematic absenteeism as well.
Lounsbury and colleagues (2004) found the Big Five personality traits to predict school absences in middle and high school youth. Openness, conscientiousness, and emotional stability were negatively related to absences in general. Agreeableness was negatively related to absences for $10^{\text {th }}$ and $12^{\text {th }}$ grade youth and extraversion was negatively related to absences for $7^{\text {th }}$ grade youth. The narrowband personality trait of work drive was negatively associated with school absences in all grade levels as well. Other common youth-related risk factors of problematic absenteeism include teenage pregnancy (Stevenson et al., 1998), substance abuse (Byrne \& Mazanov, 1999), low self-esteem, extensive work hours outside of school (Kearney, 2008a), and low participation in extracurricular activities such as school athletics (Whitley, 1999) and after school-programs (Weisman \& Gottfredson, 2001).

## Parent Factors

Common parent-based factors related to problematic absenteeism include psychiatric disorder, education level, employment, alcohol and drug use, and maltreatment. McShane and colleagues (2001) found that youth with school refusal behavior had high rates of maternal (53\%) and paternal (34\%) psychiatric disorder. Egger and colleagues (2003) found problematic absenteeism to be associated with a biological parent with a history of treatment for a mental health problem, a parent without a high school diploma, and an unemployed parent. Casas-Gil and Navarro-Guzman (2002) reported that youth with parents with alcoholism had lower academic performance, poorer intelligence, and more grade retention than youth with parents without alcoholism. Youth with parents with alcoholism also skipped more school days and dropped out of school more frequently than youth with parents without alcoholism. Parental maltreatment of youth has also been linked to school absences (Kearney, 2008a). Parents may
keep youth home from school to conceal maltreatment, mask hospital stays or recovery time from maltreatment, and minimize psychiatric sequelae of maltreatment. However, some maltreated youth may attend school assiduously or linger after school to avoid going home (Kearney, 2001).

## Family Factors

Common contributing family-based variables for youth with problematic absenteeism include family structure and conflict. McShane and colleagues (2001) found that $43 \%$ of youth with school refusal behavior reportedly experienced a conflict at home, $21 \%$ reported family separation, and $39 \%$ reported living with a single parent. Egger and colleagues (2003) found problematic absenteeism to be associated with living in a single-parent home, having at least one adoptive parent, and lax parental supervision. Lower family activity levels, enmeshment, socioeconomic disadvantage, and homelessness have also been linked to problematic absenteeism (Galloway et al., 1985; Hansel et al., 1998; Kearney, 2008a; Kearney, 2008b).

## Peer Factors

Common peer difficulties among youth with problematic absenteeism include affiliation problems (Hirata \& Sako, 1998-1999), self-reported alienation (Reid, 1984), school violence (Dake, Price, \& Telljohan, 2003), and bullying or teasing (Egger, Costello, \& Angold, 2003). French and Conrad (2001) found that peer rejection-antisocial behavior among youth predicted high school dropout. Farmer and colleagues (2003) found that elevated levels of youth aggression, affiliation with an aggressive peer group, and lower levels of teacher-perceived popularity were linked to higher school dropout among youth. Angelo (2012) found that $100 \%$ of school refusing youth endorsed the quality of their peer relationships as markedly influencing their unwillingness to attend school.

## School Factors

Some students think that school is boring, classes are disengaging, and staff members are unapproachable, making absences more likely (Dube \& Orpinas, 2009). Shochet and colleagues (2006) found self-reported school connectedness, defined as the extent to which a student feels personally accepted, respected, included, and supported by others in the school environment, to be inversely related to absenteeism in youth. Jenkins (1995) reported lower levels of school commitment among youth to be linked to greater school crime, misconduct, and nonattendance. Ingul and colleagues (2012) found that negative contact with a teacher and a sense of being treated with disrespect in the school setting predicted school absences among high school youth.

Other common teacher-student relational factors associated with problematic absenteeism include teacher control, teacher support, and teacher absenteeism (Ehrenberg, Ehrenberg, Rees, \& Ehrenberg, 1989; Moos \& Moos, 1978). School organizational factors such as large school size, lower academic press (i.e., emphasis on academic achievement), choice of educational program (i.e., school curriculum involving more remedial or nonacademic courses and less challenging courses), and consistency of enforcement of absentee policies have also been linked to problematic absenteeism (Lee \& Burkam, 2003; Stickney \& Miltenberger, 1998; Werblow, Robinson, \& Duesbery, 2010).

## Community Factors

Family and community socioeconomic status determines the exposure to health stressors and schools attended by youth (Wandersman \& Nation, 1998). Galloway and colleagues (1985) reported socioeconomic disadvantage among youth to be associated with poor school attendance. Youth living in low-income neighborhoods are more likely to experience acts of violence, maltreatment, and attend poorly funded schools (Teasley, 2004). Youth in affluent communities,
conversely, have access to support systems and resources that reduce the risk of truancy. These youth also have increased parental involvement with their education, a protective factor for problematic absenteeism.

Some cases of problematic absenteeism may be due to one causal factor, such as child or family illness, but a primary cause for school absence in other cases may be more difficult to determine. Researchers have developed various assessment methods that consider the etiological factors that contribute to problematic absenteeism. Proper assessment of problematic absenteeism is critical for determining an accurate clinical profile with the full range of symptoms and effective treatment. A detailed discussion of assessment methods thus follows.

## Assessment

A thorough assessment that utilizes various techniques is necessary to identify the most appropriate form of intervention for problematic absenteeism in youth (King, Ollendick, \& Tonge, 1995). Commonly used assessment methods are described next. This study utilized selfreport questionnaires to obtain data from a diverse, gender-balanced, community sample of youth.

## Interviews

Many clinicians recommend the use of structured interview schedules to ensure a complete and reliable diagnostic picture (Elliot, 1999). The Anxiety Disorders Interview Schedule for Children for DSM-IV (ADIS-IV; Silverman \& Albano, 1996) is a semi-structured interview that focuses primarily on anxiety and other psychiatric disorders. Child and parent versions are available and should be included in assessment. Problem behaviors and diagnosis that the ADIS-IV addresses include school refusal behavior, separation anxiety, social phobia, specific phobia, panic disorder, agoraphobia, ADHD, obsessive-compulsive disorder, and post-
traumatic stress disorder. Additional sections are included for externalizing, mood, somatoform, and substance use disorders, which may be useful for identifying comorbid diagnoses. The school refusal behavior section of the ADIS-IV contains several questions that cover important variables such as number of school days missed in the current and previous school year, whether a youth experiences nervous feelings or worries at school, and the frequency with which a youth visits the nurse or counselor to leave school early. The interview also provides a list of common school-related fears. Youth and parents rate level of fear and interference on a $0-8$ scale for each item (Silverman \& Albano, 1996).

## Questionnaires

Questionnaires are also useful for assessing problematic absenteeism as well as psychopathology and other absenteeism-related behaviors. Questionnaires can be completed by youth, parents, and teachers and generally focus on absenteeism-related behaviors such as anxiety, fear, stress, and depression. A number of relevant youth self-report measures exist. The Multidimensional Anxiety Scale for Children (MASC; March, 1997) contains 45 items 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 measure that assesses physiological anxiety, worry/oversensitivity, and social concerns/concentration problems. The Social Anxiety Scale for Children-Revised (SASC-R; La Greca \& Stone, 1993) contains 20 items that assess a youth's feelings of social anxiety in the context of their peer relations, which may involve the fear of being negatively evaluated and social avoidance. The State-Trait Anxiety Inventory for Children (STAIC; Spielberger 1973) is a 40-item questionnaire that assesses a youth's anxiety about specific situations, such as school, or anxiety in general.

The Revised Fear Survey Schedule for Children (FSSC-R; Ollendick, 1983) contains 80 fear-stimulus items, including school-related activities such as taking a test, that assess the number of fears and the overall level of fearfulness in youth. The Daily Life Stressors Scale (DLSS; Kearney, Drabman \& Beasley, 1993) is a 30 -item questionnaire to measure the severity of a youth's aversive feelings of every day events. The Children's Depression Inventory (CDI; Kovacs, 1992) contains 27 items to assess depressive symptoms in youth over a 2 -week period. The former is ideal for identifying youth with problematic absenteeism who escape aversive social situations. The latter is ideal for distinguishing youth with depression from youth with problematic absenteeism to avoid school-related negative affectivity.

The Youth Self Report (YSR; Achenbach \& Rescorla, 2001) contains 118 items that cover a range of internalizing and externalizing symptomatology and is useful for assessing all youth with problematic absenteeism. Other self-report questionnaires have been developed to specifically measure school refusal behaviors such as the School Refusal Personality Scale and School Avoidance Scale (Honjo et al., 2003). Parents and teachers may also complete measures to assess a wide range of a youth's internalizing and externalizing problems. Examples include the Child Behavior Checklist (CBCL; Achenbach \& Rescorla, 2001), Conners Rating Scale Parent Version Revised (CRS-PVR; Conners, 1997a), Teacher Report Form (TRF; Achenbach \& Rescorla, 2001), and Conners Teacher Rating Scale - Teacher Version Revised (CTRS-TVR; Conners, 1997b).

## Monitoring

Monitoring is another valuable technique for assessing the nature of a youth's problematic absenteeism. Monitoring may be completed by the youth or parent on a daily or weekly basis (Kearney, 2001). Many aspects of problematic absenteeism can be assessed in this
format such as distress, frequency, and content of distorted thoughts or problem behaviors. Such insight can provide valuable information about the nature of a youth's feelings and behaviors, combined with contextual details that may help to trigger, exacerbate, or alleviate problematic absenteeism (Elliot, 1999). One commonly used standardized monitoring system is a Daily Diary (Beidel, Neal, \& Lederer, 1991), which tracks the occurrence, time, location, and behavioral responses to an anxiety-provoking event. Another standardized monitoring system is the Subjective Units of Distress Scale (SUDS; Wolpe, 1969). The SUDS is a 0-100 scale used to rate the level of distress for specific situations relevant to a youth's problematic absenteeism and is most often used for hourly ratings with youth whose levels of emotional distress change throughout the day (Kearney, 2001). Another frequently used tool to assess the level of a youth's anxiety or distress is a fear thermometer, which contains a rating scale of 1-5 or 1-10 that youth can use to rate level of fearfulness of a certain event. This technique is particularly favorable for youth who display problematic absenteeism due to a specific school-related fear (Kearney, 2001).

## Behavioral Observation

Behavioral observations are also an important assessment strategy that involves tracking and recording a youth's absenteeism-related behavior. Some behaviors that a youth engages in on a daily basis could be tracked by the youth and/or parents. Examples 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). Youth and parents can provide ratings for each of these activities, track the number of minutes it takes the youth to do each activity, and note the amount of time the youth misses school (Kearney, 2007b). These behaviors are recorded on a $0-10$ scale $(0=$ none and $10=$ extreme $)$. In addition, teachers can be useful
sources of observations for a youth's behavior throughout the school day. Behavioral observations of youth at home and in school provide valuable information concerning the functions of problematic absenteeism and reveal contextual factors that may not be apparent in an interview (Elliot, 1999).

Interviews, questionnaires, monitoring, and behavioral observations are all beneficial assessments techniques but they are not without limitations. These methods may not capture the fluctuating nature and various functions of problematic absenteeism or the heterogeneity of symptoms and behaviors displayed by youth. Functional analysis adds essential information to ensure a complete and descriptive assessment of a youth's problematic absenteeism.

## Functional Analysis

Functional analysis of problematic absenteeism could be conducted via 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 questionnaire that includes 6 questions relevant to each of the 4 functions of school refusal behavior: (1) avoidance of school-related stimuli that provoke negative affectivity, (2) escape from school-related aversive social and/or evaluative situations, (3) attention from significant others, and (4) tangible reinforcement outside of school (Kearney, 2002b; Kearney \& Silverman, 1996). Questions are answered using a 7-point Likert scale ranging from 0-6 where $0=$ never and $6=$ always (Kearney, 2002b). A mean item score is calculated for each of the 4 functions based on the youth's and parents' responses. The function with the highest mean item score is considered to be the primary variable maintaining a youth's problematic absenteeism (Kearney, 2002b).

The SRAS-C has demonstrated adequate reliability and validity. The scale has significant test-retest reliability across 7-14 day intervals for each of the 4 conditions (.64, .73, .78, and .56 ,
respectively). Concurrent validity has also been established with the SRAS-C and SRAS-R-C for each of the 4 functional conditions (mean $r=0.68$ ). Confirmatory factor analysis was used to examine the structure of the SRAS-R-C and investigate the validity of the proposed 4-factor model (two negative reinforcement factors and two positive reinforcement factors). Support was found for the 4-factor model with the exception of two items (items 20 and 24), which should be used with caution (Haight, Kearney, Gauger, \& Schafer, 2011; Kearney, 2006a). With these two weakest items removed, Cronbach's alpha values for each of the 4 functional conditions were $.82, .80, .87$, and .74 , respectively.

The SRAS-P has demonstrated adequate reliability and validity. The scale has significant test-retest reliability across 7-14 day intervals for each of the 4 conditions (.63, .67, .78, and .61 , respectively). Interrater reliability across mother and father reports of the SRAS-R-P for each of the 4 functional conditions has been to be found significant ( $.57, .49, .64$, and .46 , respectively). Confirmatory factor analysis was used to examine the structure of the SRAS-R-P and investigate the validity of the proposed 4-factor model (two negative reinforcement factors and two positive reinforcement factors). Confirmatory factor analysis revealed that 21 of the 24 items supported the 4 -factor model. With the exception of the 3 weakest items (items 18, 20, and 24), Cronbach's alpha values for each of the 4 functional conditions were $.86, .86, .88$, and .78 , respectively (Haight, Kearney, Gauger, \& Schafer, 2011). Caution is advised when including items 18, 20, and 24 of the SRAS-R-P (Kearney, 2006a).

This study sought to examine the level of absenteeism severity that warrants the most clinical and family concern in order to further facilitate targeted assessment. After proper assessment, the next step is to identify an intervention approach that is best suited for each individual case of problematic absenteeism. The following section describes methods used to
treat youth with problematic absenteeism, as well as prescriptive approaches that address the specific functions of problematic absenteeism.

## Treatment

Early detection and intervention, as well as the consideration of a youth's particular needs and reasons for refusing to go to school, are critical components for the effective treatment of problematic absenteeism (Lauchlan, 2003). Lauchlan (2003) also advised that the involvement of a youth's family and school personnel responding to the problem are essential to facilitate smooth reintegration of a youth into the school system. Research has failed to find any conclusive evidence in favor of one particular intervention strategy. The American Academy of Child and Adolescent Psychiatry (AACAP, 1997) recommends a multimodal treatment approach that may include many of the treatment components described in the next section.

## Psychological Approaches

Psychological interventions for youth with problematic absenteeism are circumscribed to focus on key symptoms and proximal variables, while the general goals are to help youth manage anxiety to boost daily attendance and to help parents appropriately consequate school attendance and nonattendance (Kearney, 2008a). Psychological techniques for youth with problematic absenteeism may be arranged according to 3 categories: youth-based, parent-based, and familybased (Kearney, 2006b).

Youth-based. Youth-based techniques for problematic absenteeism generally focus on managing anxiety symptoms in the school setting. Common anxiety management techniques include cognitive-behavior therapy and exposure-based practices that gradually or immediately reintroduce youth to school (Kearney, 2006b). Mansdorf and Lukins (1987) reported that cognitive restructuring plus graduated exposure to the school setting improved attendance by the

4th week. Last and colleagues (1998) found cognitive-behavior therapy and an education support therapy control to be equally effective at improving attendance and reducing anxiety and depressive symptoms among youth with school phobia. Tolin and colleagues (2009) found that cognitive-behavioral therapy with graduated exposure to the school setting significantly improved school attendance in $75 \%$ of cases. Heyne and colleagues (2011) reported that a developmentally sensitive cognitive-behavioral therapy program for youth with problematic absenteeism was effective at improving school attendance, school-related fear, anxiety and depressive symptoms, adolescent self-efficacy, and overall functioning.

Graduated exposure to the school setting is typically less stressful for youth and their parents. However, many researchers in the field view flooding as the most successful approach for youth with mild or acute problematic absenteeism (Lauchlan, 2003). This technique is less advisable when a youth's anxiety is particularly severe or insufficient resources exist to ensure a youth's return to school (Elliot, 1999).Kearney and Beasley (1994) surveyed 300 professional psychologists on their practice characteristics for youth with school refusal behavior and found that forced school attendance was reported successful $100 \%$ of the time but used as the primary treatment approach only $11.6 \%$ of the time.

Other youth-based strategies include somatic control exercises, such as relaxation training and breathing retraining, and social skills training to boost a youth's self-esteem and positive expectations of social situations. A combination of social skills training combined with other youth-based techniques, such as cognitive-restructuring and graduated exposure, provides the most effective treatment plan (Spence, Donovan, \& Breechman-Toussaint, 2000).

Parent-based. Parent-based techniques can improve treatment approaches and further facilitate a youth's reintegration to school. Kearney and Beasley (1994) found parent training and
contingency management to be the most frequent primary treatment approach used by professional psychologists for problematic absenteeism (40\%). The general emphasis of parentbased approaches is managing contingencies for school attendance and non-attendance. Common techniques include establishing regular morning, daytime, and evening routines, modifying parental commands towards brevity and clarity, reducing a youth's reassurance-seeking behaviors, and providing attention-based consequences for school nonattendance (Kearney, 2006b). King and colleagues (1998) found a 4-week cognitive-behavioral therapy program plus parent/teacher training in youth behavior management skills to be more effective at improving a youth's school attendance and self-reports of fear, anxiety, depression, and coping than a waitlist control. Heyne and colleagues (2002) investigated the effects of child therapy alone, parent/teacher training alone, and a combination of these in youth with problematic absenteeism. All treatment groups showed improved attendance, reduction in symptoms of distress, and increased self-efficacy. However, parent involvement in treatment was related to better attendance.

Family-based. Family-based techniques are applied least frequently in the treatment of youth with problematic absenteeism. However, strong support exists in the literature for such interventions. Family-based interventions focus on formulating a multi-level picture of family relationships and how these relate to the presenting problem (Lask, 1996). Common familybased strategies include communication and problem solving skills training, contingency contracts to increase incentives for school attendance and decrease incentives for nonattendance, reframing or giving an alternative meaning to a set of circumstances, and escorting youth to school and classes (Kearney \& Albano, 2000).

Lask (1996) outlined a variety of family-based therapy approaches for treating youth with problematic absenteeism. These approaches include structural, Milan systemic, strategy, brief solution-based, and narrative therapies. Structural therapy for youth with problematic absenteeism aims to change a family's dysfunctional organization and interaction patterns that support the absenteeism-related behaviors. Milan-systemic therapy works under the assumption that problematic absenteeism in a youth arises out of the experience, behaviors, and beliefs of other family members, so interventions challenge these existing belief systems. Strategy therapy relies on the therapist to identify a family's unsuccessful attempts at resolving a youth's problematic absenteeism. The therapist must gain the family's trust to introduce alternative and often very different ways of approaching the presenting problem.

Some investigators consider brief solution-based therapy to be strategic therapy. However, the former intervention is solution-focused while the latter is problem-focused (Lask, 1996). The initial session in brief solution-based therapy is used to identify exceptions to a youth's problematic absenteeism behavior and then discuss the circumstances surrounding these instances. Interventions build on these exceptions to a youth's problematic absenteeism behavior. Narrative approaches help identify the 'negative stories' that are developed about youth with problematic absenteeism and how these stories influence a youth's thoughts, feelings, and behaviors. The aim of narrative approaches is to challenge the existing negative story and recreate a more positive and helpful view of a youth with problematic absenteeism.

Specific interventions and treatment approaches may vary significantly depending on the nature of the family dynamic. Kearney and Silverman (1995) describe 5 different types of families common to youth with problematic absenteeism: (1) coercive, (2) enmeshed, (3) detached, (4) isolated, and (5) healthy. Each type of family requires a different form of
therapeutic intervention. The advised primary treatment focus for coercive families is on the entire family, with conflict among family members addressed prior to the concurring problematic absenteeism. The suggested primary treatment focus for enmeshed families is on one or both parents via contingency management. The suggested primary treatment focus for detached families is on the entire family via psychotherapy and contracting techniques. Treatment protocols that separately target the behaviors of parents and youth are recommended for isolated families, although less information is available on the treatment of these families. The advised primary treatment focus for a healthy family is the youth, for which relaxation training and systematic desensitization with exposure to the school setting may be most useful.

Functional Approach. A functional approach to the treatment of youth with problematic absenteeism allows for a more prescriptive plan that focuses on the motivating conditions of a youth's absences, rather than on managing a youth's symptoms (Table 2).

## Table 2

Function of school refusal behavior and personalized treatment (Kearney, 2001)
Function Personalized Treatment

To avoid school-based stimuli that provoke negative affectivity

To escape aversive school-based social/ evaluative situations

To pursue attention from significant others

To pursue tangible rewards outside of school

Child-based psychoeducation, hierarchy development, and somatic management and exposure-based techniques

Child-based psychoeducation, hierarchy development, cognitive restructuring, and somatic management and exposure-based techniques

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

Family-based contracting, communication and peer refusal skills training, and escorting youth to school

The functional treatment of youth who refuse school to avoid school-based stimuli that provokes negative affectivity is child-focused and includes psychoeducation, hierarchy development, somatic control exercises, imaginal and in-vivo exposure, and self-reinforcement (Kearney, 2001). Psychoeducation helps youth make connections between their feelings, thoughts, and behaviors. A negative-affectivity avoidance hierarchy is constructed from low-tohigh anxiety-provoking situations that are addressed in a stepwise manner. Somatic control exercises such as relaxation and breathing training can help youth reduce unpleasant physical symptoms, which can then be implemented during imaginal and in-vivo exposure to improve fear tolerance. Youth are encouraged to recognize and reward their improvement throughout treatment (Kearney, 2001). The functional treatment of youth with problematic absenteeism to
escape aversive social-evaluative situations is similar. However, more emphasis is placed on targeting social anxiety via cognitive restructuring. Cognitive restructuring focuses on recognizing negative thought patterns and helping a youth think in more healthy and realistic ways (Kearney, 2001).

The functional treatment of youth with problematic absenteeism to pursue attention from significant others focuses on parent training. The general goal is to reinstate parental control of a youth's school attendance through contingency management practices, clarified and directive commands, and daily routines to ensure structure (Kearney, 2001). Functional treatment of youth with problematic absenteeism to pursue tangible reinforcements outside of school neither focuses on the youth nor the parents, but a variety of family members. The general goal of treatment is to enhance a family's ability to resolve conflict and appropriately address a youth's problematic absenteeism via communication and problem-solving skills training (Kearney, 2001). Youth will also learn to apply these communication and problem solving skills to situations involving peer pressure and school nonattendance. However, youth escorts to school and from class to class may be necessary to ensure attendance (Kearney, 2001).

Outcome studies have indicated that prescribing treatment based on the reason a youth is maintaining problematic absenteeism can be effective. Kearney and Silverman (1990) found $100 \%$ of youth receiving individualized, functional treatment to report moderate improvements in daily levels of anxiety, depression, and distress, while approximately $88 \%$ of youth reported full-time school attendance by post-treatment and at 6-month follow-up. Chorpita and colleagues (1996) examined the effectiveness of functional treatment of a female with separation and social anxiety. Marked reductions were noted in her absenteeism-related behaviors and she no longer met criteria for an anxiety disorder diagnosis after 8 weeks.

Kearney and Silverman (1999) found that functional treatment substantially decreased the percentage of time out of school as well as daily ratings of anxiety and depression among youth with acute school refusal behavior. Improvements were also seen across child self-report measures and parent and/or teacher ratings of internalizing and externalizing behaviors. Kearney and colleagues (2001) found a multi-component functional treatment approach for mixed functional profile youth to be effective for improving attendance after 5 sessions with gains maintained at 1-year follow-up. Tolin and colleagues (2009) found functional treatment to improve attendance for youth with problematic absenteeism. Youth were found to be attending alternative educational programs at 3-year follow up, with noted improvements from pretreatment.

Youth-based, parent-based, and family-based techniques have been established as promising approaches for youth with problematic absenteeism, while a functional approach offers a more prescriptive treatment plan to families of youth with identifiable reinforcers of problematic absenteeism. Another approach, pharmacotherapy, has been suggested as an intervention for youth with problematic absenteeism. A discussion of its effectiveness is next.

## Pharmacotherapy

Early forms of treatment for youth with problematic absenteeism include medications that target anxiety and depressive symptoms, such as antidepressants and anxiolytics (Bernstein, Garfinkel, \& Borchardt, 1990; Kearney, 2006b). Other pharmacological medications considered in the treatment of anxiety-based problematic absenteeism include selective serotonin reuptake inhibitors (SSRIs), benzodiazepines, buspirone, beta-blockers, and antiepileptics (Kearney, 2008b). Studies examining medication as an appropriate form of treatment yield mixed results. Gittelman-Klein and Klein (1971) found imipramine (dose range of $25-200 \mathrm{mg}$ ) to be
significantly better than a placebo control for youth with anxiety-based problematic absenteeism, with $81 \%$ and $47 \%$ of youth returning to school, respectively. Berney and colleagues (1981) reported no significant effects of a double-blind, placebo controlled study of clomipramine (dose range of $40-75 \mathrm{mg}$ ) for youth with problematic absenteeism. Klein and colleagues (1992) found imipramine and a placebo to be equally effective as treatment for youth with problematic absenteeism and SAD. Bernstein and colleagues (2000) found imipramine ( $3 \mathrm{mg} / \mathrm{kg} / \mathrm{day}$ ) combined with cognitive-behavioral therapy for treatment of anxiety-based problematic absenteeism to improve attendance and depressive symptoms in $67 \%$ of youth during an 8 -week trial.

Little conclusive support exists for the use of medication in the treatment of problematic absenteeism (Lauchlan, 2003). Kearney (2006b) stated that youth may not respond to medication as well as adults due to the fluid and amorphous nature of anxious and depressive symptomatology in children and adolescents. Some investigators have suggested that medications may be useful for youth with a milder form of problematic absenteeism with better attendance records and fewer symptoms of social avoidance and separation anxiety (Kearney, 2006b).

A major criticism of the psychopharmacological approach is that key exclusion criteria often include the presence of externalizing behavior problems, which are quite prevalent among youth with problematic absenteeism (Kearney, 2008a). Another criticism in this area is that broader contextual factors that impact school non-attendance such as school- and communitybased factors are commonly ignored (Kearney, 2008a). Many studies also utilize medication in combination with secondary treatment strategies such as psychotherapy or school-based support that may have enhanced a youth's attendance (Kearney \& Silverman, 1996). Interventions, such
as those suggested from a criminal justice perspective, fill these gaps by concentrating primarily on the youth's behavior problems and the broader context that affects school attendance and nonattendance (Kearney, 2008a). These are described next.

## Criminal Justice Approaches

Problematic absenteeism interventions from the criminal justice perspective are broader than those from a psychological perspective and often utilize systemic and legal strategies (Kearney, 2008a). Researchers have generally focused their attention on contextual factors that may influence absenteeism. Common intervention approaches include early education, family, and health services, court referral and community services, and police and other legal strategies (Kearney, 2008a).

Education, family, and health services for youth with problematic absenteeism enhance academic and parenting skills and provide resources for at-risk families (Kearney, 2008a). Common academic enhancements to boost attendance include early language and math skill development, structured small-group learning experiences, and low student-to-teacher ratios in the classroom. Family outreach programs and other early health intervention strategies include home visits, increased awareness of nutrition, and screening for speech and medical disorders (Reynolds et al., 2001; Peterson et al., 2007).

Court referral and community services commonly involve placing social services and truancy court proceedings within the school building (Fantuzzo et al., 2005; McCluskey et al., 2004). Integration within the school is thought to reduce stigmatization, transportation problems, and attrition and relapse of problematic absenteeism (Kearney, 2008a). Early interventions are provided to remove obstacles to school attendance before any legal system referral of youth.

Families are also offered help at financial, social, and occupational levels to improve a youth's attendance.

Police and other legal strategies for the treatment of youth with problematic absenteeism include the use of the juvenile justice system. Programs involving wide-scale police sweeps of a community have also been developed to detain youth with problematic absenteeism and then refer them to the appropriate intervention services (White, Fyfe, Campbell, \& Goldkamp, 2001). Psychological and criminal justice perspectives have greatly influenced the way that a school system views and addresses the issue of problematic absenteeism. Numerous education strategies are discussed next.

## Educational Approaches

Educational approaches often involve counseling or other non-judicial methods to address problematic absenteeism because school systems recognize that many youth have psychological or other exigent circumstances that impede school attendance (Kearney, 2008a). Commonly addressed school-based factors associated with problematic absenteeism include school violence and victimization, school climate, and parent involvement.

Key systemic interventions to address school violence and victimization include counseling services, conflict resolution practices, skills training groups for aggressive and victimized youth, extracurricular activities to reduce tensions, clearly defined rules and consequences, expulsion of violent youth, increased school security, and community outreach with church groups as well as police and anti-gang units (Kearney, 2008a). Systemic programs to enhance school climate involve closely matching course content to individual student cognitive ability and academic needs, flexible course scheduling, smaller learning settings, school-wide
traditions and ceremonies, and increased student activity in extracurricular activities (Kearney, 2001; Kearney, 2008a).

Key systemic parent involvement strategies to boost school attendance include enhanced parent-teacher communication, translators, home visits, childcare and transportation, parent participation in classroom activities, and matching diversity of the school personnel to the surrounding community (Kearney, 2008a). Other relevant school-based strategies for problematic absenteeism include utilizing peers as attendance monitors, maintaining a student's peer group across initial classes, restructuring the role of the homeroom teacher to identify atrisk youth and provide more guidance, and providing school-based rewards, prenatal care, and frequent feedback to parents (Kearney, 2001; Kearney, 2008a). School-based support-therapy groups involving increased monitoring of homework, a token economy, cognitive therapy, increased social awareness, and training in communication, social, and problem solving skills have also been used to reduce problematic absenteeism (Kearney, 2001). Schools have also implemented system-wide programs to boost youth health and thus attendance. Examples include increased hand washing, management of asthma symptoms and lice, and providing mass flu immunizations (Kearney, 2008a).

## CHAPTER 2

## REVIEW OF THE LITERATURE

## Absenteeism Severity

School attendance is a key foundational competency. Problematic school absenteeism has received much attention over the years by professionals in many disciplines that include psychology, education, criminal justice, and medicine, among others. Severity is a specific component of problematic school absenteeism. Professionals have noted much variability in the severity of problematic absenteeism among youth (Hansen et al., 1998; Kearney \& Beasley, 1994; Kearney \& Silverman, 1990, 1993; Last \& Strauss, 1990). Severe problematic absenteeism costs billions of dollars in lost revenues, welfare and unemployment programs, underemployment, and crime prevention and prostitution (Christenson \& Turlow, 2004). Numerous investigators have endorsed the view that youth with severe problematic absenteeism may also be more resistant to treatment (Kearney 1995; Rodriguez, Rodriguez, \& Eisenberg, 1959; Smith, 1970). Severe problematic absenteeism leads to a greater likelihood of psychiatric, occupational, and marital problems in adulthood as well (Kearney \& Hugelshofer, 2000). However, empirical investigations on varying levels of absenteeism and the related risk factors are parse (Hansen et al., 1998). A discussion on these topics follows.

## Level of Severity

School absenteeism can range from an occasional missed day of school to complete refusal to attend (Hansen at al., 1998). Kearney and Silverman (1990) reported a range of absenteeism from $5.7 \%$ to $69.9 \%$ among 7 youth with acute school refusal behavior. Kearney and Silverman (1993) found an average of $33.4 \%$ days of missed school among 42 youth with
anxiety-based school refusal behavior. Chapman and colleagues (2014) reported a range of 3-15 unexcused school absences in 1 academic year among 90 middle school youth.

Various classification systems of absenteeism severity have been proposed by investigators. Some researchers have developed distinctions based on the duration of the presenting problem, while others have utilized the actual amount of school time missed. However, no formal classification system of absenteeism severity currently exists. Kennedy $(1965,1971)$ suggested acute (Type I, rapid onset) and chronic (Type II, gradual onset) groupings of youth with problematic absenteeism based primarily on the onset and course of absences. A subtyping of youth based solely on the duration of the presenting problematic absenteeism includes self-corrective school refusal behavior (i.e., 2-week period or less), acute school refusal behavior (i.e., 2-52 weeks), and chronic school refusal behavior (i.e., 53+ weeks) (Kearney \& Silverman, 1996). Last and Strauss (1990) utilized the actual number of school days missed by youth to define mild absenteeism (youth endorsing 1 missed day of school in 2 weeks), moderate absenteeism (1 missed day of school per week), severe absenteeism (several missed days of school per week), and extreme absenteeism (several missed weeks of school). This study adopted a method similar to Last and Strauss in that actual number of school days missed represented absenteeism severity.

## Risk Factors

Few studies have examined potential risk factors associated with absenteeism severity, as measured by actual amount of school time missed. Bernstein and colleagues (1997) examined the relationship between school attendance and somatic, anxious, and depressive symptoms in 44 youth aged 12-18 years. Absenteeism was defined as partial days missed, or greater than $50 \%$ of the school day missed, as well as full days missed. No significant predictors of absenteeism
severity were found. However, higher levels of somatic complaints were associated with greater absenteeism in youth with comorbid anxiety and depressive disorders.

Hansen and colleagues (1998) examined sociodemographic, clinical, and family variables and absenteeism severity in 76 clinic-referred anxiety-based school refusing youth aged 6-17 years. Absenteeism was defined as time spent out of the classroom, including time at home or otherwise away from the school building, as well as time spent in other areas of the school building during scheduled class periods. Absenteeism for a 5-week time period ranged from 13\% to $100 \%$, with approximately $1 / 3$ of youth missing school at least $90 \%$ of the time. Older age, lower levels of fear, and lower levels of active-recreational emphasis significantly predicted absenteeism severity. Youth with the most severe levels of absenteeism are thus likely to be older, less fearful, and from homes that place relatively low emphasis on out-of-home recreational activities. Age was the most significant predictor of absenteeism severity.

Egger and colleagues (2003) examined the relationship between DSM-IV psychiatric disorders and school refusal behavior in 1,422 youth aged 9-16 years. Truants were defined as youth who failed to reach or who left school without the permission of school authorities, without an excuse, and for reasons not associated with anxiety about separation or the school at least once in the previous 3 months. Anxious school refusal youth included those who failed to reach or who left school because of anxiety or who had to be escorted to school by their parent at least once in the previous 3 months. Mixed school refusers were defined as youth who had been truants and school refusers during the previous 3 months. All types were found to be significantly associated with psychiatric disorders. Pure truancy was linked to ODD, CD, and depression. Pure anxious school refusal was linked to SAD and depression. Mixed school refusal
was linked to a greater frequency of both types of absenteeism, rate of overall psychopathology, and range of psychiatric disorders.

Henry (2007) examined the relationship between sociodemographic, family, and schoolrelated factors and truant behavior among $8^{\text {th }}$ and $10^{\text {th }}$ grade youth. Truant behavior was defined as absenteeism within the past 4 -weeks and was measured via self-report. Parental education and large amounts of unsupervised time after school significantly predicted recent truant behavior. School disengagement variables such as poor grades and low educational aspirations as well as drug use were also found to significantly predict recent truant behavior.

Ingul and colleagues (2012) examined the relationship between a youth's family, internalizing and externalizing symptomatology, school-related factors and absenteeism severity in 865 high school youth aged 16-21 years. Absenteeism was measured in terms of total days and hours absent and divided into 3 groups: no absence (< 1.5 days), normal absence ( $>=1.5$ and $<13.5$ days), and high absence (>= 13.5 days or $15 \%$ ). Externalizing problems, family work and health, and school environment were found to be the main predictors of absenteeism severity. Internalizing problems (i.e., generalized anxiety, social anxiety, panic/somatic, and depression), externalizing problems (i.e., conduct problems and hyperactivity), health factors (i.e., chronic illness, poor personal health, personality problems, alcohol and other drug use), school factors (i.e., feeling safe in school and being treated with respect), and demographic factors (i.e., mother's education level, parental unemployment, living without parents, and less participation in leisure time activities) were identified as risk factors for school absenteeism.

## Purpose of the Study

Extant research studies of absenteeism severity have several limitations. Researchers have identified various risk factors of problematic absenteeism (Bernstein et al., 1997; Egger,

Costello, \& Angold, 2003; Hansen et al., 1998; Henry, 2007). However, previous research on absenteeism severity remains somewhat limited because investigators use different criteria to define problematic absenteeism. Some researchers have utilized characteristic symptoms to define problematic absenteeism, whereas others have utilized duration. This study specifically defined absenteeism severity as a percentage of actual school days missed from the current academic year at the time of assessment. Absenteeism severity was examined dimensionally (0$100 \%$ ) as well as categorically at various levels.

Previous studies of problematic absenteeism have also utilized clinical samples of youth with various internalizing symptoms (Bernstein et al., 1997; Hansen et al., 1998). However, problematic absenteeism is frequently recognized among youth with externalizing symptoms as well. This study examined problematic absenteeism in a community-based sample of youth referred to a truancy court or a truancy diversion program. A community-based sample allowed for a wide variety of internalizing and externalizing symptoms among youth with problematic absenteeism.

This study intended to elaborate on the relationship between school absenteeism severity and various risk factors in an ethnically diverse, community-based, and gender-balanced sample of youth. This study examined whether specific clinical variables in youth are predictors of absenteeism severity. This study also examined the level of absenteeism severity that warrants the most clinical concern. Youth with greater internalizing symptoms (e.g., generalized anxiety, social anxiety, panic, depression, and somatic complaints) may display more severe absenteeism than youth with fewer internalizing symptoms (Bernstein et al., 1997; Egger, Costello, \& Angold, 2003; Ingul et al., 2012). Youth with greater externalizing symptoms (e.g., inattention/hyperactivity, rule-breaking behavior, and aggressive behavior) may display more
severe absenteeism than youth with fewer externalizing symptoms as well (Egger, Costello, \& Angold, 2003; Ingul et al., 2012).

This study examined whether specific family variables are predictors of absenteeism severity in youth. This study also examined the level of absenteeism severity that warrants the most family concern. Youth with a low active-recreational family emphasis, for example, may display more severe levels of absenteeism (Hansen et al., 1998). Another pertinent family characteristic may include conflict (McShane, Walter, \& Rey, 2001). This study is important to the field because findings may help clarify the complex phenomenon of problematic school absenteeism, facilitate the identification of at-risk youth, and improve targeted assessment while extending treatment to a wider array of youth.

## Hypotheses

The first set of hypotheses involved specific clinical and family variables that may predict absenteeism severity evaluated on a dimensional basis. Hypothesis 1 was that greater absenteeism severity would be associated with higher Revised Child Anxiety and Depression Scale (RCADS) (Chorpita, Yim, Moffitt, Umemoto, \& Francis, 2000) general anxiety, separation anxiety, social phobia, panic, obsessions and compulsions, and depression subscale scores. Previous research supports a relationship between absenteeism severity and various internalizing symptoms (Bernstein et al., 1997; Egger, Costello, \& Angold, 2003; Ingul et al., 2012), though this study examined this relationship with additional internalizing symptoms and absenteeism severity that is represented dimensionally and not simply categorically.

Hypothesis 2 was that greater absenteeism severity would be associated with higher Youth Self Report (YSR) (Achenbach \& Rescorla, 2001) inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores. Previous research supports a relationship
between absenteeism severity and various externalizing symptoms (Egger, Costello, \& Angold, 2003; Ingul et al., 2012), though this study examined this relationship with additional externalizing symptoms and absenteeism severity that is represented dimensionally and not simply categorically.

Hypothesis 3 was that greater absenteeism severity would be associated with higher Family Environment Scale (FES) (Moos \& Moos, 2009) conflict and lower FES activerecreational orientation subscale scores. Absenteeism severity has been linked to high conflict and low active-recreational family environments (Hansen et al., 1998; McShane, Walter, \& Rey, 2001), though this study examined this relationship among a diverse sample of community youth as opposed to clinic-referred youth.

The second set of hypotheses involved potential differences in specific clinical and family variables between categorically defined levels of absenteeism. The first categorically defined levels of absenteeism were based on a definition of "high absence" as equal to or greater than $15 \%$ of days missed (Ingul et al., 2012). Hypothesis 4 was that youth with a high level of absenteeism severity (15-100\%) would display higher RCADS general anxiety, separation anxiety, social phobia, panic, obsessions and compulsions, and depression subscale scores than youth with a lower level of absenteeism severity ( $0-14 \%$ ). Hypothesis 5 was that youth with a high level of absenteeism severity (15-100\%) would display higher YSR inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores than youth with a lower level of absenteeism severity $(0-14 \%)$. Hypothesis 6 was that youth with a high level of absenteeism severity (15-100\%) would display higher FES conflict and lower FES active-recreational orientation subscale scores than youth with a lower level of absenteeism severity (0-14\%).

The second categorically defined levels of absenteeism were based on equivalent sample size distribution ( $0-19 \%, 20-53 \%$, and $54-100 \%$ ). Hypothesis 7 was that youth with the highest level of absenteeism severity (54-100\%) would display higher RCADS general anxiety, separation anxiety, social phobia, panic, obsessions and compulsions, and depression subscale scores than youth with a moderate level of absenteeism severity (20-53\%) who, in turn, would display higher RCADS subscale scores than youth with the lowest level of absenteeism severity ( $0-19 \%$ ). Hypothesis 8 was that youth with the highest absenteeism severity ( $54-100 \%$ ) would display higher YSR inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores than youth with a moderate level of absenteeism severity (20-53\%) who, in turn, would display higher YSR subscale scores than youth with the lowest level of absenteeism severity ( $0-19 \%$ ). Hypothesis 9 was that youth with the highest level of absenteeism severity (54$100 \%$ ) would display higher FES conflict and lower FES active-recreational orientation subscale scores than youth with a moderate level of absenteeism severity (20-53\%) who, in turn, would display higher FES conflict and lower FES active-recreational orientation subscale scores than youth with the lowest level of absenteeism severity (0-19\%). Exploratory analyses were also conducted for other levels of absenteeism based on percentage of days missed (e.g., $10 \%$ versus $20 \%$ versus $30 \%$ ), as well as specific sociodemographic variables.

## CHAPTER 3

## METHODOLOGY

## Participants

Participants included 118 middle and high school students aged 11-19 years ( $M=$ 15.10; $S D=1.69$ ) from the Clark County School District and their parent(s). Youth and their families were assessed from the Clark County Family Courts and Services Center ( $\mathrm{n}=85$ ) and the Truancy Diversion Program $(\mathrm{n}=33)$. Youth were $48.3 \%$ male $(\mathrm{n}=57), 50.8 \%$ female $(\mathrm{n}=60)$, and $0.9 \%$ unknown $(\mathrm{n}=1)$. Youth were Hispanic (73.5\%), AfricanAmerican (10.2\%), European American (2.6\%), multiracial (4.3\%), Asian-American (3.4\%), or other $(6.0 \%)$. Mean percentage of school days missed was $42.2 \%(S D=29.28)$. Parents in these families were married (35.1\%), never married (19.3\%), divorced (21.9\%), separated $(21.1 \%)$, or other ( $2.6 \%$ ). Families included $0(6.0 \%), 1$ ( $16.1 \%$ ), 2 ( $34.2 \%$ ), 3 ( $21.4 \%$ ), or 4 or more (22.3\%) additional children. Some mothers of these youth graduated from high school (43.5\%), as did some fathers (33.3\%). Families were English- (55.6\%) or Spanishspeaking (44.4\%).

## Measures

Demographic Form. Youth or parents completed a demographic form to assess a youth's gender, age, grade, and ethnicity. The form also included marital status of a youth's parents, parent's education level, and the gender and age of a youth's siblings (Appendix A).

Revised Child Anxiety and Depression Scale (RCADS; Chorpita, Yim, Moffitt, Umemoto, \& Francis, 2000) (Appendix B). The RCADS is a 47-item self-report measure of psychopathology in children and adolescents. The measure contains subscales for numerous anxiety disorder symptoms including SAD, social phobia, generalized anxiety disorder,
obsessive-compulsive disorder, and panic disorder, as well as a scale for major depressive disorder. Items are answered on a 4-point Likert scale ranging from 0-3 $(0=$ "never," $1=$ "sometimes," 2 = "often," and 3 = "always"). This study utilized all 6 of the RCADS subscales to assess internalizing symptoms in youth.

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 relate more closely to various DSM-IV anxiety disorders. Thirty-eight of the RCADS items were adopted from the SCAS, while 7 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 6 subscales: SAD, social phobia, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, and major depressive disorder. Test-retest reliability was found to be high over a 1-week period across all subscales: SAD $(\alpha=.78)$; social phobia $(\alpha=0.81)$; generalized anxiety disorder $(\alpha=0.80)$; obsessive-compulsive disorder $(\alpha=0.71)$; panic disorder $(\alpha=0.85)$; 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 Children's Manifest Anxiety Scale (RCMAS; Reynolds \& Richman, 1978). The Revised Children’s Manifest Anxiety Scale (RCMAS) contains 3 subscales: physiological anxiety (RCMAS-P), worry and oversensitivity (RCMAS-W), and concentration anxiety (RCMAS-C) (Reynolds \& Paget, 1983). The major depressive disorder subscale on the RCADS correlated most significantly with the CDI, more than any other subscale of the RCADS ( $\mathrm{r}=.70$ ). The RCADS social phobia 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 social phobia subscale correlated more significantly with the RCMAS-W subscale than the RCMAS-C subscale. However, the RCADS social phobia subscale did not correlate as significantly with the RCMAS-P subscale. The RCADS generalized anxiety disorder subscale 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). Cronbach's alpha for the RCADS for this study was $.76,95 \%$ CI $[.68, .82]$.

Youth Self Report (YSR; Achenbach \& Rescorla, 2001) (Appendix C). The YSR is one component of the Achenbach System of Empirically Based Assessments (ASEBA). The instrument contains 112 self-report items that measure emotional and behavior problems in children and adolescents. Items are scored using a 3-point Likert scale ( $0=$ "absent," $1=$ "occurs sometimes," $2=$ "occurs often"). The measure yields 3 separate scales: competence, empiricallybased syndrome, and DSM-oriented. Confirmatory factor analysis revealed 3 competence subscales (activities, social, and total competence), 8 empirically-based syndrome subscales (anxious/depressed, withdrawn depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behavior, and aggressive behavior), and 6 DSMoriented subscales (affective problems, anxiety problems, somatic problems, ADHD, oppositional defiant problems, and conduct problems). Test-retest reliability was found to be moderately high over an 8 -week period across all subscales: competence $(\alpha=.55-.75)$, empirically derived syndrome ( $\alpha=.71-.95$ ), and DSM-oriented $(\alpha=.67-.83)$ (Achenbach \& Rescorla, 2001). This study utilized the attention problems, rule-breaking behavior, and aggressive behavior empirically-based syndrome subscales to assess externalizing symptoms in youth.

Validity was examined via correlational studies with other measures of emotional and behavior problems in children and adolescents: the Child Behavior Checklist (CBCL; Achenbach, \& Rescorla, 2001) and the Connors Parent and Teacher Ratings Scales (CPRS-R and CTRS-R; Conners, 1997a, b). The anxious/depressed empirically-based syndrome subscale and the anxiety problems DSM-oriented subscale on the YSR correlated with the CBCL DSM-IV criteria for anxiety at $\mathrm{r}=.51$ and $\mathrm{r}=.43$, respectively. The withdrawn/depressed empiricallybased syndrome subscale and the affective problems DSM-oriented subscale on the YSR correlated with the CBCL DSM-IV criteria for depression at $\mathrm{r}=.49$ and $\mathrm{r}=.63$, respectively. The attention problems empirically-based syndrome subscale on the YSR correlated with the CBCL DSM-IV criteria for ADHD, the CPRS-R, and the CTRS-R at $\mathrm{r}=.80, \mathrm{r}=.77$, and $\mathrm{r}=.88$ respectively. The ADHD DSM-oriented subscale on the YSR correlated with the CBCL DSMIV criteria for ADHD, the CPRS-R, and the CTRS-R at $\mathrm{r}=.80, \mathrm{r}=.71$, and $\mathrm{r}=.89$, respectively. The rule-breaking behavior empirically-based syndrome subscale and the conduct problems DSM-oriented subscale on the YSR correlated with the CBCL DSM-IV criteria for conduct at r $=.63$ and $\mathrm{r}=.61$, respectively. The aggressive behavior empirically-based syndrome subscale and the oppositional defiant problems DSM-oriented subscale on the YSR correlated with the CBCL DSM-IV criteria for ODD at $\mathrm{r}=.64$ and $\mathrm{r}=.60$, respectively. The results support the reliability, structural validity, and convergent and discriminant validity of the YSR (Achenbach \& Rescorla, 2001). Cronbach's alpha for the YSR for this study was .76, $95 \%$ CI [.60, .88].

Family Environment Scale (FES; Moos \& Moos, 2009) (Appendix D). The FES consists of 90 true/false questions that measure interpersonal relationships, personal growth, and organizational structure within families. The FES is composed of 10 subscales: cohesion, expressiveness, conflict, independence, achievement orientation, intellectual-cultural orientation,
active-recreational orientation, moral-religious emphasis, organization, and control (Table 3). The FES has 3 different forms: the real form (Form R) measures the current family environment, the ideal form (Form I) measures the ideal family environment, and the expectations form (Form E) measures expectations about the family environment. Internal consistency is adequate for each subscale with Cronbach's alpha ranging from 0.61-0.78. Additionally, 2- and 4- month test-retest reliabilities for each subscale ranged from 0.70-0.91 (Moos, 1990). This study utilized the conflict and active-recreational orientation subscales of the FES Form R to assess a youth's family environment. Kuder-Richardson 20 for the FES for this study was $.57,95 \%$ CI [.42, .70].

Table 3
Family Environment Scale Subscale Definitions

| Dimension | Subscale | Definition |
| :---: | :---: | :---: |
| Relationship | Cohesion | The degree of help, support, and commitment family members provide for one another |
|  | Expressiveness | The extent to which family members are Encouraged to express their feelings directly |
|  | Conflict | The amount of anger and conflict expressed openly among family members |
| Personal Growth | Independence | The extent to which family members are self-sufficient, assertive, and make decisions for themselves |
|  | Achievement Orientation | How much activities (such as school and work) are cast into an achievement-oriented or competitive framework |
|  | Intellectual-Cultural Orientation | The level of family interest in intellectual, cultural, and political issues |
|  | Active-Recreational Orientation | The amount of family participation in recreational and social activities |
| System <br> Maintenance | Moral-religious Emphasis | How much emphasis is placed on ethical and religious issues and values |
|  | Organization | The degree of importance of clear structure and organization in planning family responsibilities and activities |
|  | Control | How much set rules and procedures are used to structure family lives |

[^0]school days possible for the academic year (at the time of consent) and multiplied by 100 . Percentage of days absent was examined dimensionally ( $0-100 \%$ ) and as categorically defined levels of absenteeism. The first categorically defined levels of absenteeism were based on a definition of "high absence" as equal to or greater than $15 \%$ of days missed (Ingul et al., 2012). The second categorically defined levels of absenteeism were based on equivalent sample size distributions ( $0-19 \%, 20-53 \%$, and $54-100 \%$ ).

## Procedure

This study was conducted at two locations. One location was the Clark County Truancy Court, which was held at the Clark County Family Court and Services Center in Las Vegas, Nevada. This court addressed students in middle and high school from the Clark County School District who had 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 varied for each student. Typically, after 3 unexcused absences from a single class or entire day of school, a letter was sent home to the youth's parents. According to school district policy, a letter was to be sent home to the youth's parents for each additional absence or truancy. After 3 truancy notices, a youth was issued a truancy citation and ordered to report to truancy court. This procedure was a general guideline, but may have varied among schools.

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

When sentenced to community service, the judge gave the parent and youth the option to substitute two of the youth'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 youth to fulfill all community service hours. Youth were required to complete the remainder of their sentenced number of hours elsewhere.

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 youth. The parent was asked to sign an informed consent form and the youth was asked to sign an assent form to participate in the program. Parents and youth voluntarily completed a de-identified packet of measures regarding the youth's internalizing and externalizing behaviors and school refusal behavior. The process required 60-90 minutes. Parents whose primary language is Spanish were asked to complete Spanish-translated versions of the same questionnaires. Spanish interpretation was available upon request. If there were questions or concerns, the primary researcher and/or trained undergraduate research assistants were present to address them. The parent and youth were free to decide that they did not wish to participate at any time, and were then be required to complete the full number of community service hours assigned by the judge. After completion of all measures, the parent and youth were thanked and given the required signature on their community service form to indicate participation. Data were coded
anonymously and stored in a secure location. The project is IRB-approved (Protocol \# 05111795).

Data collection also occurred at a community program to address truancy. The Truancy Diversion Program was administered by the Court Appointed Special Advocates (CASA) program. CASA designed the Truancy Diversion Program to address middle and high school youth who were at risk for truancy citations based upon prior absences. The program was conducted in 10 middle schools and 2 high schools where problematic absenteeism tends to occur. The staff identified 15-20 youth at their school that had poor attendance records. The program required that the youth and their parent 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 tracks each youth on a weekly basis. The schools also held two tutoring sessions and one group counseling session per week, which the youth were assigned to attend. The parent and youth were given the opportunity to complete the measures at the start of the program. They were informed that their participation is voluntary and that there would be minimal risk or benefit for participation. If the parent and youth wished to participate they were given an explanation of the informed consent and assent. Parents and youth voluntarily completed a de-identified packet of measures regarding the youth's internalizing and externalizing behaviors and school refusal behavior. The assessment process required 60-90 minutes. Parents whose primary language was Spanish were permitted to complete Spanish-translated versions of the same questionnaires. Spanish interpretation was available upon request. If there were questions or concerns, a graduate student and/or trained
undergraduate research assistants was present to address them. The parent and youth were free to decide that they do not wish to participate at any time.

If a parent could not attend weekly meetings, then a parent permission slip was sent home. This allowed the youth to complete the packet. After completion of all measures, the parent and youth were thanked for their participation. All data was coded anonymously and stored in a secure location. This project is ongoing and is IRB approved (Protocol \# 0801-2585).

## Data Analyses

Data analyses involved specific clinical and family variables and absenteeism severity. Clinical variables included (1) RCADS separation anxiety, social phobia, generalized anxiety, obsessions and compulsions, panic, and depression subscale scores and (2) YSR inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores. Family variables included FES conflict and active-recreational subscale scores.

The first set of hypotheses involved specific clinical and family variables that may predict absenteeism severity evaluated on a dimensional basis. Hypothesis 1 was examined via stepwise linear regression to determine whether absenteeism severity is predicted by RCADS generalized anxiety, separation anxiety, panic, social phobia, obsessions and compulsions, and depression subscale scores. Hypothesis 2 was examined via stepwise linear regression to determine whether absenteeism severity is predicted by YSR inattention/hyperactivity, rulebreaking behavior, and aggressive behavior subscale scores. Hypothesis 3 was examined via stepwise linear regression to determine whether absenteeism severity is predicted by FES conflict and active-recreational orientation subscale scores. No serious violations were noted in preliminary assumption testing.

The second set of hypotheses involved potential differences in specific clinical and family variables between categorically defined levels of absenteeism. The first categorically defined levels of absenteeism were based on a definition of "high absence" as equal to or greater than $15 \%$ of days missed (Ingul et al., 2012). Hypothesis 4 was examined via multivariate analysis of variance (MANOVA) to determine whether mean differences in RCADS general anxiety, separation anxiety, panic, social phobia, obsessions and compulsions, and depression subscale scores exist between levels of absenteeism ( $0-14 \%$ vs. $15-100 \%$ ). Violations were noted in preliminary assumption testing with respect to multivariate outliers and the homogeneity of variance-covariance matrices and as a result, one case was excluded from analysis. Hypothesis 5 was examined via MANOVA to determine whether mean differences in YSR inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores exist between levels of absenteeism ( $0-14 \%$ vs. $15-100 \%$ ). Violations were noted in preliminary assumption testing with respect to univariate outliers and as a result, one case was excluded from analysis. Hypothesis 6 was examined via an independent sample t-test to determine whether mean differences in FES conflict and active-recreational orientation subscale scores exist between levels of absenteeism (0-14\% vs. $15-100 \%$ ).

The second categorically defined levels of absenteeism were based on equivalent sample size distribution ( $0-19 \%, 20-53 \%$, and $54-100 \%$ ). Hypothesis 7 was examined via MANOVA to determine whether mean differences in RCADS general anxiety, separation anxiety, panic, social phobia, obsessions and compulsions, and depression subscale scores exist among levels of absenteeism ( $0-19 \%$ vs. $20-53 \%$ vs. $54-100 \%$ ). Violations were noted in preliminary assumption testing with respect to multivariate outliers and the homogeneity of variance-covariance matrices and as a result, one case was excluded from analysis. Hypothesis 8 was examined via a

MANOVA to determine whether mean differences in YSR inattention/hyperactivity, rulebreaking behavior, and aggressive behavior subscale scores exist among levels of absenteeism ( $0-19 \%$ vs. $20-53 \%$ vs. $54-100 \%$ ). Violations were noted in preliminary assumption testing with respect to sample size, univariate outliers, and multicollinearity. Violations were explored and as a result, the highest level of absenteeism severity (54-100\%) was excluded from analysis, as well as one additional case. Hypothesis 9 was examined via MANOVA to determine whether mean differences in FES conflict and active-recreational orientation subscale scores exist among levels of absenteeism ( $0-19 \%$ vs. $20-53 \%$ vs. $54-100 \%$ ). No serious violations were noted in preliminary assumption testing.

Exploratory multivariate analyses of variance were also conducted to examine potential mean differences in specific clinical and family variables for other levels of absenteeism based on percentage of days missed (e.g., $10 \%$ versus $20 \%$ versus $30 \%$ ). Post-hoc exploratory interaction analyses were conducted to determine the relationship between specific sociodemographic variables and absenteeism severity. Sociodemographic variables included youth age, gender, ethnicity, parent marital status, and parent education level.

## CHAPTER 4

## RESULTS

## Hypothesis 1

Hypothesis 1 was that greater absenteeism severity would be associated with higher RCADS general anxiety, separation anxiety, panic, social phobia, obsessions and compulsions, and depression subscale scores. All variables were entered into a stepwise regression analysis but only RCADS obsessions and compulsions subscale scores were significantly related to absenteeism severity $(F(1,85)=13.50, p<.01)$. The multiple correlation coefficient was .37 , so approximately $13.7 \%$ of the variance of absenteeism severity was accounted for by RCADS obsessions and compulsions subscale scores.

## Hypothesis 2

Hypothesis 2 was that greater absenteeism severity would be associated with higher YSR inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores. All variables were entered into a stepwise regression analysis but none were significantly related to absenteeism severity.

## Hypothesis 3

Hypothesis 3 was that greater absenteeism severity would be associated with higher FES conflict and lower FES active-recreational orientation subscale scores. Both variables were entered into a stepwise regression analysis but neither were significantly related to absenteeism severity.

## Hypothesis 4

Hypothesis 4 was that youth with a high level of absenteeism severity (15-100\%) would display higher RCADS general anxiety, separation anxiety, panic, social phobia, obsessions and
compulsions, and depression subscale scores than youth with a lower level of absenteeism severity $(0-14 \%)$. A statistically significant difference was found between levels of absenteeism severity on the combined dependent variables $(F(6,79)=2.83, p=.02$; Wilk's lambda $=.82$; partial $\eta^{2}=.18$ ). Significant differences were also found between levels of absenteeism severity on separate dependent variables. Post-hoc analysis revealed that youth with a high level of absenteeism severity (15-100\%) reported significantly higher levels of RCADS general anxiety, separation anxiety, panic, obsessions and compulsions, and depression subscale scores than youth with a lower level of absenteeism severity (0-14\%) (Table 4).

Table 4

RCADS mean subscale scores for Hypothesis 4

|  | Lower Absence <br> $(0-14 \%)$ | Higher Absence <br> $(15-100 \%)$ |
| :---: | :---: | :---: |
| Separation Anxiety | 45.17 |  |
| Mean | 7.48 | $52.56^{*}$ |
| Standard Deviation | 39.67 | 12.15 |
| General Anxiety | 8.91 | $46.11^{*}$ |
| Mean |  | 11.51 |
| Standard Deviation | 44.37 | $54.56^{*}$ |
| Panic | 6.67 | 12.29 |
| Mean | 39.00 | 44.03 |
| Standard Deviation | 11.52 | 11.24 |
| Social Phobia |  |  |
| Mean | 41.50 | $50.56^{*}$ |
| Standard Deviation | 9.12 | 10.17 |
| Obsessions/Compulsions |  | $52.79^{*}$ |
| Mean | 42.96 | 13.56 |
| Standard Deviation | 10.52 |  |
| Depression |  |  |
| Mean |  |  |
| Standard Deviation |  |  |

[^1]
## Hypothesis 5

Hypothesis 5 was that youth with a high level of absenteeism severity (15-100\%) would display higher YSR inattention/hyperactivity, rule-breaking behavior, and aggressive behavior subscale scores than youth with a lower level of absenteeism severity (0-14\%). No statistically significant difference was found regarding the combined dependent variables.

## Hypothesis 6

Hypothesis 6 was that youth with a high level of absenteeism severity (15-100\%) would display higher FES conflict and lower FES active-recreational orientation subscale scores than youth with a lower level of absenteeism severity ( $0-14 \%$ ). No statistically significant differences were found regarding these FES subscale scores.

## Hypothesis 7

Hypothesis 7 was that youth with the highest level of absenteeism severity (54-100\%) would display higher RCADS general anxiety, separation anxiety, panic, social phobia, obsessions and compulsions, and depression subscale scores than youth with a moderate level of absenteeism severity (20-53\%) who, in turn, would display higher RCADS subscale scores than youth with the lowest level of absenteeism severity (0-19\%). A statistically significant difference was found between levels of absenteeism severity on the combined dependent variables ( $F$ (12, 156) $=2.24, p=.01 ;$ Wilk's lambda $=.73 ;$ partial $\left.\eta^{2}=.15\right)$.

Significant differences were also found between levels of absenteeism severity on separate dependent variables. Post-hoc analysis revealed that youth with the highest level of absenteeism severity (54-100\%) reported significantly higher levels of RCADS subscale scores (general anxiety, separation anxiety, panic, obsessions and compulsions, and depression) than youth with the lowest level of absenteeism severity ( $0-19 \%$ ). In addition, youth with a moderate
level of absenteeism severity (20-53\%) reported significantly higher levels of RCADS subscale scores (general anxiety, separation anxiety, panic, obsessions/compulsions, and depression) than youth with the lowest level of absenteeism severity (0-19\%). No statistically significant difference was found in RCADS subscale scores between youth with the highest level of absenteeism severity (54-100\%) and youth with a moderate level of absenteeism severity (2053\%) (Table 5).

Table 5

RCADS mean subscale scores for Hypothesis 7

|  | Lower Absence <br> $(0-19 \%)$ | Moderate Absence <br> $(20-53 \%)$ | Higher Absence <br> $(54-100 \%)$ |
| :--- | :---: | :---: | :---: |
| Separation Anxiety | 45.65 | $54.50^{*}$ | $52.27^{*}$ |
| Mean | 7.59 | 15.34 | 9.58 |
| Standard Deviation |  |  |  |
| General Anxiety | 39.42 | $46.80^{*}$ | $47.30^{*}$ |
| Mean | 8.25 | 12.85 | 10.93 |
| Standard Deviation | 43.81 | $59.12^{*}$ |  |
| Panic | 6.18 | 20.01 | $53.73^{*}$ |
| Mean |  |  | 15.39 |
| Standard Deviation | 39.19 | 44.72 |  |
| Social Phobia | 10.97 | 12.21 | 44.43 |
| Mean |  |  | 10.89 |
| Standard Deviation | 39.19 | $44.72^{*}$ | $44.43^{*}$ |
| Obsessions/Compulsions | 8.88 | 11.69 | 9.16 |
| Mean |  |  |  |
| Standard Deviation | 44.10 | $54.32^{*}$ | $52.63^{*}$ |
| Depression | 11.56 | 16.25 | 10.72 |
| Mean |  |  |  |
| Standard Deviation |  |  |  |

[^2]
## Hypothesis 8

Hypothesis 8 was that youth with the highest level of absenteeism severity (54-100\%) would display higher YSR inattention/hyperactivity, rule-breaking behavior, and aggressive
behavior subscale scores than youth with a moderate level of absenteeism severity (20-53\%) who, in turn, would display higher YSR subscale scores than youth with the lowest level of absenteeism severity ( $0-19 \%$ ). No statistically significant difference was found regarding the combined dependent variables.

## Hypothesis 9

Hypothesis 9 was that youth with the highest level of absenteeism severity (54-100\%) would display higher FES conflict and lower FES active-recreational orientation subscale scores than youth with a moderate level of absenteeism severity (20-53\%) who, in turn, would display higher FES conflict and lower FES active-recreational orientation subscale scores than youth with the lowest absenteeism severity ( $0-19 \%$ ). No statistically significant difference was found regarding the combined dependent variables.

## Post hoc analysis

Other levels of absenteeism based on set percentages of days missed (i.e., 0-20\%, 21$40 \%, 41-60 \%, 61-80 \%$, and $81-100 \%$ ) were also examined via MANOVA. A statistically significant difference was found between absenteeism severity levels on the combined dependent variables $\left(F(12,156)=2.49, p<.01 ;\right.$ Wilk's lambda $=.48 ;$ partial $\left.\eta^{2}=.17\right)$.

Significant differences were also found between levels of absenteeism severity on separate dependent variables. Post-hoc analysis revealed that youth with a level of absenteeism severity at 20-39\% reported the highest levels of RCADS separation anxiety, panic, and depression subscale scores, which were statistically different than youth with the lowest level of absenteeism severity ( $0-19 \%$ ). Youth with a level of absenteeism severity at $40-59 \%$ also reported higher levels of RCADS general anxiety and obsessions/compulsions subscale scores than youth with the lowest level of absenteeism severity (0-19\%).

In addition, youth with the highest level of absenteeism severity (80-100\%) reported higher levels of RCADS obsessions/compulsions subscale scores than youth with the lowest level of absenteeism severity ( $0-19 \%$ ). However, on all of the other RCADS subscale sores, youth with the highest level of absenteeism severity (80-100\%) did not significantly differ when compared to youth with lower levels of absenteeism severity (Table 6).

Table 6
RCADS mean subscale scores for post-hoc analysis

|  | $0-19 \%$ | $20-39 \%$ | $40-59 \%$ | $60-79 \%$ | $80-100 \%$ |
| :--- | ---: | :---: | :---: | :---: | :---: |
| Separation Anxiety |  |  |  |  |  |
| Mean | 45.03 | $54.18^{*}$ | 53.67 | 50.46 | 51.20 |
| Standard Deviation | 6.90 | 16.00 | 10.29 | 11.57 | 6.05 |
| General Anxiety |  |  |  |  |  |
| Mean | 38.63 | 43.82 | $50.58^{*}$ | 45.69 | 43.00 |
| Standard Deviation | 7.11 | 9.55 | 12.44 | 10.63 | 8.10 |
| Panic |  |  |  |  |  |
| Mean | 43.77 | $60.88^{*}$ | 48.83 | 52.00 | 50.30 |
| Standard Deviation | 6.28 | 18.00 | 9.46 | 16.19 | 7.80 |
| Social Phobia |  |  |  |  |  |
| Mean | 37.97 | 45.41 | 45.08 | 40.54 | 43.50 |
| Standard Deviation | 8.73 | 10.99 | 12.48 | 7.91 | 9.63 |
| Obsessions/Compulsions |  |  |  |  |  |
| Mean | 41.73 | 48.35 | $51.25^{*}$ | 48.23 | $55.20^{*}$ |
| Standard Deviation | 7.53 | 12.23 | 9.02 | 7.07 | 9.69 |
| Depression |  |  |  |  |  |
| Mean | 43.77 | $54.65^{*}$ | 50.50 | 49.77 | 52.90 |
| Standard Deviation | 11.61 | 16.53 | 10.36 | 11.54 | 8.10 |

* $p<.05$

Other data were used to further examine the relationship between absenteeism severity and sociodemographic variables. A stepwise linear regression revealed that youth age, gender, ethnicity, marital status of a youth's parents, and parental education level were not significantly
related to absenteeism severity in youth. In addition, no interaction between age, gender, or ethnicity was found. (Table 7).

Table 7
Simple main effects for post-hoc analysis

|  | $\beta$ | $t$ | $p$ |
| :--- | :---: | :---: | :---: |
| Age x Gender | .08 | .85 | .396 |
| Gender x Ethnicity | .06 | .63 | .530 |
| Ethnicity x Age | -.09 | -1.0 | .315 |

* $p<.05$


## CHAPTER 5

## DISCUSSION

The present study is one of the first to examine number of days absent from the current academic school year with respect to internalizing and externalizing symptomatology and family environment. Obsessions and compulsions subscale scores were the only significant predictors of absenteeism severity measured dimensionally. Youth with an absence rate of $15-100 \%$, however, displayed significantly higher levels of general anxiety, separation anxiety, panic, obsessions/compulsions, and depression subscale scores than youth with a lower absence rate (0$14 \%$ ), suggesting that $15 \%$ of days missed may be an appropriate clinical cutoff. No significant differences were found in YSR externalizing subscale scores or FES conflict and activerecreational subscale scores with respect to absenteeism severity.

## Relationship to Previous Research

The present study can be understood in the context of previous studies that even a moderate amount of absenteeism can be problematic for a youth and family members (Egger et al., 2003; Hansen et al., 1998; Henry, 2007; Ingul et al., 2012). Henry (2007) found minimum absenteeism severity (at least one class period) to be associated with negative outcomes such as poor grades, low educational aspirations, and drug use. Egger and colleagues (2003) also noted a relationship between absence from school for at least half a day and numerous psychiatric disorders. Hansen and colleagues (1998) also provided evidence that absenteeism severity was associated with older age, lower levels of fear, and lower active-recreational emphasis among youth whose absences ranged from 13-100\%. The present study and Ingul et al. (2012) found that the relationship between absenteeism severity and internalizing symptomatology was the strongest in youth who missed at least $15 \%$ of school days.

A notable difference between the present study and previous studies is the statistical method used to evaluate absenteeism severity in youth. A number of previous studies evaluated absenteeism severity on a dimensional basis (Bernstein et al., 1997; Hansen et al., 1998; Henry, 2007). However, the present study did not find an association between most clinical symptoms and absenteeism severity evaluated dimensionally. The present study did, however, provide evidence for a relationship between various internalizing symptoms and absenteeism severity evaluated categorically.

This difference in significance may be accounted for by the shape of the distribution of the samples. The present study may represent an inverse U-shaped distribution such that youth with absenteeism $<15 \%$ reported the lowest levels of internalizing symptomatology, youth with absenteeism of $15-60 \%$ reported the highest levels of internalizing symptomatology, and youth with absenteeism greater than $60 \%$ reported levels of internalizing symptomatology between the other groups. This distribution suggests that youth with $15-60 \%$ absenteeism may be primarily responsible for the significant relationship between clinical symptoms and absenteeism severity that has been found in previous studies utilizing dimensional analysis. One possible explanation for this finding is that youth with the highest level of absenteeism severity are in school less and thus experience fewer internalizing symptoms associated with school attendance than youth with lower levels of absenteeism severity. Researchers may thus find it more useful to evaluate absenteeism severity categorically rather than dimensionally.

The results of the present study can also be understood in the context of previous studies that provide evidence for a relationship between absenteeism severity and internalizing symptoms (Bernstein et al., 1997; Egger, Costello, \& Angold, 2003; Ingul et al., 2012). Bernstein and colleagues (1997) found that higher levels of somatic complaints were associated with
greater absenteeism in youth with comorbid anxiety and depressive disorders. Egger and colleagues (2003) found that separation anxiety and depression were associated with problematic absenteeism in youth. Ingul and colleagues (2012) found a relationship between absenteeism severity and generalized anxiety, social anxiety, panic, and depression. The present study also found a relationship between absenteeism severity and generalized anxiety, separation anxiety, panic, and depression. In addition, the present study found a relationship with obsessions and compulsions.

Some notable differences were found between the present study and previous studies with respect to internalizing symptomatology, however. For example, Ingul and colleagues (2012) found social anxiety to be associated with absenteeism severity; the present study did not.

Instead, the present study found separation anxiety to be associated with absenteeism severity, which is similar to findings by Egger et al. (2003).

The difference in associated internalizing symptomatology may be accounted for in part by the average age of the samples. The mean age of participants in the Ingul et al. (2012) study was 17.18 years. The mean age of the participants in the Egger et al. (2003) study was 13.33 years. The mean age of participants in the present study was 15.10 years. These age differences may have accounted for the relationships found between social anxiety, separation anxiety, and absenteeism severity. Social anxiety is typically endorsed by older youth and separation anxiety is generally found in younger youth.

The difference in internalizing symptomatology may also be accounted for by the timing of assessment. Social anxiety refers to adverse physiological arousal or distress in social situations, such as school, that involve possible negative evaluation from others (Kearney, Gauger, Schafer, \& Day, 2011). Youth with problematic absenteeism may worry what their peers
think of them and what questions they might have about the time that they have been disengaged from school. However, the present study assessed youth while they were still attending school on a variable basis. These youth may have had more opportunity for feedback and may not have experienced as much distress related to how their peers perceive them.

## Clinical Implications

Research on absenteeism severity has remained somewhat limited due to varying definitions of problematic school absenteeism. However, the present study corroborates Ingul and colleagues (2012) definition of "high absence" by suggesting that youth with $>15 \%$ of school days missed may be of the most clinical concern, particularly for internalizing symptomatology. This finding has important implications for educators and clinicians working with these youth as well as for school district policies.

Professionals could address problematic absenteeism and relevant internalizing symptomatology utilizing a Response to Intervention approach (Kearney \& Graczyk, 2014). This approach is a three-tiered service delivery model with universal (all youth), targeted (at-risk youth), and intensive interventions (severe youth) to addresses academic and school-related problems (Barnes \& Harlacher, 2008). This approach is also familiar to school personnel and can facilitate improved communication between school and community mental health professionals.

Tier 1. Tier 1 strategies, or universal assessment and intervention, would be directed toward all students regardless of their attendance. These universal strategies are intended to focus on the prevention of problematic absenteeism at a broad level. Universal assessment of problematic absenteeism should include accurate and daily record keeping and monitoring of actual absences, both excused and unexcused (Kearney \& Graczyk, 2014). For example, school administrators in charge of attendance could construct an early warning system for youth
approaching $15 \%$ of days missed. The actual number of school days missed, as well as the pattern of a youth's absences, are both primary measures of problematic absenteeism. Other universal assessment strategies may include disciplinary actions, suspensions, and expulsions (Sailor, 2009).

Professionals could also routinely assess for school climate at Tier 1. School climate is the quality of school environment characterized by the patterns of a youth's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching, learning and leadership practices, and organizational structure (Cohen, McCabe, Michelli, \& Pickeral, 2009). School climate may serve as a tool to determine what strengths and weaknesses lie within a school system and may be measured using the School Climate Survey Revised Edition (SCS) (Emmons, Haynes, \& Comer, 2002). For example, school administrators may specifically monitor youth reports of negative teacher and peer relationships and consider them as early warning signs for absenteeism and other related problems. Additionally, youth perceptions of school climate may help guide where universal interventions should be allocated.

Universal interventions could include school-wide strategies to promote school attendance by improving school climate and safety. For example, schools could implement clear behavioral expectations, reward attendance, and establishing bullying prevention programs (Nickerson \& Martens, 2008; Sailor et al., 2006). Other common school-wide strategies include improving health (e.g., nutrition programs), social-emotional functioning (e.g., social skills programs), and parent involvement (e.g., partnerships) (Freudenberg \& Ruglis, 2007; Sheldon, 2007; Weist et al., 2010).

Universal interventions to prevent problematic absenteeism could also focus on improving the education of professionals working in the school system (Kearney \& Garczyk,
2014). For example, school districts may require that teachers and school personnel receive yearly psychoeducation on internalizing symptomatology associated with problematic absenteeism. Findings from the present study suggest that general anxiety, separation anxiety, panic, and depression may serve as early warning signs for problematic absenteeism. Additionally, the present study found that obsessions and compulsions are associated with more severe problematic absenteeism in youth.

Psychoeducation on these internalizing symptoms may be facilitated through collaborative relationships with community mental health professionals that could provide ongoing education workshops for youth internalizing disorders. For example, community mental health professionals could provide a workshop on obsessive compulsive disorder in youth.

Professionals may provide information on the symptoms of obsessive compulsive disorder by introducing the common themes of intrusive thoughts such as contamination or harm/death and the related compulsions such as cleaning and checking, respectively. Professionals could also include information about the risk factors associated with obsessive compulsive disorder in youth such as behavioral inhibition (Coles, Schofield, \& Pietrefresa, 2006). Educated teachers and school staff may facilitate the earlier identification of youth at-risk for problematic absenteeism.

Tier 2. Tier 2 strategies, or targeted assessment and intervention, could be directed towards youth with emerging absenteeism near the $15 \%$ mark. These targeted strategies are intended for at-risk youth that require additional support beyond universal strategies (Sailor, 2009). Targeted assessment of problematic absenteeism could begin by focusing on various internalizing symptoms. Professionals may assess for general anxiety, separation anxiety, panic, and depression using measures such as the Revised Child Anxiety and Depression Scale (RCADS; Chorpita \& Ebesutani, 2014). Other measures that could be utilized to assess
internalizing symptomatology in youth include the Multidimensional Anxiety Scale for Children, Second Edition (MASC 2; March, 2013) and the Children's Depression Inventory (CDI; Kovacs, 2010).

Professionals should specifically assess for obsessions and compulsions, because the present study indicated that these symptoms are associated with more severe problematic absenteeism in youth. Common measures that assess for obsessive and compulsive symptoms in children include the Children's Yale-Brown Obsessive Compulsive Scale (CY-BOCS; Goodman, Price, Rasmussen, \& Mazure, 1989) and the Children's Measure of ObsessiveCompulsive Symptoms (CMOCS; Reynolds \& Livingston, 2010).

Professionals could also conduct semi-structured interviews as a way to measure internalizing symptomatology. The Kiddie-SADS-Present and Lifetime Version (K-SADS-PL; Kaufman et al., 1997) is a commonly used semi-structured interview that may be administered to both a youth and family members. Semi-structured interviews may provide information above and beyond a self-report questionnaire about a youth's problematic absenteeism and the concurrent symptomatology.

Targeted intervention of problematic absenteeism will likely involve increased parental contact (Kearney \& Graczyk, 2014). For example, school districts may require that school personnel contact a youth's parents after each absence to further evaluate the reason for a youth's absence and better determine a youth's risk for problematic absenteeism. Frequent consultations between school-based personnel and parents are recommended regarding a student's attendance status, grades, required past and present academic work, and policies regarding absenteeism (Kearney, 2007c). Findings from the present study suggest that consultation between school-
based personnel and parents should also address any known difficulties with anxiety or related problems at school.

Targeted interventions may also include further parental involvement. For example, parents may be encouraged to implement regular morning and evening routines to help maintain a youth's current school attendance. Parents may also supervise a youth's attendance more closely and refrain from keeping a youth home from school for reasons not related to youth illness. Contingency management practices that involve consequences for a youth's nonattendance could also be implemented by parents to further discourage absenteeism. (Kearney, LaSota, Lemos-Miller, \& Vecchio, 2007).

Tier 2 strategies may also include individual and family-based therapy techniques. For example, youth and their families may benefit from referrals to a pediatrician (e.g., for somatic complaints), family therapist (e.g., for communication and problem-solving deficiencies), psychologist (e.g., for psychosocial problems), psychiatrist (e.g., for severe depression), or social worker (e.g., for economic assistance) (Bernstein et al., 1997; Reid, 2011; Sewell, 2008). A key point for professionals to focus on is psychoeducation on various internalizing symptoms. In particular, youth with problematic absenteeism should be provided with basic definitions and common symptoms of anxiety and depression in children and adolescents. Information on these symptoms may allow youth to better understand the relationship between their absences and ongoing symptomatology (Wright, Basco, \& Thase, 2006).

Another key point for professionals to focus on is the management of internalizing symptomatology. Youth with problematic absenteeism should be taught symptom management techniques that include somatic control exercises such as relaxation training and breathing retraining. Initiation of these exercises by youth themselves, as well as by school staff, may
further reduce a youth's internalizing symptomatology. Youth with problematic absenteeism should also be introduced to other symptom management techniques such as behavioral activation and cognitive restructuring. Behavioral activation is a technique that can be utilized to increase a youth's productivity and improve their attitude about school, while cognitive restructuring is a technique that can be utilized to challenge a youth's maladaptive thoughts and behaviors in relation to school attendance (Kearney, 2006b). A combination of youth-based management techniques provides the most effective treatment plan (Spence, Donovan, \& Breechman-Toussaint, 2000).

One of the most important points for professionals to focus on is graduated exposure. This techniques allows students to slowly reintegrate into the school system with attempts made to ensure that academic progress is maintained and that the child is reunited with peers (Kearney, 2006b). Graduated exposure techniques occur in conjunction with somatic control exercises and assist the youth in attending school while learning to cope with their internalizing symptoms. Professionals should also introduce cognitive restricting techniques with graduated exposure as a way to modify unrealistic thoughts and expectations that impede school attendance.

Targeted interventions for problematic absenteeism may also include additional school support. For examples, teachers and school staff could facilitate psychological interventions that may be completed during school hours. For example, school districts may require that teachers and school personnel be provided with formal training on skills to assist in managing a youth's internalizing symptomatology such as deep breathing and progressive muscle relaxation (Kearney \& Albano, 2007). These exercises can be incorporated at the start of class periods to alleviate a youth's distress and potentially boost positive expectations about the school environment.

Other targeted interventions could include student engagement models such as Check and Connect, as well as teacher and peer mentoring programs (DeSocio et al., 2007; Sinclair et al., 2003; Wheeler et al., 2010). Schools could also promote the development of individualized education or 504 plans when necessary (Logan et al., 2008). These plans could allow for parttime attendance, modifications to class schedule and academic work, and escorts to school and class (Kearney \& Bensaheb, 2006). Additionally, alternative and self-contained educational programs that focus on supervised attendance as well as close mentoring of academic work may be utilized to reduce drop out and improve academic performance (Klima et al., 2009; Lever et al. 2004).

Tier 3. Tier 3 strategies, or intensive assessment and intervention, could be directed towards youth with severe absenteeism. Intensive assessment of youth with severe absenteeism will likely involve individual case study analysis. Case study analysis involves input from multiple agencies and evaluators such as educators, community therapists, and officers of the court (Kearney \& Graczyk, 2014). The main goal in case study analysis is to further understand the unique circumstances surrounding a particular case of severe absenteeism through psychiatric, learning, and medical evaluations.

Youth with severe absenteeism could be administered self-report questionnaires and semi-structured interviews to evaluate psychiatric concerns related to absences. However, youth could also be administered assessments that measure cognitive and academic abilities to further determine factors impeding attendance. A commonly used set of measures includes the Woodcock-Johnson IV Tests of Early Cognitive and Academic Development (Schrank, McGrew, \& Mather, 2015). Additionally, comprehensive medical evaluations may be necessary for the most severe cases of problematic absenteeism.

Intensive interventions for problematic absenteeism could include expanded Tier 2 interventions and second chance and specialized programs (Kearney \& Graczyk, 2014). Tier 2 strategies could be expanded to include broader therapy models, or "exosystem" interventions, that focus on social structures and policies to impact absenteeism more generally (Lyon \& Cotler, 2009). Exosystem interventions could include the collaboration of school personnel, medical and mental health professionals, and legal associates. For example, school districts may require that youth exhibiting $15 \%$ or more days absent be fined, lose privileges, and/or attend a diversion program. Consistent enforcement of truancy policy within a system is critical for reducing absenteeism (Bye et al., 2010).

Targeted interventions could be also expanded to youth with severe absenteeism by including wraparound services. These services refer to a delivery model that focuses on individualized family- and community-based care to concerns that may supersede attendance (Chitiyo, 2014). The general goal is to extend the traditional role of the school from education to coordinating the delivery of social, health, family, food, and other services that a youth with severe absenteeism may need. Other wraparound services include mobile outreach programs that provide educational, social, and medical services to families in rural and remote areas (Wilson, Stemp, \& McGinty, 2011). For example, mobile medical care for conditions like asthma that contribute heavily to absenteeism may be utilized in this regard (Bruzzese, Evans, \& Kattan, 2009).

Tier 3 interventions may also include second chance programs. Second chance programs refer to special opportunities to achieve credentials necessary for a high school diploma or its equivalent. A commonly used second chance program is the General Education Development (GED) credential. The GED is equivalent to a high school diploma and is obtained by passing a
series of examinations. Other second chance programs could involve after-school programs such as tutoring, credit accrual alternatives through examinations, fifth-year senior programs, and virtual schooling (Kearney \& Graczyk, 2014). Additionally, community based-learning centers and summer programs could serve as a second chance opportunities for youth with severe absenteeism. The long-term goal of these programs is to allow an individual to pursue access to college, vocational or technical training and other options for personal advancement.

Intensive interventions could also include specialized or institutional programs for youth with severe absenteeism and concurrent internalizing symptomatology. An advantage to these programs is that they provide a multiple modality for treatment (e.g., therapy and medication). Additionally, these programs offer support services for families and are often linked to ongoing outpatient services to maintain gains and prevent relapse. An example of such program is the ATLAS Adolescent Day Hospital Program (Adolescent Treatment and Learning Alternative Service; www.msh.on.ca/node/1166) located in Ontario, Canada for youth ages 12-19 years. This program focuses on a youth's credit accumulation, eventual return to school, and coping strategies for internalizing symptoms. Research on specialized programs is sparse. However, emerging studies have provided some evidence that these programs may be an effective form of treatment for youth with severe absenteeism and concurrent internalizing symptomatology (Walter et al., 2013).

## Limitations

Several limitations are evident in the present study. First, the regression analyses utilizing the dimensional data did not provide strong evidence for the proposed hypotheses. This may be explained by the finding that youth with the highest level of absenteeism severity did not endorse the highest levels of clinical or family environment variables. Instead, youth with the highest
level of absenteeism severity often endorsed equivalent or slightly lower levels of clinical and family environment variables than youth with lower levels of absenteeism severity. Second, the present study had a limited sample size on the YSR. This may have precluded a significant finding due to a lack of power. Third, the present study included only youth self-report of internalizing and externalizing symptoms, as well as family environment. The present study did not consider additional measures of behavioral observation or parent or teacher report. Utilizing information from a wider variety of resources may have allowed for a greater understanding of youth with problematic school absenteeism in a community setting.

## Recommendations for Future Study

Future research regarding absenteeism severity and internalizing symptomatology should address the aforementioned limitations. First, future research should continue to examine the relationship between absenteeism severity and internalizing symptomatology. Future studies could examine individual items on the measures to further determine specific symptoms most related to absenteeism severity. Additionally, future studies should include parent-reported internalizing and externalizing symptoms, as well as family environment in analysis. Future studies could examine potential differences in youth, parent, and teacher perceived clinical symptoms and family environment to determine whether significant differences exist. The relationship between clinical symptoms and family environment and absenteeism severity may be stronger with the addition of parent information.

Future studies should also include additional variables that may be related to absenteeism severity. Future studies could include a measure of academic performance such as course grades or overall GPA. This may provide researchers with additional information for determining at-risk youth. Further, future studies should continue to examine absenteeism severity at a variety of
different levels. Future studies could examine additional percentiles of absenteeism to further explore the level that warrants the most clinical concern for youth and their families (e.g., $10 \%$ vs $20 \%$ vs $30 \%$, etc.). Future studies could also examine individual characteristics of youth with the highest level of absenteeism severity to further determine who is the most at-risk (e.g., male vs female youth).

## Appendix A

Information Sheet

1. Child's Age $\qquad$
2. Child's Gender (circle one) M F
3. Child's Ethnicity (circle one)
Asian African-American European-American Hispanic
Multiracial/Biracial Native American Other___
4. Did mother/guardian graduate from high school? Yes No
5. Did father/guardian graduate from high school? Yes No
6. Age (in years) and gender of all siblings:

Age:___ gender: M/F
Age: ___ gender: M /F
Age:___ gender: M /F
Age: $\qquad$ gender: $\mathrm{M} / \mathrm{F}$
Age: $\qquad$ gender: $\mathrm{M} / \mathrm{F}$
Age: $\qquad$ gender: $\mathrm{M} / \mathrm{F}$
7. Marital status of parents/guardians currently? (circle one)

Married Never married Separated Divorced Other $\qquad$
8. Parent/guardian completing packet (circle one):

Mother Father Guardian/Other

## Appendix B

## Revised Child Anxiety and Depression Scale

| 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 |
| . | Never | Sometimes | Often | Always |

[^3]| 18. I have trouble going to school in the mornings because I feel nervous or afraid $\qquad$ | 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 $\qquad$ | 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 | Alway |

## Appendix C

## Youth Self Report




Please describe any concerns or problems you have about school:

Please describe any other concerns you have:

Please describe the best things about yourself:

Below is a list of tems that describe kids. For each item that describes you now or within the past 6 months, please circle the 2 if the item is very true or often true of you. Circle the 11 fit the item is somewhat or sometimes true of you. If the item is not true of you, circle the 0 .
$0=$ Not True $\quad 1=$ Somewhat or Sometmes True $\quad 2=$ Very True or Often True

| 0 | 1 | 2 | 1. lact too young for my age | 0 | 1 | 2 | 33. Ifeel that no one loves me |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1 | 2 | 2. Idrink alcohol without my parents' approval (describe): | 0 | 1 | 2 | 34. Ifeel that others are out to get me |
|  |  |  |  | 0 | 1 | 2 | 35. Ifeel worthless or inferior |
|  |  |  |  | 0 | 1 | 2 | 36. laccidentally get hurt abt |
| 0 | 1 | 2 | 3. largue a lot |  |  |  |  |
| 0 | 1 | 2 | 4. Ifail to finish things that Istart | 0 | 1 | 2 | 37. Iget in many fights |
|  |  |  |  | 0 | 1 | 2 | 38. Iget teased a bt |
| 0 | 1 | 2 | 5. Theres very little that lenjoy | 0 | 1 | 2 |  |
| 0 | 1 | 2 | 6. like animals | 0 | 1 | 2 | 39. Inang around with kids who get introuble <br> 40. Ihear sounds or voices that other people |
| 0 | 1 | 2 | 7. Ibrag |  |  |  | think aren't there (describe): |
| 0 | 1 | 2 | 8. Ihave trouble concentrating or paying attention |  |  |  |  |
| 0 | 1 | 2 | 9. Ican't get my mind off certain thoughts; |  |  |  |  |
|  |  |  | (describe): | 0 | 1 | 2 | 41. lact without stopping to think |
|  |  |  |  | 0 | 1 | 2 | 42. Iwould rather be alone than with others |
| 0 | 1 | 2 | 10. Ihave trouble sitting still | 0 | 1 | 2 | 43. Ilie or cheat |
| 0 | 1 | 2 | 11. I'm too dependent on adults | 0 | 1 | 2 | 44. Ibite my fingernails |
| 0 | 1 | 2 | 12. Ifeel bnely | 0 | 1 | 2 | 45. Iam nervous ortense |
| 0 | 1 | 2 | 13. Ifeel confused or in a fog | 0 | 1 | 2 | 46. Parts of my body twitch |
| 0 | 1 | 2 | 14. Icry a bt |  |  |  | movements (describe): |

$\begin{array}{llll}0 & 1 & 2 & \text { 15. Iam pretty honest }\end{array}$

| 0 | 1 | 2 | 16. Iam mean to others |
| :--- | :--- | :--- | :--- |

$\begin{array}{llll}0 & 1 & 2 & \text { 17. Idaydream a lot }\end{array}$
$\begin{array}{llll}0 & 1 & 2 & \text { 18. Ideliberately try to hurt or kill myself }\end{array}$
$\begin{array}{llll}0 & 1 & 2 & 19 \text {. Itry to get a lot of attention }\end{array}$
$\begin{array}{llll}0 & 1 & 2 & 20 \text {. Idestroy my own things }\end{array}$
$\begin{array}{llll}0 & 1 & 21 \text {. Idestroy things belonging to others }\end{array}$
$\begin{array}{llll}0 & 1 & 2 & \text { 22. Idisobey my parents }\end{array}$
$\begin{array}{llll}0 & 1 & 2 & \text { 23. Idisobey atschool }\end{array}$
$0 \quad 1 \quad 2 \quad$ 24. Idon't eat as well as Ishould
$\begin{array}{llll}0 & 1 & 2 & \text { 25. Idon'tget along with other kids }\end{array}$
$\begin{array}{llll}0 & 1 & 2 & \text { 26. Idon't feelguilty after doing something } \\ \text { Ishouldn't }\end{array}$ shouldn't
$\begin{array}{llll}0 & 1 & 2 & \text { 27. lam jealous of others }\end{array}$
0 1 2 28. Ibreak rules at home, school, or elsewhere
$\begin{array}{llll}0 & 1 & 2 & \text { 29. Iam afraid of certain animals, situations, or }\end{array}$ places, other than school (describe):
$\begin{array}{llll}0 & 1 & 2 & 30 \text { lamafraid of gaingtoschod }\end{array}$
O 12 31. Iam afraid I might think or do something bad
0123 32. Ifeel that Ihave to be perfect


Pease write down anything else that describes your feelings, behavior, or interests:

PAGE 4

|  |  |
| :---: | :---: |
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## Appendix D

## Family Environment Scale

There are 90 statements. They are statements about families. You are to decide which of these statements are true of your family and which are false. If you think the statement is True or mostly True of your family, make an X in the box labeled true. If you think the statement is False or mostly False of your family, make an X in the box labeled false.
You may feel that some of the statements are true for some family members and false for others. Mark True if the statement is true for most members. Mark False if the statement is false for most family members. If the members are evenly divided, decide what is the stronger overall impression and answer accordingly.
Remember, we would like to know what your family seems like to you. So do not try to figure out how other members see your family, but do give us your general impression of your family for each statement.

1. Family members really help and support one another True False
2. Family members often keep their feelings to themselves. True False
3. We fight a lot in our family.
4. We don't do things on our own very often in our family.
5. We feel it is important to be best at whatever you do. True False
6. We often talk about political and social problems.
7. We spend most weekends and evenings at home. True False
8. Family members attend church, synagogue, or Sunday school fairly often.
9. Activities in our family are pretty carefully planned.

True False
True False
10. Family members are rarely ordered around.

True False
11. We often seem to be killing time at home.

True False
12. We say anything we want to around home. True False
13. Family members rarely become openly angry. True False
14. In our family, we are strongly encouraged to be independent. True False
15. Getting ahead in life is very important in our family.

True False
16. We rarely go to lectures, plays or concerts.
17. Friends often come over for dinner or to visit.
18. We don't say prayers in our family.
19. We are generally very neat and orderly.
20. There are very few rules to follow in our family.
21. We put a lot of energy into what we do at home.
22. It's hard to "blow off steam" at home without upsetting somebody. True False
23. Family members sometimes get so angry they throw things. True False
24. We think things out for ourselves in our family.

True False
25. How much money a person makes is not very important to us. True False
26. Learning about new and different things is very important in our family.

True False
27. Nobody in our family is active in sports, Little League, bowling, etc.

True False
28. We often talk about the religious meaning of Christmas, Passover, or other holidays. True False
29. It's often hard to find things when you need them in our household. True False
30. There is one family member who makes most of the decisions. True False
31. There is a feeling of togetherness in our family.

True False
32. We tell each other about our personal problems.

True False
33. Family members hardly ever lose their tempers. True False
34. We come and go as we want to in our family.

True False
35. We believe in competition and "may the best man win." True False
36. We are not that interested in cultural activities.

True False
37. We often go to movies, sports events, camping, etc.

True False
38. We don't believe in heaven or hell.

True False
39. Being on time is very important in our family.
40. There are set ways of doing things at home.
41. We rarely volunteer when something has to be done.

True False

True False
True False
42. If we feel like doing something on the spur of the moment we often just pick up and go.

True False
43. Family members often criticize each other.

True False
44. There is very little privacy in our family.

True False
45. We always strive to do things just a little better the next time. True False
46. We rarely have intellectual discussions. True False
47. Everyone in our family has a hobby or two.

True False
48. Family members have strict ideas about what is right and wrong. True False
49. People change their minds often in our family.

True False
50. There is a strong emphasis on following rules in our family. True False
51. Family members really back each other up.

True False
52. Someone usually gets upset if you complain in our family. True False
53. Family members sometimes hit each other.

True False
54. Family members almost always rely on themselves when a problem comes up.
55. Family members rarely worry about job promotions, school grades, etc.
56. Someone in our family plays a musical instrument.

True False
True False
57. Family members are not very involved in recreational activities outside work and school. True False
58. We believe there are some things you just have to take on faith. True False
59. Family members make sure their rooms are neat. True False
60. Everyone has an equal say in family decisions. True False
61. There is very little group spirit in our family. True False
62. Money and paying bills is openly talked about in our family. True False
63. If there's a disagreement in our family, we try hard to smooth things over and keep the peace.
64. Family members strongly encourage each other to stand up for their rights.
65. In our family, we don't try that hard to succeed.
66. Family members often go to the library.
67. Family members sometimes attend courses or take lessons for some hobby or interest (outside of school).
68. In our family each person has different ideas about what is right and wrong.
69. Each person's duties are clearly defined in our family.
70. We can do whatever we want in our family.

True False
True False
71. We really get along well with each other.
72. We are usually careful about what we say to each other.

True False
True False
True False
73. Family members often try to one-up or out-do each other. True False
74. It's hard to be yourself without hurtin someone's
feelings in our household.
75. "Work before play" is the rule in our family.
76. Watching T.V. is more important than reading in our family. True False
77. Family members go out a lot.
78. The (Bible, Torah, Koran, etc.) is a very important book in our home.
79. Money is not handled very carefully in our family.
80. Rules are pretty inflexible in our household.
81. There is plenty of time and attention for everyone in our family.
82. There are a lot of spontaneous discussions in our family.
83. In our family, we believe you don't ever get anywhere by raising your voice.
84. We are not really encouraged to speak up for ourselves in our family.
85. Family members are often compared with others as to how well they are doing at work or school.
86. Family members really like music, art and literature.
87. Our main form of entertainment is watching T.V. or listening to the radio.
88. Family members believe that if you sin you will be punished.
89. Dishes are usually done immediately after eating.
90. You can't get away with much in our family.

True False
True False
True False

True False
True False
True False
True False
True False

True False

True False

True False
True False

True False
True False
True False
True False

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Wilson, K., Stemp, K., \& McGinty, S. (2011). Re-engaging young people with education and training: What are the alternatives? Youth Studies Australia, 30, 32-39.

Wolpe, J. (1969). The practice of behavior therapy. New York: Pergamon.
Wright, J. H., Basco, M. R., \& Thase, M. E. (2006). Learning cognitive-behavior therapy. Washington, DC: American Psychiatric Publishing, Inc.

Young, J. G., Brasic, J.R., Kisnadwala, H., \& Leven, L. (1990). Strategies for research on school refusal and related nonattendance at school. In C. Chiland \& J. G. Young (Eds.), Why children reject school: Views from seven countries (pp.199-223). New Haven, CT: Yale University Press.

## CURRICULUM VITAE

Kyleigh Sheldon

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## Education

| August 2013-Present | Master of Arts in Clinical Psychology | University of Nevada, Las Vegas <br> Las Vegas, NV |
| :--- | :--- | :--- |
| May 2013 | Bachelor of Arts in Psychology <br> Minor in Business Management <br> Minor in Philosophy | Hope College |

## Relevant Coursework

| Developmental Psychology | Social Psychology | Industrial Psychology |
| :--- | :--- | :--- |
| Physiological Psychology | Abnormal Psychology | Clinical Psychology |
| Theory of Practice and Helping | Assessment of Children | Intervention with Children |
| Assessment of Adults | Intervention with Adults | Clinical Foundations |
| Psychopathology | Research Methods | Statistics |
| Psychometrics | Group Therapy | Diversity |

## Honors and Awards

| 2015 | Summer Session Scholarship | University of Nevada, Las Vegas |
| :--- | :--- | ---: | :--- |
| 2013 | Collegiate Swim Coaches Association Team Scholar All-American Award | Hope College |
| 2009 | Dean's List (2009-2013) | Hope College |

## Clinical Experience

| September 2015 - Present | UNLV School Refusal and Anxiety Disorders Clinic - Las Vegas, NV <br> Practicum Student |
| :--- | :--- |
| Primary Supervisor: | Christopher Kearney, Ph.D. |

Currently providing psychological assessment and treatment to children with significant school-based anxiety and other co-morbid anxiety disorders in the clinic, community, and school settings using cognitive-behavioral techniques, exposure based therapy, and group therapy techniques. Primary diagnoses include separation anxiety disorder, social anxiety disorder, specific phobia, and generalized anxiety disorder. Measurements include the Anxiety Disorder Interview Schedule and various self-report instruments. Receiving weekly individual supervision.

| August 2015 - Present | UNLV Practice Clinic - Las Vegas, NV |
| :--- | :--- |
|  | Practicum Student |
| Primary Supervisor: | Noelle Leffore, Ph.D. |

Currently providing psychological services to an average of 8-10 clients once a week under the supervision of Dr. Noelle Lefforge. Services are provided in a group format to adults between the ages of 20-70 years. Primary diagnoses include mood and anxiety disorders. Bion's Group as a Whole (GAW) orientation is utilized as the main form of intervention. Receiving weekly supervision.

January 2015 - April 2015 UNLV School Refusal and Anxiety Disorders Clinic - Las Vegas, NV Graduate Assistant
Primary Supervisor: Christopher Kearney, Ph.D.
Provided psychological services to an average of 4 clients once a week under the supervision of Dr. Christopher Kearney. Services were administered in a group format to children between the ages of 5-7 years with selective mutism and their parents. A cognitive-behavioral orientation was utilized as the main form of intervention.
$\begin{array}{ll}\text { January } 2015 \text { - May } 2015 & \begin{array}{l}\text { UNLV Practice Clinic - Las Vegas, NV } \\ \text { Practicum Student }\end{array} \\ \text { Primary Supervisor: } & \text { Christopher Heavey, Ph.D. }\end{array}$

Provided psychological services to an average of one couples client once a week under the supervision of Dr. Christopher Heavey, Ph.D. Services were administered to adults seeking couples counseling. A cognitive-behavioral orientation was utilized as the main form of intervention for a majority of couples. Received weekly group supervision.

August 2014 - August 2015
UNLV PRACTICE Clinic - Las Vegas, NV Practicum Student
Primary Supervisors: Michelle G. Paul, Ph.D. and Andrew Freeman, Ph.D.
Provided psychological services to an average of 5-7 clients once a week under the supervision of Dr. Andrew Freeman, Ph.D. Services were administered to children and adolescents between the ages of 6-15 years. A cognitivebehavioral orientation was utilized as the main form of intervention for a majority of child and adolescent cases. Received weekly individual and group supervision.

January 2012 - June 2012 Mary Free Bed Rehabilitation Hospital - Grand Rapids, MI Child Life Specialist Intern
Primary Supervisor:
Deb W. Brewer

Assisted in providing a positive hospital experience for child patients, acted as a support system to the child and family members, and led developmentally appropriate games and activities for the child and family members. Received weekly supervision.

June 2011 - August 2012 Private Care Taker - Hastings, MI
Private Employer:
Deb Hatfield

Assisted and mentored a young 17-year old female diagnosed with Cerebral Palsy in completing daily life tasks, such as bathing, dressing, and cooking, in completing physical therapy exercises, such as stretching and swimming, and also completing academic tasks, such as homework.

## Research Experience

July 2015 - Present Neuropsychology Research Laboratory, University of Nevada, Las Vegas
Title: Social Cognition in ADHD

## Faculty Advisor: Daniel Allan, Ph.D.

This study investigates social cognitive function in children with Attention Deficit Hyperactivity Disorder (ADHD). This study also investigates the underlying social cognitive mechanisms resulting in poor social skills and defiant behavior typically seen in children with ADHD. Participants include approximately 10 elementary and middle school youths aged 7-13 years from Las Vegas, Nevada. Assessments and data collection are ongoing.

Expected termination date is May 2016.
September 2013 - Present School Refusal Research Laboratory, University of Nevada, Las Vegas
Title: Effectiveness of a Las Vegas Truancy Diversion Program Faculty Advisor: Christopher Kearney, Ph.D.

This study examines the effectiveness of a Las Vegas Truancy Diversion Program for adolescents' whose identified primary behavioral problem is truancy. This study also evaluates associated truancy rates and environmental and familial issues pre- and post- program participation. Participants include approximately 410 middle school and high school youths aged 9-19 years from a variety of Clark County School District Middle School and High Schools. Assessments and data collection are ongoing.

August 2012 - December 2012
Expected termination date is May 2016.

Title: Activity Preference and Self-Efficacy in Kindergarten and First Grade Students Faculty Advisor: Sonja Trent-Brown, Ph.D.

The study examined the effectiveness of an early intervention nature program administered by the Outdoor Discovery Center to elementary school youths in Holland, MI. The study evaluated nature and outside activityrelated self-efficacy, familial, environmental, and social issues pre- and post- program participation. Participated in this study as a research assistant. Attended one school-based nature lesson on-site provided by the Outdoor Discovery Center, coded and entered pre- and post- program data into SPSS.

January 2012 - April 2012

## Research Assistant, Michigan State University

## Title: The Effect of Tier One Literacy Practice in Preschool Settings Faculty Advisors: Tami Mannes, M.A.

The study examined the role of peer support and child age on the relationship between parental control and child anxiety. Participated in this study as a research assistant. Administered pre- and post- literacy assessment measures (i.e. DIBBELS) to pre-school aged children in the Ottawa County School District, Holland MI. Collected, scored, coded, and entered data.

## Teaching Experience

August 2015 - Present

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UNLV - Las Vegas, NV Graduate Teaching Assistant PSY 757 - Teaching of Psychology Wayne Weiten, Ph.D.
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Currently assisting Dr. Wayne Weiten by instructing two undergraduate courses of Psychology 101: Introduction to Psychology. Course goals include: 1) develop an understanding of the discipline of psychology, 2) develop scientific values and skills, 3 ) foster personal growth, and 4) enhance library and computer skills. Course duties include: assembling and presenting weekly lectures, grading assignments and examinations, and providing a minimum of two outside office hours to address any student questions or concerns.

August 2014 - December 2014
Course:
Teacher:

UNLV - Las Vegas, NV
Teaching Assistant
PSY 715 - Psychological Assessment of Children
Andrew Freeman, Ph.D.

Assisted Dr. Andrew Freeman by organizing an online program for the course (WebCampus), performing administrative duties (e.g. scheduling and grading student's assignments), and sending weekly reminders to students, among other miscellaneous tasks.

October 2012-December 2012 Holland West Elementary School - Holland, MI
Project Charlie Course Instructor
Organization Affiliate:
Pathways, MI
Project Charlie is a school-based drug and alcohol early prevention program targeted to increase awareness, educate, and prevent childhood drug and alcohol use. Course goals include 1) teach children to identify different types of drugs and alcohol, 2) increase awareness of the harmful effects and negative consequences of drugs and alcohol 3) manage emotional reactions and decision-making processes when confronted with drugs and alcohol and 4) promote formation of positive goals and implement coping skills to prevent drug and alcohol use. Administered structured lesson plans, implemented course materials and worksheets, and facilitated open discussion/disclosures.

## Relevant Experience

January 2013 - May 2013 Hope College Academic Support Center - Holland, MI Student Tutor
Program Director: Janet Pinkham

Assisted students enrolled in GEMS 100: Understanding our Quantitative World in bi-weekly tutoring sessions by reviewing relevant chapters, discussing problems in assigned homework, and answering relevant questions.

Spring 2011 - August $2012 \quad$ Engedi Church - Holland, MI Children's Ministry Leader Jenni Sandstedt

## Program Director:

Assisted in leading preschool through kindergarten years aged children in structured weekly Children's Ministry Program including Bible lessons, corresponding reading stories and songs, and relevant developmentally appropriate games and activities.

Fall 2011
Hope College Dance Marathon - Holland, MI Events Committee
Primary Student Supervisor: Jamie Sloan
Assisted in creating the theme, producing and providing the decorations, and monitoring the event space during the event (i.e. ensuring decorations were secure, space was clean and organized).

## Publications

Kearney, C.A., \& Sheldon, K. (in press). Interventions for school refusal behavior. In L.A. Theodore (Ed.), Handbook of applied interventions for children and adolescents. New York: Springer.

Kearney, C.A., \& Sheldon, K. (in press). School refusal behavior. In A.E. Wenzel (Ed.), SAGE encyclopedia of abnormal and clinical psychology. Thousand Oaks, CA: Sage.

## Professional Presentations

Sheldon, K., \& Kearney, C.A. (2015). Differences in Absenteeism Severity among Community Youth. Oral presentation at the WPA $95^{\text {th }}$ Annual Convention: Las Vegas, NV.

Diliberto, R., Sheldon, K., \& Kearney, C.A. (2015). Peer Relationships in Youth with School Refusal or Selective Mutism. Poster presentation at the WPA $95^{\text {th }}$ Annual Convention: Las Vegas, NV.

Sheldon, K., \& Kearney, C.A. (2014). Internalizing and Externalizing Symptoms as Predictors of Truancy Severity in Community Youth. Poster presented at the 40th Annual Conference of the Society For Police and Criminal Psychology: Las Vegas, NV.

Sheldon, K. (2014). School Refusal Behavior: Perceptions of School Climate and Absenteeism Severity. Oral presentation at the Global Conference on Contemporary Issues in Education: Las Vegas, NV.

Ross, E., Kearney, C.A., \& Sheldon, K. (2014). Depression and Dissociation as Predictors of Posttraumatic Symptoms among Community Youth. Poster presented at the Association for Psychological Science 26th Annual Convention: San Francisco, CA.

Bednarz, A., Bieri, M, Burke, K., Cameron, L., Hogan, C., Kelso, M., Kostizen, M., McGuire, P., Sheldon, K., Timmer, S., Walker, A., Wilkie, C., \& Trent-Brown, S. (2012). Activity Preference and Self-Efficacy in Kindergarten and First Grade Students. Poster presented at the Celebration of Undergraduate Research: Hope College, Holland, MI.

## Professional Memberships

| 2015 - Present | The Society for the Teaching of Psychology (STP) |
| :--- | :--- |
| 2014 - Present | Western Psychological Association (WPA) |
| 2014 - Present | Society for Police and Criminal Psychology (SPCP) |
| 2014 - Present | American Psychological Association of Graduate Students (APAGS) |
| 2013 - Present | Association for Psychological Science (APS) |
| 2013 - Present | Nevada Psychological Association (NPA) |

## Professional Boards and Committees

2015 - Present NPA Technology/Social Media
2015 - Present NPA Executive Board

## Leadership Positions

Graduate Student Institutional Representative, Western Psychological Association, 2015
American Psychological Association Graduate Student (APAGS) Campus Representative, 2015/2016
Clinical Student Committee (CSC) Cohort Representative, 2015/2016


[^0]:    Absenteeism severity. School staff provided a total number of absences for participants.
    Total number of school days missed during the academic year was divided by the total number of

[^1]:    * $p<.05$

[^2]:    * $p<.05$

[^3]:    17. I feel scared if I have to sleep on my own. ....
