

SCHOOL REFUSAL BEHAVIOR IN ECOLOGICAL CONTEXT:
BROADENING SAMPLE DEMOGRAPHICS AND METHODS OF
ASSESSMENT

A Dissertation

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VITA

The author was born in Lansing, MI on May 4th, 1979. He graduated from Okemos High School in 1997 and received his Bachelor of Arts with Honors and Distinction in Psychology from The University of Michigan in 2001. He received his Master of Arts degree in Clinical Psychology from DePaul University in 2005 and is currently pursuing a doctoral degree in the Clinical Child Psychology program at DePaul University in Chicago, IL.

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CHAPTER I

INTRODUCTION

Repeated, unexcused absence from school represents a significant deviation from our society's norms of behavior and socialization. Although the rejection of school is frequently met with confusion and frustration from parents and teachers alike, it has been estimated to affect up to 28% of United States youth (Kearney, 2001). Nonattendance in elementary school has a significant negative impact on individual, family, school and community functioning. Children's repeated absences may result in the learning of maladaptive avoidance strategies, cause parents to miss work or leave their children unsupervised, deny their schools adequate funding, and put communities at increased risk for adolescent delinquency (Barth, 1984; Epstein & Sheldon, 2002; Loeber & Farrington, 2000). Further, students who miss school at problematic levels are at greater risk for poor achievement (Kooker, 1976; Lamdin, 1996) and eventual dropout (Alexander, Entwisle, & Horsey, 1997; Kaplan, Peck, & Kaplan, 1995; Rumberger, Ghatak, Poulos, Ritter, & Dornbusch, 1990).

Populations for which problematic nonattendance is most common (i.e., low-SES, urban, ethnic minority populations) are conspicuously absent from research on school refusal as are the contextual variables (e.g., uninviting or dangerous school settings) that characterize the experience of attending school for these children. Instead, ethnic and "economic" minority children are often overlooked by mental health professionals and assigned truancy classifications.

As a result of a truancy label, they and their families are subjected to punitive consequences (e.g., legal intervention) at a higher rate than non-minority individuals (Bell, Rosen, & Dynlacht, 1994; Puzanchera, Stahl, Finnegan, Tierney, & Snyder, 2003). The current research seeks to avoid biased categorizations by examining variables at multiple levels of the ecologies of low-income, urban, African American children exhibiting or at risk for school refusal behavior. Using a conceptualization based in ecological systems theory (Bronfenbrenner, 1979), it is hypothesized that individual, family, peer, school, and community level variables will allow for the prediction of (1) school refusal behavior in early adolescents and (2) different functional categories, which can generate or maintain school refusal behavior.

Terminological, Definitional, and Operational Issues

Problems of nonattendance are not new, but the ways in which the etiology and treatment of extensive school absence are conceptualized have been subject to substantial revisions. Multiple terms have been used to describe unexcused nonattendance including *truancy*, *school phobia*, and *school refusal*. *Truancy*, the original term for children deliberately absent from school, has been the favored language used by educators and law enforcement professionals since the adoption of compulsory education laws in the United States during the late 19th century. Varying definitions of truancy have provided different levels of specificity when describing the problem. Schultz (1987), for example, defined truancy simply as “excessive unexcused absences.” In slightly greater detail, the Chicago Public Schools (2005) defined truancy as “a student subject to

compulsory school attendance and who is absent without valid cause for a school day or portion thereof.” Others have elaborated on the factors associated with truancy or children’s motivations for becoming truant. For example, multiple authors have suggested that truancy requires that parents have no knowledge of and do not consent to their child’s absence (e.g. Berg, Nichols, & Pritchard, 1969; Hersov, 1960). Stickney and Miltenberger’s (1998) definition indicated that motivations for truancy come exclusively from a child’s desire to engage in “alternative enjoyable activities.” Despite these minor variations, nearly all conceptualizations view truancy as indicative of student delinquency and conduct problems.

As the psychological and psychiatric fields began to address issues of nonattendance, conceptualizations of anxiety-based *school phobia* emerged from the prevailing delinquency-based approach to the problem. School phobia, defined as “a deep-seated psychoneurotic disorder...recognizable by the intense terror associated with being at school” (Johnson, Falstein, Szurek, & Svendsen, 1941; p702), attributed the problem of nonattendance to the displacement of a child’s separation anxiety to the school setting, which produced a level of worry comparable to that of phobic reactions. Separation anxiety, in turn, was believed to be indicative of maternal anxiety and a dependency relationship between mother and child. More recently, school phobia has been defined in slightly broader terms, with reference to severe “emotional upset,” instead of anxiety exclusively, which is produced “when faced with the prospect of going to school.” This level of distress then results in children “staying at home with parental

knowledge” (Huffington & Sevitt, 1989). Although this view and the phrase “school phobia” still enjoy considerable support in the field, it has recently become clear that terminology such as school phobia and the etiological assumptions associated with it are too narrow to fully account for the school refusing population.

School phobia is often used synonymously with the term *school refusal* (also called, *school refusal behavior*) in the psychological field, a practice that results in considerable confusion among professionals. Many current conceptualizations of school refusal remain anxiety-based (e.g., Berg et al., 1993; Bernstein et al., 2000; Hansen, Sanders, Massero, & Last, 1998; Last & Strauss, 1990) making it difficult to distinguish the two. However, an anxiety-based conceptualization has been called into question repeatedly as the sole root of school refusal (e.g., Last, Strauss, & Francis, 1987; McShane et al., 2001; Pilkington & Piersel, 1991; Waldron et al., 1975). A broader conceptualization of school refusal is now receiving empirical support, especially when non-clinic-referred samples of school refusers are considered. For example, using the Child and Adolescent Psychiatric Assessment (CAPA; Angold, Cox, Harrington, Simonoff, & Ratter, 1995), Egger, Costella, and Angold (2003) found a relatively low rate (22%) of separation anxiety disorder in their community sample of children identified as anxious school refusers. These findings can be compared to clinic-referred samples, which have yielded similar rates (22.4%) of separation anxiety disorder (Kearney & Albano, 2004) and found that three-quarters of the children could not be assigned an anxiety or phobia diagnosis.

In 1969, Berg, Nichols, and Pritchard proposed four specific criteria to determine if school refusal is occurring and these descriptors remain in circulation today. They specified that, to be considered a school refuser, a child must: (1) experience persistent difficulties attending school, (2) experience severe emotional upset (e.g., fearfulness, temper outbursts, somatic complaints) when faced with the prospect of going to school, (3) be at home with the parent's knowledge when he/she should be at school, and (4) not display any antisocial characteristics (i.e., conduct problems). These criteria have served as a foundation for much of the existing school refusal research, but still echo past conceptualizations of school refusal as a problem driven largely by anxiety. Further, Berg and colleagues' emphasis on the component of parental knowledge is particularly problematic since numerous additional factors (e.g., parent work schedule) could influence whether or not parents are immediately aware of their children's absence.

Some authors have formulated definitions that make fewer assumptions about the etiology of school refusal. Naylor, Staskowski, Kenny, and King (1994) used a broader definition, describing school refusal as "failure to attend school despite the physical ability to do so," but still excluded conduct disordered youth from their study. The practice of excluding children with conduct problems from school refusal research is indicative of a widespread desire in the field to distinguish school refusal from truancy in the face of definitional ambiguity.

More recently, Kearney and Silverman (1996) defined school refusal behavior as "child-motivated refusal to attend school or difficulties remaining in

school for an entire day” (p.365). Their definition is broad enough to include classical definitions of school refusal, as well as incorporating nonattenders who have simply been identified as truant. Nevertheless, although a desire to distinguish among child and other (e.g., parental, societal) sources of motivation for school refusal is understandable, it can be exceedingly difficult to determine the multiple sources of school refusal behavior and the interactions among them. Except in extreme cases where parents explicitly tell a child that she cannot attend school or where a catastrophic event (e.g., the family becomes homeless) precipitates nonattendance, it is even more difficult to conclude that one of those sources is primary and most deserving of intervention. Therefore, it is for pragmatic reasons that the current paper favors using a less restricting version of Kearny and Silverman’s definition of school refusal: *refusal to attend school or difficulties remaining in school for an entire day*. This definition includes both school refusing youth (anxiety-based and otherwise) and populations that might be labeled truant in other studies of nonattendance.

Measurement

Stemming from their broad definition of school refusal, Kearney and Silverman (1993) created four functional typologies/dimensions of school refusal. These dimensions, assessed by the School Refusal Assessment Scale (SRAS, Kearney & Silverman, 1993) and School Refusal Assessment Scale – Revised (SRAS-R, Kearny, 2002), have helped broaden traditional definitions. Instead of focusing on etiological explanations of school refusal problems, the SRAS-R stresses dimensions focused on the function of the behavior itself. Functional

dimensions include: (1) avoidance of school-related stimuli provoking negative affectivity, (2) escape from aversive social or evaluative situations, (3) getting parental attention, and (4) positive tangible reinforcement. Although the current research uses the functional labels articulated by Kearney, the “tangible reinforcement” dimension requires clarification as it involves social and other forms of reward that go beyond typical notions of “tangible” reinforcers. Kearney (2001) has noted that reinforcers in this category can commonly include a wide variety of behaviors: “watching television, playing video games or sports, accessing the Internet, sleeping late, visiting with friends..., engaging in drug use, going to day parties, shopping...” (p. 95).

In all, the four functional dimensions/typologies may be classified as involving negative reinforcement (1 and 2) and positive reinforcement (3 and 4). It may be better to think of the negative reinforcement dimensions in terms of their broader category since those dimensions have not been adequately distinguished by factor analysis (Higa, Daleiden, & Chorpita, 2002; Kearney, 2002). Using three well-differentiated factors (i.e., combined negative reinforcement, attention-getting, tangible reinforcement), Kearney (2002) was able to explain 48% of the variance in his sample (versus 54% with 4 poorly-differentiated factors). The SRAS-R is the only scale specifically designed to assess the behaviors of children with problematic nonattendance.

The Self-Efficacy Questionnaire for School Situations (SEQ-SS; Heyne et al., 1998) is a measure designed to assess the cognitions of school refusers regarding their ability to cope with specific school-related situations. The SEQ-

SS differs from the SRAS-R because, instead of directly assessing the maintaining factors for nonattendance, the SEQ-SS measures children's perceptions of their performance in hypothetical situations such as, "how sure are you that you could do school work set by the teacher" or "how sure are you that you could stand up for yourself if you were teased or bullied by other kids at school." Heyne and colleagues (1998) have asserted that the SEQ-SS can yield areas of low self-efficacy to target in clinical interventions and serve as a monitoring tool for treatment outcome. They also cited existing research (King et al., 1998) that demonstrated its utility as a measure of treatment outcome. Results of Heyne et al.'s (1998) work on the psychometrics of the measure demonstrated a relatively even distribution of self-efficacy scores in their sample. Approximately one-third of participants fell into the low, middle, and high ranges of the scale. Unfortunately, no analyses were completed to assess the relationship of self-efficacy to severity of refusal (days missed) or participant age.

The SRAS-R and the SEQ-SS are the only standardized instruments for the assessment of children exhibiting school refusal behavior. Although both measures are significant steps forward in the effort to capture the experiences of school refusing children, neither adequately considers the context in which school refusal occurs (e.g., the degree to which school environments are aversive). One potentially important factor not included is the child's level of academic functioning. Though negative affect corresponding to a child's presence at school is tapped by the first dimension of the SRAS-R, "avoidance of school-related stimuli provoking negative affectivity," the impact of academic stressors is not

specifically addressed. Additionally, dimension two, “escape from aversive social or evaluative situations,” pertains primarily to general social concerns and not to school-based evaluations of performance. Assessment of the connections of children’s perceptions of their academic performance (e.g., the cognitions and feelings experienced regarding academic competence) and other variables to the positive and negative dimensions of the SRAS-R is necessary. Such research could provide useful data for the planning of interventions and coordination of services. The current project strives to address this limitation by conceptualizing school refusal behavior in the context of Bronfenbrenner’s (1979) ecological systems model, which will later be described in detail.

The definitional and operational ambiguity that has characterized the school refusal field must be considered when reviewing the literature and attempting any sort of information synthesis. Findings in school refusal articles are largely dependent on the terms and associated inclusion criteria utilized by the authors and demonstrate wide variability on the basis of participant diagnoses. Moreover, the larger body of literature on problematic nonattendance (i.e., truancy, school phobia, and school refusal) is heavily influenced by the demographics (e.g. ethnicity, economic factors, gender, and age) of the participants. Much of the existing research has questionable applicability to the population of interest in the current study – low-income, urban, African American early adolescents – and must be interpreted cautiously.

Demographic Factors and the Study of Nonattendance

Though research is admittedly limited, a number of large-scale studies have indicated significant discrepancies among the attendance patterns of different ethnic groups and suggest a growing divide in attendance between White students and ethnic minorities in the United States (US DHHS, 1997). Whereas Native American children are found to commonly exhibit the greatest rates of nonattendance nationwide, African American and Latino children usually rank second, displaying similar levels of problematic nonattendance (US DHHS, 1997). Research on the number of truancy cases petitioned by the courts indicates a significant ethnic disparity in which Whites are underrepresented and African Americans are overrepresented (Bell et al., 1994). Puzzanchera and colleagues (2003) found that African Americans accounted for 26% of all petitioned truancy cases. This rate far exceeds the percentage of the overall school-aged (5-17 yrs) population composed of African Americans in the United States (15.7% - US Census, 2000). Additionally, urban areas demonstrate considerably higher rates of truancy than rural ones (Epstein & Sheldon, 2002; National Center for Education Statistics, 1996), creating a compounded effect for African American youth, who are more likely to live in cities than in rural areas (US Bureau of the Census, 2005). In 2002, at least 14,000 students in Chicago Public Schools were reported as *chronically truant* (Council of the Great City Schools, 2003), defined as failure to attend school without a valid cause for 10% of the previous 180 days of regular attendance (CPS, 2005).

With regard to socioeconomic status, youth from low-income families have been shown to be at greatest risk for nonattendance (Berg et al., 1993; Epstein & Sheldon, 2002; McCluskey et al., 2004; US DHHS, 1997). Over time, this can result in higher rates of chronic absenteeism for low-income populations (FDE, 2004). Since African Americans and Latinos are overrepresented among low-income populations (Procter & Dalaker, 2002), they are especially vulnerable to attendance problems. Unfortunately, school refusal research rarely addresses the socioeconomic status (SES) of the sample.

The vast majority of research on nonattendance, especially research which is conducted outside of the psychology field, has focused on high-school-aged children (e.g., Baker, Sigmon, & Nuget, 2001; Roderick et al., 1997). However, problematic attendance patterns begin early in childhood and only worsen as children grow older, potentially resulting in dropout (Alexander, Entwisle, & Horsey, 1997; Barth, 1984; Robins & Ratcliff, 1980; Zhang, 2003). When children reach adolescence, the reasons for which they avoid school become more complex as peer and other social influences begin to play a more influential role in their behavior. For example, as children enter adolescence, they usually rely less on their parents for support or guidance and more on their peers (Furman & Buhrmester, 1992; Lieberman, Doyle, & Markiewicz, 1999). In addition to ethnic and economic status, confounds associated with participant age make the interpretation of existing findings difficult. For these reasons, it is important for all studies of school refusal behavior to carefully assess the role of age in the samples used.

With respect to gender, few differences within samples of youth demonstrating patterns of problematic nonattendance have been observed. Generally, cases of truancy petitioned by the courts show gender rates roughly equal to those found in the general population (e.g., Puzzanchera et al., 2003; Roderick et al., 1997), as do most psychological studies of school refusal (e.g., Granell de Aldaz et al., 1984; Heyne et al., 2002; Kearney, 1995). Such consistent findings have prompted some authors to conclude that, “gender is not highly predictive of cases of school absenteeism” (Kearney, 2001). Nevertheless, when considering the familial and community contexts in which school refusal behavior occurs, the potential for meaningful gender differences stemming from gender-specific socialization practices remains.

The Truancy-Refusal Overlap and Attempts at Differentiation

School refusal is often distinguished from truancy in the psychological and education literatures. It has been proposed that truants lack the anxiety and fear commonly associated with school refusal and have positively reinforced motivations for staying home (Berg et al., 1993). With regard to Berg and colleagues’ (1969) criteria, truant youths are considered distinct in that their parents are infrequently aware of their absence (Berg et al., 1993; McShane, Walter, & Rey, 2001). Truancy has been tied more closely to conduct disorders, whereas school refusal has been thought to be indicative of emotional disorders and/or parental pathology (Bools et al., 1990; Hersov, 1960). This distinction has not received universal endorsement, however. Recent articles (e.g., Kearney, 2003) have described the division between school refusal and truancy as

inadequate, artificial, and inhibiting cooperation among professionals such as psychologists and educators. Kearney (2003) has noted that clinical psychologists tend to emphasize the term school refusal, which is often thought to be anxiety-based, and educators, social workers, and those in the criminal justice system often label the same behaviors as delinquency-based truancy.

In an attempt to distinguish the problem of school refusal from traditional truancy, many existing school refusal studies have required samples to have diagnosable anxiety disorders (e.g., Bernstein et al., 2000; Heyne et al., 2002; Last et al., 1998) or comorbid anxiety and depression (e.g., Bernstein et al., 1999) as inclusion criteria. Unfortunately, this constraint has resulted in studying children with more severe psychopathology than is actually representative of the school refusing population as a whole. Moreover, research has demonstrated that distinctions based on behavioral or affective comorbidities, in which behavioral disorders are more indicative of truancy and affective disorders of school refusal, are largely unsubstantiated. McShane and colleagues (2001), for example, found that 38% of a sample of school refusing children had a diagnosable disruptive behavior disorder (e.g., Attention-Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, Conduct Disorder), even though those disorders are typically associated with truancy.

Recently, Kearney (2003) addressed the definitional inconsistencies within the field of psychology and between psychology and other disciplines that work with absentee youth. He pointed out that many of the distinctions made between school refusing and truant youth (i.e., those that correlate truancy with

externalizing/behavioral disorders and school refusal with internalizing/affective disorders) leave out many children experiencing attendance problems who are not diagnosable by DSM-IV standards. In order to eliminate many of the problems he identified, Kearny presented a series of suggestions for the manner in which school refusal and other absentee issues are defined and discussed. The method eliminates definitional ambiguity and replaces it with more specific operational criteria.

First, Kearney suggested that “problematic” and “nonproblematic” refusal be distinguished, with nonproblematic absences being those that are deemed legitimate and not detrimental to the child. Problematic was defined as ongoing (for at least two weeks) nonattendance or as attendance with difficulty and functional impairment (e.g., routinely skipping certain classes or demonstrating problematic levels of anxiety). The distinction seems an appropriate starting point for a comprehensive classification system so that unnecessary interventions with nonproblematic populations can be avoided.

Second, Kearney suggested that absenteeism be further divided into “child-motivated” and “non-child-motivated.” Non-child-motivated absenteeism places the root of the attendance issue within individuals or systems over which the child has no control, whereas child-motivated absenteeism attributes nonattendance to the child. However, for reasons described earlier, the child-motivated/non-child-motivated distinction may be hard to apply. Furthermore, Kearney suggested that each episode of child-motivated school refusal behavior be placed on a severity spectrum running from mild (“school attendance under

duress and pleas for nonattendance”) to severe (“complete absence from school for an extended period of time”), capturing both acute school refusers (2-52 weeks in duration) and chronic ones (over one year in duration).

Third, it was recommended that the proposed definitional model be employed to assist communication among professionals and to facilitate research in multiple disciplines that is more congruent and complementary than existing models. Under this suggestion, Kearney identified the need to clarify and delineate prevalence rates of different kinds of absenteeism for different types of children. However, his discussion of possible demographic factors was limited only to potential age effects. Fourth, Kearney proposed that the model be used to select appropriate targets for assessment and treatment by attending to variables such as the severity, history, and potential sources (child- vs. non-child-motivated) of absences. Under this, he suggested that attention be paid to factors that predict treatment change (or no change). As will later be discussed, these factors are of paramount importance to the populations that are the focus of this paper (low-SES, urban, ethnic minority families).

Fifth, Kearney identified tools and best practices to be used in the assessment of attendance problems, including urging that family factors be considered, particularly for extended absences. Sixth, Kearny proposed that broad treatment strategies be developed and implemented to help the wide range of children experiencing attendance difficulties. These strategies, he argued, would most likely build on present treatments that stress cognitive-behavioral techniques addressing mastery of worry and parent training in contingency

management and discipline. Seventh, he recommended that professionals across disciplines interact to establish and maintain an understanding of how attendance issues are conceptualized and treated. Suggestions included activities such as conferences, web sites, and collaboration on grants. Though Kearney did not address the limited diversity of existing samples in the school refusal literature, his suggestions to reduce or eliminate truancy-school refusal distinctions are broad enough to have wide applicability to diverse samples. Kearney's conceptual recommendations should be used as a general starting point for efforts to assess the characteristics and experiences of school refusing children from all backgrounds.

Studies including nonclinic-referred samples of school refusers have addressed the school refusal-truancy overlap detailed by Kearney (2003) and others. They too have reached the conclusion that school refusal and truancy are not mutually exclusive categories (Berg et al., 1993; Bools et al., 1993; Egger et al., 2003). At the same time, these studies have identified that school refusal and truancy are unable to fully account for the range of problematic nonattendance observed. Berg and colleagues (1993) assessed the relationship of diagnosable disorders and contextual factors with school nonattendance in a sample of 80 British high school students between the ages of 13 and 15. Approximately half of the nonattending children were classified as truants and one-fifth were classified as school refusers. However, they also determined that 14 children in their sample with severe school attendance problems could not be classified as either truant or school refusing. This seems to suggest that, although definitions

of truancy and school refusal may be useful in some situations, they are unable to capture the full range of children exhibiting difficulties with school attendance. Similarly, a study by Bools, Foster, Brown, and Berg (1990) demonstrated that some children in their sample of 100 nonattending students were classifiable as “both refusers and truants” (n=9) or as “neither” (n=14). In both studies, revisions of the Berg et al. (1969) criteria were used to operationalize school refusal and truancy.

In the largest and most recent community study of school refusal behavior, Egger, Costello, and Angold (2003) assessed the associations between identified psychiatric disorders and truancy or school refusal designations. The authors were careful to avoid etiological assumptions for school refusal or truancy and, instead, used what they referred to as “agnostic definitions” to describe the problems. Participants were 1,422 North Carolina children aged 9-16 who were 70% White, 22.4% Native American, and 6% African American. Thirty-four percent had a family member income below the federal poverty level. School refusal behavior was assessed using sections of the Child and Adolescent Psychiatric Assessment (CAPA; Angold et al., 1995) which yielded classifications of *pure anxious school refusers*, *pure truants*, and *mixed school refusers*, based on Berg’s (1969) criteria. Mixed patterns indicated that the pattern of nonattendance varied from day to day or that a school refusal pattern was present, but with a concomitant conduct disorder.

Findings indicated that one quarter of children who met criteria for pure anxious school refusal could also be classified as truant (i.e., a mixed

presentation). The authors also found that no one diagnosis reliably distinguished among types of school nonattenders. In fact, it was determined that three quarters of children with either pure truancy or pure anxious school refusal did not meet criteria for any psychiatric disorder at all. Again, the authors found a very low rate of separation anxiety and suggested instead that these children's school-related fears may result from environmental situations (i.e., their avoidance may have been appropriate or adaptive considering the context). These results mirror findings with older populations that have shown no differences between attending and nonattending groups of Canadian high school students on ratings of anxiety (Corville-Smith, Ryan, Adams, & Dalicandro, 1998).

In their review of the school refusal literature, Pilkington and Piersel (1991) came to similar conclusions as they analyzed the etiological utility of the classic separation anxiety model of school phobia. Specifically, the authors identified three limitations of the separation anxiety approach: (1) methodological problems (e.g., the overreliance on case studies and retrospective accounts), (2) emphasis on family pathology (most specifically the importance of the mother-child relationship), and (3) a resulting lack of research on external causal variables, such as aspects of the school setting that might contribute to aversive reactions. Such empirical and theoretical papers further support the inadequacy and lack of reliability of existing methods of assessment and classification of children displaying problematic nonattendance.

Since differentiation in nonattendance patterns based on the presence or absence of particular traits (e.g., parental knowledge, DSM diagnosis, antisocial

characteristics) has been unsuccessful, it is important to examine whether school refusers and truants can instead be distinguished on the basis of other variables, such as days missed from school. A review of truancy and school refusal studies yields overlapping levels of nonattendance as cutoffs for research inclusion. For example, two studies of truancy by McCluskey and colleagues (2004) and Robins and Ratcliff (1980) used a cutoff of 20% of school days missed as their threshold criterion for inclusion. Studies of school refusal have ranged from as much as 40% nonattendance (e.g., Berg et al., 1993) to 20% (Bernstein et al., 1999; Bernstein et al., 2000; Layne et al., 2003) to as low as 15% (Heyne et al., 2002) or 10% (Last et al., 1998) of school days missed. Egger et al. (2003) even reported frequencies of half-days missed over a three month period that corresponded to approximately 3%, 5.5%, and 28% nonattendance for anxiety-based school refusal, truancy, and mixed presentations, respectively.

These levels of nonattendance represent a mixture of researcher-imposed inclusion/exclusion cutoffs and mean levels of absence found in study samples (many of which used anxiety-based definitions). Interestingly, few of the studies of school refusal that did not use a set cutoff level for participant inclusion have reported the range of nonattendance levels observed. However, existing data indicate that the nonattendance rates in school refusing samples can range from 0% to over 90% (C. Kearney, personal communication, June 30, 2006). This information calls into question the use of absenteeism rates as a primary criterion for identifying children exhibiting school refusal behavior. Instead, it might be most useful to identify other factors that could prove to be precursors to eventual

school refusal behavior. For example, favorable cognitions regarding school avoidance and school refusal behavior, or *school refusal ideation*, should logically precede identifiable levels of behaviors designed to bring about the goal of school absence. Although he has never explicitly identified the concept of school refusal ideation, Kearney (2003) has frequently suggested that school refusers include children and adolescents who actively desire to miss school "but have not yet reached that goal" (p.60).

The data presented above suggest that problematic presentations, at least those that warrant referral for services, can exist at any level of nonattendance, even in children who do not miss school. Ultimately, it might prove useful to assess for the presence of school refusal ideation when attempting to identify or intervene early with children who have not been clinically referred for school refusal behavior. Steps to encourage similarities in the terminology and definitions used by different professionals dealing with problematic nonattendance will be important in reducing the negative consequences of the division discussed below.

Effects of the Truancy-School Refusal Distinction

Although empirical research has failed to substantiate a clear distinction between school refusal and truancy, the use of both remains widespread. School refusal has been defined as "child-motivated refusal to attend school or difficulties remaining in school for an entire day" (Kearney & Silverman, 1996) while truancy is often described similarly, but including "antisocial characteristics" (Berg et al., 1969) or a lack of parental knowledge about the

absence (Berg et al., 1993; McShane, Walter, & Rey, 2001). Both contain similar levels of days missed. Unfortunately, the continued use of the two labels has carried with it a number of undesirable effects. First, a label of truancy immediately evokes punitive connotations simply because it is a legal term. While school refusing children often conjure sympathy, truants are seen as deviant and deserving of reprimand. Since school refusal is more of a psychological term, it may be that individuals categorized as such are determined to be less personally responsible for their status and more worthy of treatment than deserving of penalties. In the study of social cognition, biased responsibility judgments have repeatedly been shown to affect determinations of deservingness and punishment (e.g., Weiner, 1993). As a result of such value judgments and the legal nature of the term truancy, individuals with the label and their families are more likely to be subjected to punitive and legal rather than empowering interventions such as individual or family therapy. For example, in a study further documenting the overlap and inconsistency of school refusal and truancy, Berg and colleagues (1985) found that 20% of a sample of British youth who had become court involved due to nonattendance were, by their criteria, classifiable not as truant, but as school refusers. However, only a very small number of the participants had been referred for mental health services. Nevertheless, despite the frequency with which they are applied, research has repeatedly demonstrated that the use of courts, police, and other legal interventions are largely ineffective with chronically truant youth (Epstein & Sheldon, 2002; Hoyles, 1998).

Along with the punitive bias that accompanies truancy classifications, another consequence of the distinction between truancy and school refusal is a tendency to view truant populations as more homogenous than school refusing groups. School refusers treated at mental health clinics usually receive a psychological assessment to determine the multiple influences impacting their situation. Intervention is usually with an individual child or child and her family in combination (e.g., Heyne et al., 2002; King et al., 1998; Last et al., 1998). In contrast, intervention programs for truancy most often take the form of broadly applied formulas that fail to consider the specifics of each child's condition. For example, McCluskey, Bynum, and Patchin (2004) described a truancy intervention conducted under the federal Operation Weed and Seed initiative that applied the same intervention steps to all participants. Chronically absent children eligible for the intervention were identified as having missed more than 20% of school days. Five stages of intervention were included in the study ranging from low-severity actions such as letters sent from principals to parents to higher-severity ones such as referral to mental health agencies (usually for "long-standing" family problems) and visits to the home with police officers to stress the importance of school attendance. At the most extreme end of the intervention, parents were prosecuted under state compulsory attendance law. Little attention was paid to what the best treatment might be for an individual child as each was subject to the same progression through similar stages of severity. A very small number (6%) of participants were referred for psychological services. Such unwavering adherence to the established intervention protocol seems to exemplify

the common view of truant students as a population to be punished rather than treated according to their needs.

The effects of the truancy-school refusal distinction are also perpetuated by the mental health systems with which some school refusers interact. If the school refusing individual is from a family that relies on health insurance to cover mental health costs, a classification of school refusal is insufficient to receive reimbursement because it is not a recognized diagnosis. The effect is that, in nearly all cases, a DSM-IV diagnosis is also required to initiate and maintain treatment. Since numerous studies of school refusal have indicated that it is very common for school refusing children and adolescents to not qualify for a diagnosis at all (e.g., Berg et al., 1993; Egger et al., 2003; Kearney & Albano, 2004), this requirement makes it difficult for many school refusers to receive appropriate treatment. Consequently, the only options available to address problematic nonattendance with these children are the punitive or legal interventions applied in the truancy domain. Though truancy labels avoid the stigma of mental illness and, therefore, might be preferable to families particularly sensitive to the effects of that stigma, the costs and consequences of encounters with the justice system probably outweigh any potential benefits. The artificial, but commonly used, distinctions between school refusal and truancy seem to inhibit the delivery of appropriate intervention services to many families in need. To combat this, a reliable and valid classification system is needed that dismantles bias, includes a variety of contextual factors, and can demonstrate

effectiveness with a more diverse population than has traditionally been included in school refusal research.

Populations in School Refusal Research

In addition to the problems with definition and labels in school refusal studies, serious biases exist in the field because of the populations most commonly studied. Low-SES, urban children with diverse ethnic backgrounds consistently demonstrate some of the worst attendance records and are at greatest risk for dropping out of school. Nevertheless, using definitions of refusal put forth by authors such as Berg et al. (1969) and Kearney and Silverman (1996), the bulk of school refusal research has excluded these populations. The result has been an overwhelming focus on populations, both foreign and domestic, that make direct generalization to the most common nonattending groups in the United States difficult. Many studies of school refusal have relied on Australian (e.g., Heyne et al., 1998; Heyne et al., 2002; McShane, Walter, & Rey, 2001 & 2004) and British (e.g., Berg et al., 1993; Bools et al., 1990; Huffington & Sevitt, 1989) samples that are of questionable relevance to urban America. In the United States, participants are often clients at university-based school refusal clinics (e.g., Bernstein & Garfinkel, 1988; Heyne et al., 1998; Kearney, 2002; Kearney & Albano, 2004). The applicability of findings from foreign or university-based populations to children and families treated in a community context in the United States is questionable at best.

The lack of ethnic, racial, and economic diversity in school refusal studies is the most striking gap in the entire body of research. Even in more recent work,

many foreign and domestic authors do not bother to report the ethnicity of their participants (e.g., Bernstein, Garfinkel, & Borchardt, 1990; Blagg & Yule, 1984; Foreman, Dover, & Hill, 1997; Gosschalk, 2004; Heyne et al., 1998; Heyne et al., 2002; Kearney & Beasley, 1994; Last & Strauss, 1990; Meyer, Hagopian, & Paclawskyj, 1999). Those that do provide full demographic information report mostly White samples almost without exception. In reviewing the school refusal literature, only two studies could be identified which used a sample that was less than 90% White. Unfortunately, even those two studies do not provide a basis for generalization to African American and Latino individuals since one dealt with a sample of incarcerated juvenile offenders (Kearney, 2002) and the other with Japanese and “multiethnic” children living in Hawaii (Higa et al., 2002).

In 2002, Kearney described the revised version of the School Refusal Assessment Scale (SRAS-R). Two samples were employed to assess the psychometric properties of the revised version of the SRAS. One sample (n=115) was referred to as “diverse” in that it included less than 50% White children (47.8% Caucasian, 16.5% African American, 13.0% Latino, 9.6% Mixed Heritage, 3.5% Filipino/Asian, 2.6% Native American, 7.0% Unreported) and was drawn exclusively from a juvenile detention facility. The other sample was over 96% White and came from a university outpatient clinic for school refusal behavior. The use of a sample of incarcerated youth to gather “diverse” participants to norm the SRAS limits the generalizability of the norms. It will be important for future research to generate more representative normative samples, most likely through the increased use of community studies.

The other ethnically diverse school refusal study, conducted by Higa, Daleiden, and Chorpita (2002), established the psychometric properties and clinical utility of the SRAS in a multiethnic sample of Japanese American, Caucasian, Native Hawaiian, and other ethnic groups living on the Hawaiian Islands. The authors determined that the SRAS (especially the dimensions measuring negative reinforcement) is an effective instrument for use with their multiethnic sample of school refusing youth. While this study represents a groundbreaking extension of the school refusal literature to less frequently studied populations, its applicability to low-income, urban, ethnic minority individuals is unknown. However, it does suggest that the SRAS can be a useful instrument in cross-cultural research. Future studies should continue to broaden the populations to which that and other measures are applicable.

Beyond ethnicity, one possible avenue for the expansion of sample demographics comes along economic lines. School refusal research as a whole has not included a wide variety of individuals at various levels of socioeconomic status. However, enough studies have described the SES of their participants to indicate that there is slightly more socioeconomic than ethnic diversity within and between samples. Those that have reported SES generally described lower middle class participants (Bernstein et al., 1991; Bernstein et al., 1999; Layne et al., 2003; Waldron et al., 1975); however, studies that actually report those data are in the clear minority, and little information is available overall with regard to the economic status of samples within the literature.

In addition to the issues of SES, differences by age have not always received due attention in school refusal research. Samples sometimes span wide age ranges such as 5-15 (King et al., 1998) or 6-17 years (Last et al., 1998), but spend little time discussing the role of age or developmental differences. Despite the lack of attention in some school refusal studies, the importance of age seems clear. Kearney and Silverman (1993) discovered that younger children were most likely to refuse school for attention-getting reasons (positive reinforcement). They suggested that this early refusal due to attention-getting may later evolve into an avoidant type more concerned with stimuli provoking negative affectivity as more school is missed and the consequences of returning mount (negative reinforcement). With regard to onset, many findings indicate differences by age in the timing of the appearance of school refusal behavior. Ollendick and Mayer (1984) found that school refusal was more likely to occur for age groups that correspond to times of transition, most notably during transitions to new school settings (e.g., entering primary school, going from elementary to middle school, or even from one school to another within the same community). These authors found the highest rates of school refusal behavior between 5 and 6 years of age and later between 10 and 11 years. However, it is unclear if this refusal is due to the transition itself or if the transition simply corresponds with developmental changes at those ages. Interestingly, in a survey of 64 practitioners, Kearney and Beasley (1994) discovered an even distribution of age among clients aged 5-17 for whom school refusal was the primary reason for referral. Nevertheless, even if prevalence rates do not always vary significantly by age, it seems that

presentations and functional categories do. Due to the apparent importance of participant age, clearly specified age ranges must appear alongside full descriptions of population demographics as new school refusal research is conducted and existing samples are continually expanded along the lines of SES and ethnicity.

The Applicability of School Refusal Definitions to New Populations

As previously noted, many of the individuals at greatest risk for nonattendance and dropout (e.g., low-income, urban, ethnic minority children – Chávez, Belkin, Hornback, & Adams, 1991) have received virtually no attention in the school refusal literature. However, in order to expand the research to new populations, definitions of school refusal need to be reconceptualized. To accomplish this, it will be necessary to pay greater attention to cultural norms and other contextual issues and to incorporate them into new definitional and diagnostic procedures. These procedures can build on Kearney's (2003) suggestions for achieving consensus among professionals, such as psychologists, social workers, educators, and criminal justice workers. When considering low-income, urban, ethnic minority individuals engaged in school refusal behavior, family and school issues as well as community context (including peer and community norms regarding the value of education and mental health services, safety while traveling to school, and physical proximity to the school building) should be given increased attention, as should potential interactions among these variables.

Family and Community Factors

The importance of family factors is frequently addressed in the school refusal and truancy literatures. Over the years, many authors have suggested a family contribution to the generation or maintenance of school refusal behavior. Contemporary reviews continue to recommend increased attention to family issues in research (e.g., Kearney, 2001; King & Bernstein, 2001). Early on, the focus on families was influenced by conceptualizations of school refusal that stressed parents' roles in their children's separation anxiety (e.g., Johnson et al., 1941; Partridge, 1939). Later, some authors sought patterns of psychological diagnosis in the families of school refusers. For example, Waldron and colleagues (1975) assessed the degree of psychological and familial dysfunction in the parents of children they identified as "school phobic." They determined that parents of their participants exhibited high levels of both marital discord and psychopathology, with 92% of mothers and 77% of fathers reportedly displaying mild or greater levels of psychopathology. Similarly, Bernstein and Garfinkel (1988) found that the first-degree relatives of school phobic children were more likely than their non-phobic counterparts to exhibit anxiety and depressive disorders. However, since the nonattenders themselves also had diagnosed anxiety disorders, the school refusal behavior may do little to explain this relationship. More notably, in the realm of family functioning (as measured by the Family Assessment Measure – III; FAM; Skinner, Steinhauer, & Santa-Barbara, 1983), school phobic children rated their families as significantly more

dysfunctional on dimensions tapping well defined roles, clear communication, inhibition of negative/painful affect, and difficulty adapting to changing demands.

Later, Bernstein and colleagues (1999) assessed 46 families in which an adolescent was diagnosed with comorbid anxiety and depression and was actively refusing school. The authors administered the Family Adaptability and Cohesion Evaluation Scale – II (FACES II) to mothers in the sample to assess each family’s ability to balance their close relationships with appropriate flexibility. On the basis of the dimensions of cohesion and adaptability, families were dichotomized into “extreme” and “more balanced” (which consisted of mid-range and balanced families). School refusing adolescents in extreme families were significantly more depressed and experienced significantly more somatic symptoms.

Additionally, the dimensions of the FACES II were further subdivided. The cohesion dimension was split into “disengaged” and “connected,” while the adaptability dimension was dichotomized into “rigid” and “flexible.” Adolescents in disengaged families who were refusing school were significantly more depressed than those in connected families. School refusing adolescents in rigid families (e.g., those with strict rules and difficulty with problem-solving/compromising) experienced significantly more somatic symptoms.

Studies have also shown that single-parent homes may be overrepresented in school refusing samples and that those families are more likely to demonstrate high levels of family problems, as rated by the FAM (Bernstein & Borchardt, 1996). Conversely, research by Bowen, Bowen, and Ware (2002) has shown that supportive family relationships (i.e., how well family members can count on one

another for emotional support) can facilitate educationally supportive parenting (i.e., educational parent-child discussions), further reinforcing the influential role family factors play in both increasing and decreasing problematic nonattendance.

In an attempt to devise a comprehensive method to characterize the families of school refusers, Kearney and Silverman (1995) asserted that five separate familial subtypes frequently appear in the school refusal population (often in combination with one another). Family types presented were derived from multiple sources in the school refusal literature and included the enmeshed, conflictive, detached, isolated, and healthy styles. The authors stated that children in the enmeshed type of family are inadequately differentiated from and likely to be dependent on one or both of their parents (but traditionally the mother). However, consistent with the diminished role of separation anxiety, they also suggested that this type of family presentation is not as prevalent as once thought. The conflicted family is thought to experience considerable hostility, antagonism, and discord in their regular interactions, which prevents appropriate problem solving surrounding the school refusal behavior.

Kearney and Silverman's detached family functions more as a loosely-organized group of individuals rather than a family unit and the authors suggested that parents may be withdrawn from their children's activities due to feeling suffocated and overwhelmed. The isolated family maintains very rigid boundaries with outside individuals and, consequently, runs the risk of receiving inadequate support from their surrounding community. Finally, healthy families that have ample abilities expressing themselves and solving conflicts can also

produce school refusing children. However, evidence from other studies (e.g., Bernstein et al., 1990) seems to suggest that the healthy presentation may be more likely to coexist with specific individual child diagnoses such as anxiety disorders. Kearney and Silverman's system of classification seems to have potential for the assessment and treatment of the wide variety of school refusing families. However, the system is largely theoretically-based and has yet to be investigated empirically with any population. Until their work can be assessed in this manner, its utility is unfortunately limited.

While informative, all of the studies presented above have relied heavily on clinic-referred populations drawn from White, largely middle-class backgrounds. Paralleling the school refusal field as a whole, the vast majority of research on school refusers' families has focused on children displaying symptoms of anxiety and depression. One of the few exceptions to the lack of clinic-referred samples is a study by Corville-Smith et al. (1998), which identified six variables that significantly distinguished Canadian high school attenders from nonattenders. Among these six were three prominent factors related to family functioning. Nonattenders perceived their parents to be less consistent disciplinarians, but indicated higher levels of parental control and more perceived family conflict than regular attenders. The other three variables included students' school perceptions (nonattending students were less satisfied with school), students' academic self-concept (lower for nonattenders), and students' social competence in class (lower for nonattenders). Parental discipline and control were both measured using the Children's Report of Parental Behavior Inventory

(CRPBI – Revised; Kawash & Clewes, 1987) while perceived family conflict was measured using the Family Environment Scale (FES; Moos & Moos, 1994a). In combination, these six variables successfully predicted 91% of the student groupings of attenders versus nonattenders. Though student dissatisfaction with school demonstrated the single greatest predictive effects, family factors alone accounted for significant variation in the sample.

Considering these findings, it seems that interventions designed to be implemented at the family level (e.g., Cicero, 1997; Wetchler, 1986) are not at all misplaced, and more in-depth understanding of relevant family factors is essential to proper assessment and intervention with school refusing populations. All of the studies presented above suggest difficulties in functioning in the families of anxious/depressed school refusing youth, including parental pathology and marital and familial conflict. However, few studies have been conducted that assess the characteristics of the families of non-referred school refusers, who may not display clinical levels of anxiety or depression or who may be from ethnic or economic groups particularly susceptible to problematic nonattendance. As a consequence, the extent to which family functioning variables, such as family organization and parental control, are predictive of school refusal behavior in the general population is largely unknown. The work done by Corville-Smith et al. (1998) suggests that family functioning is indeed influential in some community samples, but the applicability of the findings from their sample of Canadian high school students to urban, ethnic minority youth in the United States is unclear. Low levels of family organization and control have the potential to create a home

environment characterized by uncertainty. Children and adolescents reared in such a setting might experience heightened difficulty spending time away from their parents or worry about their well-being. In this way, family factors such as organization and control are likely connected to the attention-getting dimension of the functional model of school refusal behavior (Kearney & Silverman, 1993), which deals with thoughts about parents and desires to be with parents during the school day.

In addition, family structure seems to have considerable potential to affect the behavior of would-be school refusing youth. Previous research has identified links between single-parent households and school refusal behavior (Bernstein & Borchardt, 1996), but no studies have examined other facets of family structure, such as the number and age of other children present in the home. It is conceivable that high numbers of children in the home who are not yet school aged could have a significant effect on a student's feelings about school attendance. Demands placed on parents by the presence of multiple young siblings or other relatives at home have the potential to affect the amount of attention a caregiver is able to provide to older children. Further, young children at home might contribute to an environment in which parents are less able to set firm limits for older children, due to practical constraints. Early adolescents remaining home during the school day might have greater access to fun activities in such households and, inadvertently, be reinforced for school nonattendance. The scenarios above have relevance to the positive reinforcement dimensions of the functional model of school refusal (Kearney & Silverman, 1993), specifically

attention-getting and tangible reinforcement. This could have particular relevance to low-income, ethnic minority families, which may function in a less organized manner due to persistent environmental stressors.

Furthermore, low-SES, ethnic minority families may differ considerably from existing samples given cultural differences in the meaning or presentation of family relationships. For example, in low-income, African American families, relationships with parents are often accompanied by regular contact with extended kinship networks (Boyd-Franklin, 1989), and the presence of these supportive connections has been associated with psychological well-being in adolescence (Taylor, 1996). While such extended family relationships do not negate the importance of immediate family relationships, they do begin to blur the boundaries between family and community factors in the lives of school refusing youth as they paint an ever-broadening picture of influence.

Though family factors are commonly referenced in the school refusal and truancy literatures (e.g., Bernstein et al., 1996; Bernstein et al., 1999; Bernstein & Garfinkel, 1988; Bowen, Bowen, & Ware, 2002; Burley & Harding, 1998; Cerio, 1997; Chávez et al., 1991; Corville-Smith et al., 1998; McCliskey, Bynum, & Patchin, 2004; Waldron et al., 1975), there is insufficient attention paid to cultural differences in family structure, values, and behavior. Ethnic minority families are less likely to utilize mental health services even with comparable or greater need than non-minorities (Rawal, Romansky, Jenuwine, & Lyons, 2004; Snowden, 1999). Additionally, minority families who do seek treatment are less likely to continue receiving services for the recommended period (Sue, Fujino, Hu,

Takeuchi, & Zane, 1991). It is important to consider these differences in light of the truancy-school refusal distinction because those families who do not seek or who discontinue treatment in a mental health setting are less likely to have their problematic nonattendance conceptualized as school refusal due to less contact with professionals who would classify it as such. Indeed, some have suggested that a large proportion of the school refusing population frequently goes unreferral for mental health services (e.g., Pilkington & Piersel, 1991).

As a result of the above, many low-SES and ethnic minority families may, by default, become more vulnerable to the punitive actions taken by the legal system, which accompany a truancy label in the absence of a family's involvement with mental health services. Consequently, school refusing children in these families are not receiving proper assessment and treatment for their problems. The extent to which this biased process is operating, however, is difficult to determine because of the small number of non-clinic-referred studies that have been conducted, only one of which was an epidemiological study of community prevalence rates (Egger et al., 2003). Therefore, it is largely unknown how many children, minority or otherwise, are routinely assigned a truancy designation when psychological services may be indicated. Two of the existing community studies have focused exclusively on high school students (Berg et al., 1993; Bools et al., 1990) and produced results that cannot immediately be applied to younger samples, since refusers of different ages may present different patterns of behavior. Many have called for an increase in community studies of school

refusal (e.g., King & Bernstein, 2001) and further research that addresses the needs of some of these underreferred families is certainly warranted.

It is important that such community studies also provide an understanding of each family's interest in education and the value placed on academic attainment in the surrounding neighborhood. Parental educational level is inversely associated with child absenteeism (US DHHS, 1997), and a better understanding of the specific factors responsible for this link could aid in nonattendance assessments. In the African American community, for example, the percentage of adolescents' relatives who have completed high school is significantly and positively correlated with favorable academic outcomes (Williams, Davis, Cribbs, Saunders, & Williams, 2002). Familial patterns seem to exist with regard to academic orientation and achievement. As one contributing factor to these patterns, some theorists have proposed that stigmatized groups selectively devalue, and even avoid, those dimensions on which they believe their group performs poorly (e.g., Crocker & Major, 1989; Phemister & Crewe, 2004). School refusal behavior is one potential consequence of such an evaluation, in that it limits one's exposure to a setting where negative outcomes are anticipated. Furthermore, Crocker and Major (1989) suggest that determinations about the value of academic achievement can have their origins either in personal experience or in perceptions of one's group's general abilities in that domain. For example, in low-income, urban, African American communities, the general lack of educational attainment (US Census, 2004) may provide confirmatory information to children about the abilities of their group. With

regard to experiences of the individual, there are clear parallels between Kearney and Silverman's negative reinforcement dimensions, especially "escape from aversive social or evaluative situations," and the devaluation proposed by the social stigma approach; both tend to promote self-esteem protection.

Similar to the cultural and familial influences on academics described above, research studies have also established strong links among peer group members regarding academic orientation and success (Kindermann, 1993; Kindermann, McCollam, & Gibson, 1996). In addition, authors have suggested that some forms of school nonattendance have become increasingly social, in that students missing school are more likely to do so with their peers (e.g., Reid, 2003). These enjoyable and social activities while not attending school are specifically addressed by the tangible reinforcement dimension of the functional model of school refusal. Further investigation into the social context of early adolescents' school nonattendance is necessary in order to understand the role peer norms play in the development and maintenance of school refusal behavior.

In their literature review on school refusal, Pilkington and Piersel (1991) detailed the importance of additional contextual factors for school refusing youth. They concluded that school refusal should first be addressed with attention paid to potential external factors that might be providing negative reinforcement for nonattendance in order to avoid aversive school-related stimuli before turning to intrapsychic explanations. Numerous external etiological factors were suggested such as characteristics of the schools themselves (e.g., size), parent-school connections, classroom routine, classroom practices that make performance

particularly salient, and the impact of physical and psychological confinement imposed on students. Exploration of these factors also seems to fit with the functional model of school refusal behavior assessment and the dimensions derived from the School Refusal Assessment Scale (Kearney, 2002; Kearney & Silverman, 1993). Since many of the schools serving low-income, urban areas can be rather aversive, a student's desire to avoid those settings is actually quite reasonable. The aversive characteristics include physical attributes such as the building itself and social characteristics such as negative teacher-student interactions as well as threats to physical safety from bullies or gang activity.

The overlap between familial and contextual factors (e.g., child and parental perceptions of school, community norms) in school refusal is obvious, and both need to receive adequate attention in future research with this population. Indeed, in a 2003 study, Zhang asserted that one of two general factors, "familial circumstances" and "schools which may not be well organized to meet a pupil's needs" is present in most instances of school absenteeism. Additional study is warranted to address each of these broad factors as well as the interactions between them for the purposes of assessment and, ultimately, treatment of school refusal.

Family-School Connections

Some work suggests that parents who do not place a high premium on education might be less likely to interface with the school on a regular basis (e.g., Clark, 1983). However, others (e.g., Ogbu, 1994) contend that ethnic minority parents' ambivalence about contact with the school system is largely rooted in the

distrust of systems with which they have experienced discrimination and other negative events. The process is thought to operate fairly independently of an objective appreciation of education. Ogbu (2004) has suggested, largely theoretically, that an active African American “oppositional culture” will often reject academic achievement and other activities outright that may constitute “acting White.” Whatever the origin, this observed lack of communication between parents and schools can inhibit the timely resolution of school refusal behavior through delayed identification, fewer referrals to professionals for treatment, or hindered implementation of plans to increase attendance.

The child’s home environment and the school are two of the most relevant settings involved in school refusal behavior. While each has been independently assessed in school refusal research, the connections and interactions between these settings have garnered little attention in the school refusal literature. This is true despite recommendations by organizations such as the US Office of Educational Research and Improvement (1992) that greater intervention success can be anticipated if parents, teachers, and other players from multiple systems work together to identify attendance solutions. In contrast, research into inter-setting connections between the home and school environment is plentiful and ongoing in the broader education literature (e.g., Barnard, 2004; Bridgemohan, van Wyk, & van Staden, 2005; Flouri, 2004; Flouri & Buchanan, 2004; McWayne, Hampton, Fantuzzo, Cohen, & Sekino, 2004; Thurston, 2005). The results from those studies suggest that many aspects of parent involvement are associated with attendance and are applicable to school refusal behavior. Empirical findings have

demonstrated that practices which facilitate connections among families, schools, and communities predict lower levels of nonattendance (Epstein & Sheldon, 2002). Other research has shown that some of the strongest predictors of parental involvement in a child's education include teachers' efforts to involve parents in the schooling process (Eccles & Harold, 1993; Epstein, 1991). Indeed, studies have documented that parent behaviors such as participation at a child's school, membership in a parent-teacher association, parental monitoring of students' behavior, and parent-child discussions about school-related topics can all have a positive impact on a child's attendance behavior (Astone & McLanahan, 1991; Duckworth & DeJong, 1989; McNeal, 1999). Within the field of psychology, Kearney (2001, p198) has similarly listed "poor parental motivation to address a child's initial school refusal behavior" and, more generally, "poor parent-school official communication" as notable variables that can contribute to ongoing problematic nonattendance.

These types of variables, which represent communication and activity between settings, may be best conceptualized using Bronfenbrenner's (1979) Ecological Systems Theory. Ecological Systems Theory simultaneously attends to multiple settings and levels of influence that affect a developing child. At the most immediate level, an individual interacts directly with different *microsystems* such as family, school, and peers on a regular basis. *Mesosystems* provide informational or interactional links among various microsystems. Bronfenbrenner defined the mesosystem as "a set of interrelations between two or more settings in which the developing person actively participates" (Bronfenbrenner 1979, p. 25).

These may take the form of established structures such as parent-teacher associations or less formal phone contact between two friends' parents. Both of the variables suggested by Kearney (2001) and listed earlier (i.e., parental motivation, parent-school communication) affect the strength of the family-school mesosystem.

Moving outward, the *exosystem* includes societal structures that, while exerting an indirect influence, have no direct impact on the individual (e.g., local governments may pass laws or ordinances that affect how an adolescent conducts herself, but that adolescent may have no contact with those bodies). Finally, at the most global level, an individual is influenced by the surrounding *macrosystem*, which includes societal/cultural (and subcultural) norms, customs, and values. This system of social structures influences all subsequent levels of the model, often indirectly.

Mesosystemic links between the family and school settings are the most widely studied type of mesosystem, seemingly because the relevance of family-school links transcends the boundaries of the ecological systems literature, drawing the interest of researchers in the fields of education and child development. According to Bronfenbrenner, mesosystem links may take multiple forms and come to be represented in the cognitive, affective, and behavioral profiles of individuals serving as *primary* or *supplementary links*. *Primary link* individuals establish the basic existence of a mesosystem by interacting in two distinct microsystems (e.g., a child who is a member of a family and a student enrolled in a school) while *supplementary links* refer to significant others who

serve as additional inter-setting participants (e.g., parents who interact with their children's teachers and school). When mesosystems are discussed, it is often these third parties – outside of the focal individual – who receive the most attention.

According to Bronfenbrenner's theory, mesosystemic links can take one of four general forms. While each of these forms connects two microsystems, they vary in the amount to which they directly establish a link and the way the link manifests itself in the environment. Nevertheless, only one of these forms is necessary to constitute the presence of a mesosystem. Additionally, mesosystemic links may be conceptualized as containing behavioral, cognitive, or affective components.

Multisetting participation is the simplest and most direct form of mesosystem connection. These types of links are established when a participant in one setting enters and interacts in another. Most often, the individual serving as the focal point of the ecological system (the primary link) creates these links as she moves into each new setting. For example, a child who goes to summer camp for the first time immediately creates links between the camp setting and all other settings in which she regularly interacts.

Third party supplementary links interact between settings and serve as intermediaries making it unnecessary for participants in the settings to meet with one another. It is this type of *indirect linkage* that Bronfenbrenner describes as the second type of mesosystemic connection. In a child's life, her friends may be linked to her parents indirectly through her friends' parents (the supplementary

links) in addition to being linked through her multisetting participation. Though her friends and parents might not interact regularly or at all, the link between them is an important part of the child's total social network.

The third and fourth forms of mesosystemic connections are *intersetting communications* and *intersetting knowledge*. The former refers to the transmission of information from one setting that is specifically intended for individuals in another. These types of communications may be one- or multi-sided and can occur in face-to-face interactions or through any medium imaginable. Phone calls, e-mail messages, and letters are all methods of intersetting communication. *Intersetting knowledge* is sometimes the result of intersetting communication and contains any amount of information an individual in one setting holds about another. A parent's knowledge about a child's homework activities is a prime example and one commonly included in measures of home-school links.

Numerous measures exist that tap dimensions of school involvement even though many do not explicitly refer to the home-school mesosystem (Campbell, 1994; Carter & Wojkiewicz, 2002; Crosbie-Burnett, n.d.; Desimone, 1999; Sartor & Youniss, 2002). One exception, the Parent-School Mesosystem Scale (parent-report version; Crosbie-Burnett, n.d.) measures emotional ("I would feel comfortable telling my child's teachers about important changes in our family"), behavioral ("During the school year, how many times did anyone from the school communicate something good/bad about your child?"), and cognitive ("I understand the school's rules and practices") dimensions of the home-school

relationship. Others, such as the Parent-Teacher Involvement Questionnaire (PTIQ; Conduct Problems Prevention Research Group, 1995) include items addressing similar components, but never refer to the mesosystem directly.

Investigation into the mesosystemic links between the home and school settings of school refusing youth has the potential to yield valuable information for use in the prevention of school refusal behavior as well as assessment and intervention for already-identified school refusers. Parents and schools who have few ties may be less likely to identify early school refusal behavior and, consequently, those children may progress to greater levels of severity before intervention is attempted or is successful. Furthermore, for families who have strong connections to the school, treatments could be strengthened quite readily by utilizing those existing links.

Additional Contextual Factors

Another issue of critical importance to the problem of school refusal stems from the discipline practices in the schools in which many of the most problematic nonattenders are enrolled. Therefore, it seems important to assess if school refusal behaviors (e.g., disruptive or defiant behavior) exhibited in the school setting during the day are more likely to result in long-term refusal as a function of the quality of the school and the degree to which the school is equipped to handle behavior problems internally. Kearney (2003) has suggested that school refusal occurs along a continuum and that some refusers may begin with milder presentations: “School refusal behavior thus includes youths who ‘successfully’ miss school as well as those who try to miss school but have not yet

reached that goal” (p.60). At the less severe end of the spectrum are children that seek to be sent home from school because they are rewarded with access to the home setting and negatively reinforced by escaping from the aversive school environment. If these children are repeatedly sent home by the school for behavior problems or somatic complaints, it is doubtful that they would be correctly identified as school refusers.

Other community influences on attendance patterns beyond the characteristics of the schools themselves include the level of social support available to the family. Barth (1984) found that parents who have lower levels of social support available to them have greater difficulties getting their children to attend school. Similarly, Bowen, Bowen, and Ware (2002) placed parenting in a community context and asserted that parents' abilities to be supportive of their children in general are influenced by the levels of social support and stress they experience outside of the family. The authors found that neighborhood social disorganization (as perceived by adolescents) made a substantial contribution to their model of family influences on educational behavior, which included indices of school social behavior (e.g., fights and suspensions), grades, and attendance (e.g., frequency of cutting, tardiness, and other absences). Further variables of importance may include physical danger (e.g., community violence) encountered on the way to school each morning or home in the afternoon. Work such as that done by Barth (1984), Bowen et al. (2002), and Pilkington and Piersel (1991) suggests a need for research with school refusing children that extends beyond the influences of the immediate family to the broader context of the community. The

current research will build on these efforts in order to address the multiple contexts (e.g., community, family, school) in which refusal behavior takes place and their connections to different functional presentations.

Rationale

The school refusal literature has undergone considerable change since its inception in the late 1930s and early 1940s. The field has expanded in terms of definitions and assessment, but the demographics of children studied in school refusal research have remained largely unchanged over the same period of time. White, middle-class samples suffering from clinical levels of anxiety and depression still dominate research domestically and abroad. Some of the populations most likely to experience problematic nonattendance (low-income, African American youth) are underrepresented in school refusal studies. These children are also those least likely to interface successfully with the mental health system and are instead labeled truant. As a result, they remain at increased risk for interventions that punish rather than empower individuals and families. Further, no models of assessment exist that consider the variability of low-income, urban, ethnic minority children experiencing school refusal or the myriad of contextual factors that affect the function their refusal serves or the likelihood that they will “successfully” refuse. Theoretical work by Pilkington and Piersel (1991) and an empirical study by Bowen and colleagues (2002) suggest that including measures of school and community context can enhance models of family and other influences on school-related behavior. Groupings of potential protective factors for school attendance at various ecological levels (individual, family, peer, school, community) may provide useful insights into where to place prevention and intervention emphases. However, fuller description of the under-researched school refusing population is necessary as a first step before

intervention procedures can be developed. In addition, investigation into trends by gender and age in the multilevel variables measured will yield assessment and intervention efforts that are more tailored to the needs of different subgroups.

The current study moves away from the traditional truancy-school refusal distinction toward a more integrated system of assessment and categorization that stresses multi-level variables in a sample of low-SES, urban, African American early adolescents. In assessment and intervention efforts, an emphasis on individual, peer, family, school, and community variables, which exceed the scope of traditional school refusal assessments, has the potential to identify school refusers early and adjust their behavior quickly so as to deviate from a trajectory toward increasing absence and potential dropout.

Ecological systems theory is a potentially valuable perspective from which to understand the multiple contexts that affect school refusal behavior, because it simultaneously attends to different settings that influence the developing adolescent and incorporates the connections between or among settings rather than treating them as completely independent entities. Mesosystemic connections between the microsystems of families and schools have received considerable investigation (e.g., Coatsworth, Pantin, McBride, Briones, Kurtines, & Szapocznik, 2002; De la Sierra, 2001; Eccles & Harold, 2002), but the conceptual framework has not yet been applied to school refusal populations. The current study strives to fill these gaps and examine interactions between the parent and school microsystems (i.e., Home-School Mesosystem connections) as well as

influences at numerous other ecological levels (microsystemic and macrosystemic) that may predict school refusal behavior.

The individual and ecological variables hypothesized to co-occur with school refusal behavior were selected based on a review of the school refusal and truancy literatures. Variables were chosen because of their ability to predict the severity of school refusal behavior present as well as their anticipated potential for discriminating among groups of children exhibiting school refusal behavior and categorized by different functional dimensions (based on findings from the School Refusal Assessment Scale – Revised). Identified variables can be broadly grouped into those associated with the individual (e.g., social skills, grades, life transitions); various microsystems such as the family (e.g., family relationships, family size/structure, family achievement orientation), peers (e.g., peer academic orientation), and the school (e.g., perceptions of the support and safety available in school); the home-school mesosystem (e.g., communication between parents and teachers/school personnel); and the broader macrosystemic influences of the community (e.g., neighborhood violence/safety, individuals available to serve as models of academic achievement, neighborhood youth delinquent behavior). The current study expands upon previous nonattendance research to determine variables that account for differences in school refusal behavior in a low-income, urban, African American sample. Validated assessment of the factors significantly associated with different types of school refusal behavior will allow for more efficacious and targeted approaches to remediation.

Statement of Hypotheses

- I. The degree to which children are exhibiting school refusal behavior can be predicted by assessing a range of variables at different levels of a family's ecology.
 - Ia. The presence of unexcused absences will be *negatively* associated with identified micro- and mesosystemic protective factors. These include:
 - i. The presence of individuals who serve as models of academic achievement (including immediate family, extended family, and community)
 - ii. Family achievement orientation (FES subscale)
 - iii. The strength of the parent-school mesosystem (as measured by the Student Mesosystem Perceptions Scale)
 - Ib. The presence of unexcused absence will be *positively* associated with individual and macrosystemic variables including...
 - i. High levels of individual transitions experienced – both school-based (e.g., switching schools/classrooms) and home-based (e.g., moving to a new residence)
 - ii. Neighborhood social disorganization (which is comprised of the neighborhood support, youth behavior, and safety subscales on the School Success Profile).

II. Using a strategy that emphasizes the broad function of school refusal behavior (i.e., dimensions of positive and negative reinforcement) and the context in which it occurs, predictions can be made along different dimensions for children exhibiting school refusal behavior for the purpose of assessment.

IIa. The amount to which school refusal behavior is rooted in negative reinforcement will be predicted by variables associated with the *school microsystem* including...

- i. Low academic achievement (i.e., grades)
- ii. Poor peer social skills (teacher ratings)
- iii. Perceptions of the school environment as unsatisfying, unsupportive, or dangerous (school satisfaction, teacher support, and school safety subscales of the SSP).

IIb. The amount to which school refusal behavior is rooted in attention-getting behavior will be predicted by variables associated with the *family microsystem* including...

- i. Low levels of parental organization (FES subscale)
- ii. Low levels of parental control (FES subscale)
- iii. High numbers of youths not yet school aged in the home.

IIC. The amount to which school refusal behavior is rooted in tangible reinforcement will be predicted by...

- i. High numbers of youths not yet school-aged in the home (a *family microsystem* variable)
- ii. The extent to which students' friends are academically oriented (a *peer microsystem* variable assessed by selected items from the friend behavior subscale of the SSP).

Research Question

- I. How do the families of children exhibiting some degree of school refusal behavior differ from those who do not on measures of student perceptions of internal family functioning (cohesion, expressiveness, and conflict on the FES)?

CHAPTER II

METHOD

Research Participants

Schools were considered for participation based on data published by the Chicago Public School Department of Data Management (2005). To be considered, schools needed to meet the following criteria: (1) At least 90% of the student body is classified as low-income and (2) The student body was at least 97% African American. School programs were also classified as “general,” meaning that charter, magnet, and special education schools were ineligible. All students enrolled in regular education classrooms were eligible to participate regardless of attendance history. Participants were 174 urban youth in grades five and six recruited for the study from three different elementary schools. One participant was excluded from the analyses due to his status as a home-schooled student. The 173 remaining subjects were predominantly African American (n=171) with one subject reporting her ethnicity as Native American and another of unknown ethnicity. Subjects were 54% female with a mean age of 11.65 years (s.d.=.83). Participants were equally divided between 5th and 6th grade.

Due to difficulties imposed by active consent procedures, which were required by both the DePaul IRB and Chicago Public Schools, the resulting sample was restricted to those children who were able to obtain their parents’ written permission for participation.

Procedure

Recruitment

All recruitment and data collection procedures were approved by the DePaul University Institutional Review Board prior to project initiation (IRB protocol #AL022006PSY). Once a large sample of schools meeting criteria for socioeconomic status and ethnicity was identified, a convenience sample of three schools was selected based on proximity to the academic institution in which the study was based and the willingness of school personnel to participate. Schools that were not large enough to provide an adequate sample size were also excluded. In all, 14 different classrooms participated. After obtaining administrative approval, study personnel met with the teachers of each identified classroom before or after school or at another mutually convenient time before data collection began. Teachers were informed about the purposes of the study and were given an opportunity to ask questions. All teachers also completed teacher consent forms before the beginning of data collection.

Approximately two weeks prior to data collection at each school, a brief presentation was made to students in each identified classroom that explained the purpose and importance of the research (see Appendix A). Students were also informed of the data collection date for their classroom at that time. Although children displaying problematic levels of unexcused absence were the target of the present research, all students enrolled in participating classrooms were invited to be in the study. Students wishing to participate were distributed parental consent forms along with self-addressed, stamped envelopes for their parents to

return either (1) to the school or (2) by mail to the research lab (Appendix B). While both options were available to all parents, very few consent forms were returned by mail. Attempts were also be made to obtain parental consent at Report Card Pickup Day at participating schools where study personnel provided an overview of the project to parents and answered any questions. Participation consent was obtained for one-third of participants in this manner.

On the days of data collection, students participating in the study were administered assent forms (Appendix B) prior to completion of the measures. These forms described their participation as voluntary and clearly indicated that they could decide not to participate. Additionally, in accordance with IRB protocols, students were asked three questions following review of assent forms to assure their understanding of project goals prior to giving assent. Questions were asked in small group settings and included: “What is the purpose of the study?”, “What are the benefits of participating in the study?”, and “What are the risks associated with being in the study?”. Different students were encouraged to answer, and questions were asked more than once. In order to participate, both parental consent and student assent forms were required.

Data Collection

All students eligible from a single classroom participated simultaneously. A second presentation similar to the initial recruitment presentation was made to all students, which again explained the purpose and importance of the research, on the day of data collection. Students not wishing to participate and those for whom the project was not able to obtain parental consent remained in the classroom and

were provided with an alternative, educational activity conducted by designated study personnel.

Fifty-one percent of the children enrolled across classrooms were able to participate in the project. This excluded those (1) who did not wish to participate, (2) for whom parental consent could not be obtained, and (3) those who were absent on the day of data collection. All student participants in each classroom were assisted by trained undergraduate or graduate research assistants who read all items aloud to students and, without leading student responses, clarified question meaning (see Appendix C for training materials). Survey administration lasted approximately one hour. For their participation, students received a ten dollar gift certificate to McDonald's (an establishment that had been requested by the students in an informal survey) immediately following completion of the student-report measures as compensation for their time.

Teachers of identified students were also administered brief measures that provided data on their level of contact with each participant's parents and each child's social skills. Teachers were also asked to provide attendance and academic data on the participating students using data collection sheets that could be easily de-identified (see Appendix D). All teachers were provided with their data collection materials on the day of data collection, but they were informed that they could complete the materials at their convenience. Materials were retrieved from the teachers either later on the day of data collection or over the subsequent two weeks during follow-up visits. All teachers reported the end date for the

period reflected in their attendance data. For completing the measures, teachers received a twenty-five dollar gift certificate to a local store.

Measures

Individual-Level Variables

Function of school refusal behavior. In order to assess the function of school refusal behavior, the child version of the School Refusal Assessment Scale – Revised (SRAS-R; Kearney, 2002) was used (Appendix E). The SRAS-R includes a 7-point Likert-style scale that ranges from never (0) to always (6). The functional dimensions measured by the SRAS-R include (1) avoidance of school-related stimuli provoking negative affectivity, (2) escape from aversive social or evaluative situations, (3) attention-getting behavior (e.g., tantrums), and (4) positive tangible reinforcement (e.g., watching television). More generally, these four dimensions/typologies may be classified as involving negative reinforcement (1 and 2) and positive reinforcement (3 and 4). Because Kearney (2002) has been unable to successfully differentiate all four dimensions of the school refusal assessment scale using factor analysis, the two negative reinforcement subscales were collapsed into one broad scale of negatively reinforced school refusal behavior in the current research. The two positive reinforcement dimensions, attention-getting behavior and tangible reinforcement, were kept distinct for the purposes of hypotheses testing. Previous research with the SRAS and SRAS-R has demonstrated adequate psychometrics including one to two week test-retest reliability ($\alpha = .68$) for the child version (Kearney & Silverman, 1993). Using the combined samples of mostly White clinic-referred children and incarcerated

ethnic minority children described earlier, inter-item reliability coefficients for the four subscales on the child form ranged from .56 to .78 (Kearney, 2002).

Furthermore, studies have demonstrated significant correlations between the child versions of the SRAS and SRAS-R ($r = .68$), allowing for the cautious application of findings from previous versions to the current SRAS-R. However, even though the SRAS-R is the only instrument designed specifically to measure the factors maintaining school refusal behavior, it has never been applied to a low-income, non-incarcerated African American sample. In the current sample, inter-item reliabilities for the four subscales (Avoidance of Negative Affectivity, Escape from Social/Evaluative Situation, Attention-Getting Behavior, Tangible Reinforcement) were found to be .59, .40, .63, and .62. When the two negative reinforcement dimensions were combined in a reliability analysis, the resulting inter-item reliability was .69, supporting their use as a single construct in the analyses.

Academic and social competence. Academic data were collected in the spring (May) of the academic year in which the study occurred and covered the preceding three quarters (September to April). Grades were obtained from the students' teachers in order to assess their general present and past academic performance in relation to that of their same-grade peers. Some teachers were not able to provide grades for all subjects and others were only able to provide grades from the most recent (third) quarter of the school year. Due to this, grades were calculated based only on the third quarter reading and math grades for all students in the sample.

In order to assess social skills, teachers were administered the Peer Social Skills subscale of the Teacher-Child Rating Scale (T-CRS; Hightower et al., 1986; 1993; Appendix F). The full version of the T-CRS consists of two general domains, one dealing with classroom problem areas, and one dealing with competency areas. Competency areas are further subdivided into empirically-derived subscales assessing Frustration Tolerance, Assertive Social Skills, Task Orientation, and Peer Social Skills. Of greatest interest to the current study, the Peer Social Skills subscale of the T-CRS is comprised of 5 Likert-style items and assesses the degree to which students display age-appropriate social skills with peers and demonstrate the ability to make friends (e.g., “Has many friends,” “Classmates wish to sit near this child,” etc.). Teachers rated how well each item described the students, ranging from “describes [the child] not at all” (1) to “describes very well” (5). The T-CRS was normed on an ethnically diverse sample of students in grades kindergarten through 6th from urban, suburban, and rural communities and separate norms are available for various groups. The Peer Social Skills subscale has demonstrated acceptable to good levels of internal consistency ($\alpha = .91$) and test-retest reliability ($\alpha = .64 - .90$ across samples). In the current research, the Peer Social Skills subscale reliability was calculated to be similarly high ($\alpha = .96$).

Life transitions. In order to assess recent life transitions which may impact school attendance, children completed a checklist, developed by the investigator, of ecological transitions within the past year (Appendix G). Transitions listed include items such as moving to a new neighborhood or city,

transferring to a new school, experiencing a death in one's family or social network, and changes in the composition of people living in the child's residence. Children were also able to indicate that they had experienced another significant change that was not covered by the response options. Total numbers of life transitions reported were tallied to create a summary transition score. Overall, participants reported an average of just over 4 transitions (mean = 4.34, sd = 2.29) within the past year.

Microsystem Variables

Family functioning. Family dynamics and functioning in the families of participants were assessed using portions of the Family Environment Scale – Real Form (FES-R; Moos & Moos, 1994a), which is designed to measure the social atmosphere of the family setting. The measure is comprised of 90 true/false items and may be completed by any family member over 11 years of age with at least a fifth grade reading level (Moos & Moos, 1994b). In the current study, it was anticipated that some participants would not display a fifth grade reading level. As a result, all items were read aloud to participants and brief explanations were provided. Scale items marked “true” are coded either 0 or 1 depending on the valance of the item wording. For items worded positively (e.g., “family members really help and support one another”), true is coded 1 and false is coded 0. For items worded negatively, (e.g., “family members are rarely ordered around”), true is coded 0 and false is coded 1. Approximately half of the scale items are reverse-coded. The FES yields 10 subscales, each composed of 9 items: Cohesion, Expressiveness, Conflict, Independence, Achievement Orientation, Intellectual-

Cultural Orientation, Active-Recreational Orientation, Moral-Religious Emphasis, Organization, and Control.

For the purposes of the current research, the dimensions of Cohesion, Expressiveness, Conflict, Achievement Orientation, Organization, and Control were used. Cohesion measures the degree of support and commitment family members provide to one another, and Expressiveness measures the extent to which family members are encouraged to express their feelings directly. The Conflict dimension taps the amount of open discord within the family. These first three subscales are considered the “relationship dimensions” of the FES in the extent to which they reflect internal family functioning. The next subscale utilized, Achievement Orientation, assesses the degree to which competition and/or achievement are stressed in the family. The use of this dimension is essential when investigating familial emphasis on education. Finally, Organization and Control comprise the “system maintenance” dimensions of the FES. Organization measures the amount of clear structure used in planning for the family and Control provides an indicator of the role of set rules in daily family functioning.

Previously reported Cronbach’s alpha coefficients of internal consistency for subscales utilized in the current study are all acceptable, ranging from .69 (Expressiveness) to .78 (Cohesion) (Moos & Moos, 1994a). The FES and its various subscales have been applied to a wide range of ethnic and economic minority samples in numerous research studies with children and early adolescents (e.g., Coatsworth, Maldonado-Molina, Cooley-Quille, Boyd, Frantz,

& Walsh, 2001; Coatsworth, Maldonado-Molina, Pantin, & Szapocznik & 2005; Plybon & Kliewer, 2001). Studies have used the measure both with entire families and with adolescents alone in order to assess perceptions of family characteristics. Further, specific norms exist for African American and Latino adults and African American adolescents (Moos & Moos, 1994a), making the measure particularly well-suited for work with those populations and the current study.

Inter-item subscale reliabilities for the six subscales used in this study varied considerably. The family relationship dimensions of Cohesion, Expressiveness, and Conflict yielded alpha values of .55, -.45, and .65, respectively. Achievement Orientation yielded a value of .30 and Organization and Control produced values of .53 and .32, respectively. Problematic reliability levels ranging from .34 to .58 have previously been reported for a shortened, earlier version of the FES using a low-income African American sample (Tolan & Wilson, 1990). However, the scale's author has argued strongly against an "over-reliance" on statistical measures of subscale internal consistency and stressed that less diverse samples, such as the purely African American samples used by Tolan and Wilson (1990) and in the current research, are likely to result in lower reliabilities (Moos, 1990). While problems with the measure's reliability do not seem to be confined to the current study, the low alpha values produced by the present sample were attributed largely to the confusing wording of some of the FES items including those negatively-worded (e.g., "Family members are rarely ordered around") and colloquial items (e.g., "It's hard to 'blow off steam' at home

without upsetting somebody” or “If we feel like doing something on the spur of the moment we often just pick up and go”) as well as those assessing more complex concepts (e.g., “We always strive to do things just a little better the next time”). Although attempts were made to clarify meaning and items identified as more challenging were frequently repeated, the lack of adequate reliability precluded the use of the Expressiveness, Achievement Orientation, and Control subscales in further analyses.

School environment. The School Success Profile (SSP; Bowen, Rose, & Bowen, 2005; Appendix G) was used to assess dimensions of the school environment and included the following three subscales: (1) School Satisfaction measures the general level of enjoyment experienced by students when at school and the amount they feel acknowledged and respected in the school setting. The subscale is comprised of 7 positively-stated true/false items (e.g., “I am getting a good education at this school”) scored 1 (true) or 0 (false). A summary score is created by tallying the number of “true” responses. (2) Teacher Support assesses the degree to which children perceive their teachers as supportive and caring about their academic success and is assessed using 11 positively-stated true/false items (e.g., “I receive a lot of encouragement from my teachers”). Again, true items are scored 1 and false items are scored 0. A summary score is calculated by tallying the number of “true” responses. (3) School Safety taps the amount of crime and violence present in the child’s school and is measured by asking students which of a list of potential problems are issues at their school (e.g., “fights among students,” “student use of illegal drugs”). Students respond if each

issue is “a big problem,” “a little problem,” or “not a problem at their school” and their responses are scored 1-3, respectively. Higher scores indicate safer school ratings.

The SSP was developed with a diverse sample of children, the majority of whom were from low-income families and communities, making it well-suited for the current research. Previous research has shown reliability coefficients for these three school environment dimensions to be high ($\alpha = .76, .86, .86$, respectively; Bowen et al., 2005). In the current sample, School Satisfaction, Teacher Support, and School Safety were found to have inter-item reliability values of $\alpha = .72, .75$, and $.82$.

Peer academic orientation. The SSP also contains a subscale which assesses perceptions of friends’ delinquent and academic behaviors and is entitled Friend Behavior. Youth are asked to respond to items by labeling the degree to which the statements represent their experience. For the purposes of the current study, only friends’ academic behaviors were included (4 of 9 items). Those items are: “I have friends who often cut classes,” “I have friends who make bad grades in school,” “I have friends who get in trouble at school,” and “I have friends who will probably not graduate from high school.” Students are asked to rank each statement as “a lot like me” (scored 1), “a little like me” (scored 2), or “not like me” (scored 3) and summary scores are calculated by summing scores on all items administered. Reliability assessment of the entire Friend Behavior subscale of the SSP has yielded a coefficient of $\alpha = .90$ (Bowen et al., 2005). For

the current research, a new internal consistency evaluation was conducted using only the academic items and yielded an acceptable reliability of $\alpha = .70$.

Mesosystem variables

Home-school mesosystem. Connections between the home and school settings (i.e., the home-school mesosystem) were also evaluated. In order to assess the strength of the home-school mesosystem from the child's perspective, Crosbie-Burnett's (n.d.) Student Mesosystem Perception Scale (SMPS) was used (Appendix H). The SMPS includes seven items that assess a child's general perceptions of the quality of their home-school connections, each of which is answered on a 4-point Likert scale (YES, mostly yes, mostly no, NO). Responses are coded 1-4 (item seven is reverse-coded) and a total mesosystem score is calculated (ranging from 7 to 28). Because children are often unaware of the extent to which their parents are in contact with their school, it was determined that a more meaningful measure of the home-school mesosystem could be based on a student's impressions of parent-teacher agreement than behavioral tallies of phone, e-mail, or in-person communications. Therefore, the SMPS was selected, which includes items tapping cognitive (e.g., "my parent and my teacher agree on what I should learn in school"), behavioral (e.g., "my parent and my teacher work together to help me do well in school"), and affective (e.g., "I feel caught in the middle between my teacher and parent") aspects of the mesosystem. Internal consistency calculation for the SMPS yielded a Cronbach's alpha of .62 for a low-income sample of primarily Latino children enrolled in grades 3 through 5 in De

la Sierra's (2001) original work. In the current sample, internal consistency for the SMPS was calculated to be $\alpha = .59$.

To assess the validity of child ratings of different dimensions of the home-school mesosystem, teachers were administered the Parent-School Interaction Questionnaire – Teacher Report (PSIQ-TR; Grolnick & Slowiazek, 1994; Appendix I), which asks six strictly behavioral questions about the frequency of parent-school involvement. These questions include whether the child's parents attend parent-school conferences, attend school open houses, volunteer to help out at school, attend other school activities or events, inquire about how their child is progressing in class, or speak informally with the teacher. Items are rated on a 5-point Likert scale ranging from never (1) to always (5). Grolnick and Slowiazek (1994) reported an acceptable ($>.60$) Cronbach's alpha level for the PSIQ-TR. In the current sample, a reliability value of $\alpha = .88$ was obtained for the scale.

Macrosystem Variables

Neighborhood environment. Selected subscales from the School Success Profile (SSP) were used to measure school and neighborhood dimensions as perceived by children in the sample. Neighborhood Social Disorganization was assessed utilizing the composite method outlined by Bowen and colleagues and previously applied to a large, nationally-representative sample. This method involves child reports of three constructs. The first construct, Neighborhood Support, assesses the degree to which children report dissatisfaction with their neighborhood and whether or not they perceive their neighbors to be interested in their well-being or willing to assist them in the face of a problem (e.g., "If I had a

problem, there are neighbors who could help me”). Neighborhood Support includes 12 items scored “agree” or “disagree” by participants. All of the Neighborhood Support items address positive dimensions of the neighborhood so “agree” is scored 0 and “disagree” is scored 1 to create a total scale ranging from 0-12 scale in which higher scores indicate lower levels of neighborhood support. The second construct, Neighborhood Youth Behavior, measures the extent to which children live in a neighborhood where other youth are likely to break the law or have negative encounters with the police (e.g., how likely are young people in the neighborhood to use drugs?). Neighborhood Youth Behavior is composed of 7 items scored “likely” or “unlikely.” Depending on whether the item describes a positive (e.g., “make good grades in school”) or negative (e.g., “join a gang”) behavior, “likely” responses are scored either 0 or 1. As a result, higher scores on the 0-7 summary scale indicate more negative youth behavior. The third and final construct, Neighborhood Safety, assesses the degree to which children live in a high-crime neighborhood (e.g., In the last 30 days has the child heard gunshots?). Neighborhood Safety is measured with 12 items – scored “yes”/“no” – each of which indicates the presence of an unsafe neighborhood experience (e.g., hearing gunshots, robbery/mugging, being offered drugs and alcohol). On each of the Neighborhood Safety items, a response of “yes” is coded 1 and a response of “no” is scored 0 in order to yield a 0-12 scale on which higher scores indicate less safety.

Reliability assessment (Bowen et al., 2005) has yielded high coefficients for the Neighborhood Support ($\alpha = .81$), Neighborhood Youth Behavior ($\alpha = .87$)

and Neighborhood Safety ($\alpha = .81$) dimensions. In the current research, reliability coefficients, while not as high as those reported by the authors, were still within the acceptable range. Neighborhood Support yielded a value of $\alpha = .68$. Values calculated for the Neighborhood Youth behavior and Neighborhood Safety subscales were higher at $\alpha = .83$ and $\alpha = .70$, respectively.

Available models of academic achievement. Because no existing measures could be located that assessed the presence of individuals who model academic achievement, it was necessary to devise an original method for the purposes of the current research. This construct was measured by asking children to list family members and other adults that they were close to and who they had seen in the past two weeks (Appendix J). Then, the children indicated whether or not that person, to the best of their knowledge, “did not graduate high school,” “graduated high school,” “went to college,” or “graduated college.” The responses for each person were scored on a scale of 0 to 3. In order to avoid confounding the results of the measure with the size of participants’ social and familial networks, only the three highest individual scores were summed to create a total score of models of academic attainment (0-9). Although this method is admittedly “rough,” there was no alternative way of examining individual variation in the extent to which children were exposed to adults who modeled higher levels of academic achievement.

In addition to the measures and constructs listed above, the number of children present in the child’s household and the age of those children and

number of individuals present in the household were collected as well as more standard demographic data (e.g., age, ethnicity, gender, etc).

CHAPTER III

RESULTS

Analyses were conducted with the Statistical Program for the Social Sciences (SPSS) software. Means, standard deviations, and ranges for all scales utilized in this study were computed and can be found in Table 1.

Variable-Specific Results

Individual-Level Variables

The data obtained from the current sample indicated a wide range of values obtained for the variables that measured constructs at an individual level: (1) the functions of school refusal behavior/ideation (as measured by the SRAS-R), (2) students' grades, (3) teacher-reported social skills, and (4) number of life transitions experienced by participants. With regard to the SRAS-R functional dimensions, scores on the first factor, avoidance of stimuli that promote negative affectivity (e.g., "How often do you stay away from school because you will feel sad or depressed if you go?"), ranged from 0 to 4.33, with a mean of 1.28 and scores on the second factor, avoidance of aversive social or evaluative situations (e.g., "How often do you stay away from school because you feel embarrassed in front of other people at school?"), ranged from 0 to 5.5 with a mean of 1.42. The combination of the first two functional dimensions in order to create a composite score representing all negative reinforcement for school refusal yielded scores that ranged from 0 to 9.5 with a mean of 2.7. The positive reinforcement dimensions of the SRAS-R, pursuit of attention (e.g., "How often would you rather be with your parents than go to school?") and tangible reinforcement (e.g., "When you are

not in school during the week, how often do you leave the house and do something fun?”), each yielded ranges of 0 to 6 with means of 2.76 and 3.67, respectively.

Table 1
Descriptive Statistics for Major Variables – Entire Sample

	N	Mean	Std. Deviation	Range
Percentage of days unexcused	173	.03	.04	.18
SRAS – Negative affectivity avoidance	173	1.29	1.01	4.3
SRAS – Escape from evaluative situations	173	1.43	.83	5.5
SRAS – Combined neg. reinforcement	173	2.71	1.64	9.5
SRAS – Attention getting	173	2.76	1.27	6.0
SRAS – Tangible reinforcement	173	3.66	1.25	6.0
3 rd quarter GPA (reading and math)	168	2.13	1.10	4.0
Peer Social Skills (T-CRS)	171	17.93	4.95	25.0
Life Transitions	173	4.34	2.29	11.0
FES Cohesion	170	6.89	1.69	8.0
FES Conflict	167	3.80	2.17	9.0
FES Organization	170	6.33	1.66	8.0
SSP School satisfaction	171	5.14	2.18	8.0
SSP Teacher support	173	8.24	2.44	11.0
SSP School safety	168	15.78	4.70	17.0
SSP Neighborhood youth behavior	173	3.91	2.67	8.0
SSP Neighborhood support	173	4.93	2.60	12.0
SSP Neighborhood safety	173	4.50	2.45	12.0
Peer academic orientation	171	1.70	1.81	8.0
Student Mesosystem Perceptions Scale	172	17.91	4.22	19.0
Parent-School Interaction Questionnaire	171	16.54	6.49	24.0
Models of Academic Achievement	170	7.16	2.00	8.0
Young children in home	173	.57	.86	4.0

Teacher reports of students' academic skills and peer social skills were also compiled. Early adolescents' third semester grades in math and English ranged from 0 to 4.0 with a mean of 2.13 or approximately a "C". Students' teacher-rated social skills (i.e., the extent to which students have many friends, are friendly toward peers, make friends easily, and are well-liked or sought out by classmates) ranged from 5 to 25 with a mean of 17.93. The final individual-level variable, number of transitions experienced in the past year (e.g., "I have moved to a new neighborhood," "Someone close to me has died"), ranged from 0 to 11, with students reporting an average of just over 4 transitions (mean = 4.35).

Microsystem-Specific Variables

Numerous variables relevant to specific microsystems such as the family, peer groups, and the school were also collected and analyzed. Among these were those collected through administration of the Family Environment Scale (FES). Although all the subscales of the FES were administered, only the findings for variables used in the current analyses will be reported. Sums of responses loading on the FES Cohesion scale (e.g., "Family members really help and support one another," "Family members really back each other up) and FES Organization (e.g., "Activities in our family are pretty carefully planned") both ranged from 1 to 9 with means of 6.9 and 6.3, respectively. Totals for the FES Conflict scale exhibited a slightly wider range, from 0 to 9, and a considerably lower mean of 3.8. In all three subscales, higher scores indicated higher levels of the construct measured. In addition, the number of young (four years old or younger) children reported to live in each participants' home was collected. Results indicate that

number of non-school-aged children reported to live in the homes of participants ranged from 0 to 4 with a mean of .57 young children living with the average participant.

Within the school microsystem, selected subscales of the School Success Profile (SSP) were administered to assess school satisfaction, teacher support, and school safety. Sums of responses to items loading on the school satisfaction subscale (e.g., “I enjoy going to this school,” “I am getting a good education at this school”) ranged from 0 to 8 with a mean of 5.13. Sums of true/false responses to items loading on the teacher support subscale (e.g., “My teachers care whether or not I come to school,” “I am respected and appreciated by my teachers) ranged from 0 to 11 with a mean of 8.23. On the final measure of the school microsystem, school safety (students indicated whether or not issues such as fights, weapons, drugs, and racial tension were problems at their schools), participants’ responses yielded scores ranging from 9 to 26 with a mean of 15.75. Higher scores indicated fewer problems and, consequently, greater levels of school safety.

The last microsystem, early adolescents’ peer groups, was assessed with a measure of peers’ academically-oriented behaviors (e.g., “I have friends who make bad grades in school,” “I have friends who will probably not graduate from high school”). Responses to these items, in which higher values were representative of more positive school-related behaviors, ranged from 0 to 8 with a mean of 1.7. These responses indicated a relatively low level of friends’ academic engagement.

Mesosystemic variables

Mesosystem connections between the home and school settings were measured using two separate measures, only one of which was used in the current analyses. Total scores on the Student Mesosystem Perceptions Scale (e.g., “My parent says nice things about my teacher,” “My teacher and parent work together to help me do well in school”) ranged from 5 to 24 with higher scores indicating stronger connections between the home and school microsystems. The mean score on the SMPS was found to be 17.93.

Macrosystemic/Community-Level Variables

A series of broader-level variables were also collected that measured three aspects of the neighborhood environment (SSP subscale scores of neighborhood support, neighborhood youth behavior, and neighborhood safety) as well as the extent to which the participants were exposed to individuals who could serve as models of academic achievement. All SSP subscales measuring neighborhood characteristics were negatively coded so that higher scores were associated with less positive conditions. Results indicated that sums of neighborhood support responses (e.g. “adults in my neighborhood are interested in what young people in the neighborhood are doing”) ranged from 0 to 12 with a mean of 4.92. Sums of neighborhood youth behavior responses (assessed the likelihood that neighborhood youth would get in trouble with police, graduate from high school, drink alcoholic beverages, etc) ranged from 0 to 8 with a range of 3.92. Totals of responses to items on the final SSP subscale, neighborhood safety (assessed neighborhood violence and illegal activity over the preceding 30 days), were

found to range from 0 to 12 with a mean score of 4.51. Lastly, the extent to which participants reported access to adults who could serve as models of academic achievement ranged from 1 to 9, with higher numbers indicating access to more adults with higher levels of education and a mean of 7.17.

Gender and Age Differences

Descriptive statistics contrasting scores for each scale by gender and grade were also computed and can be found in Tables 2 and 3. Similar patterns were found between genders for most variables of interest. Independent samples t-tests identified significant differences by gender only in the domains of family organization ($p=.057$), number of children in the home not yet school-aged ($p<.05$), adults serving as models of academic achievement ($p<.05$), and neighborhood support ($p<.01$). Initial analyses indicated that males reported their families as engaged in higher levels of organization and planning than females. Males also indicated living with fewer young children in the home, identified higher levels of education among the adults in their lives, and rated their neighborhoods as significantly more supportive.

Statistically significant differences by grade were found regarding total number of important life transitions ($p<.05$), family conflict ($p<.05$), models of academic achievement ($p<.05$), and ratings of neighborhood safety ($p<.05$). When compared to their 6th grade counterparts, 5th graders reported more life transitions, less conflict and less openly expressed anger at home, more models of academic achievement, and safer neighborhoods. Furthermore, consistent with previous research findings that younger children are more likely to refuse school

for attention-getting reasons (Kearney & Silverman, 1993), a significant difference by grade was identified in the degree to which school refusal behavior was rooted in attempts to garner parental attention ($p < .001$).

Table 2

Descriptive Statistics for All Measures by Gender

	N		Mean		Std. Dev.		Range
	Boys	Girls	Boys	Girls	Boys	Girls	
Percentage of days unexcused	80	93	.024	.034	.032	.038	.18
SRAS – Neg. affectivity avoid.	80	93	1.27	1.31	1.03	1.00	4.3
SRAS – Escape from eval. sit.	80	93	1.40	1.45	.81	.84	5.5
SRAS – Combined neg. reinf.	80	93	2.67	2.76	1.66	1.63	9.5
SRAS – Attention getting	80	93	2.92	2.61	1.20	1.32	6.0
SRAS – Tangible reinforce.	80	93	3.74	3.60	1.24	1.27	6.0
3 rd quarter GPA	78	90	2.15	2.11	1.06	1.14	4.0
Peer Social Skills (T-CRS)	79	92	18.17	17.73	4.92	4.98	25.0
Life Transitions	80	93	4.35	4.33	2.28	2.30	11.0
FES Cohesion	79	91	7.06	6.74	1.53	1.81	8.0
FES Conflict	78	89	3.63	3.96	2.00	2.31	9.0
FES Organization	80	90	6.59	6.10	1.53	1.79	8.0
SSP School satisfaction	78	93	5.41	4.90	2.07	2.25	8.0
SSP Teacher support	80	93	8.05	8.40	2.51	2.38	11.0
SSP School safety	78	93	16.45	15.20	4.82	4.54	17.0
SSP Neighborhood youth beh.	80	93	4.13	3.73	2.66	2.68	8.0
SSP Neighborhood support	80	93	4.35**	5.42**	2.26	2.77	12.0
SSP Neighborhood safety	80	93	4.61	4.41	2.47	2.44	12.0
Peer academic orientation	79	92	1.90	1.52	1.87	1.75	8.0
Student Meso. Percep. Scale	80	92	17.99	17.84	4.33	4.14	19.0
Parent-School Interact. Quest.	80	91	16.88	16.26	6.71	6.31	24.0
Models of Acad. Achievement	79	91	7.54*	6.82*	1.88	2.05	8.0
Young children in home	80	93	.44*	.69*	.74	.94	4.0

* Difference was significant at the $p < .05$ level

** Difference was significant at the $p < .01$ level

Table 3

Descriptive Statistics for All Measures by Grade

	N		Mean		Std. Dev.		Range
	5 th	6 th	5 th	6 th	5 th	6 th	
Percentage of days unexcused	86	87	.032	.027	.037	.034	.18
SRAS – Neg. affectivity avoid.	86	87	1.23	1.35	.96	1.06	4.3
SRAS – Escape from eval. sit.	86	87	1.45	1.41	.82	.84	5.5
SRAS – <u>Combined</u> neg. reinf.	86	87	2.67	2.76	1.52	1.76	9.5
SRAS – Attention getting	86	87	3.08***	2.44***	1.24	1.23	6.0
SRAS – Tangible reinforce.	86	87	3.78	3.55	1.17	1.33	6.0
3 rd quarter GPA	84	84	2.26	2.01	1.15	1.04	4.0
Peer Social Skills (T-CRS)	86	85	17.97	17.89	5.38	4.50	25.0
Life Transitions	86	87	4.71*	3.98*	2.01	2.49	11.0
FES Cohesion	85	85	7.00	6.78	1.73	1.66	8.0
FES Conflict	82	85	3.43*	4.17*	2.07	2.21	9.0
FES Organization	85	85	6.40	6.26	1.74	1.63	8.0
SSP School satisfaction	85	86	5.19	5.08	2.27	2.09	8.0
SSP Teacher support	86	87	8.38	8.09	2.30	2.58	11.0
SSP School safety	82	86	15.65	15.91	5.08	4.33	17.0
SSP Neighborhood youth beh.	86	87	3.65	4.17	2.77	2.56	8.0
SSP Neighborhood support	86	87	4.97	4.89	2.93	2.23	12.0
SSP Neighborhood safety	86	87	4.13*	4.87*	2.32	2.53	12.0
Peer academic orientation	86	85	1.72	1.67	1.79	1.83	8.0
Student Meso. Percep. Scale	86	86	18.43	17.38	4.00	4.39	19.0
Parent-School Interact. Quest.	86	85	15.33	17.78	6.63	6.13	24.0
Models of Acad. Achievement	85	85	7.48*	6.84*	1.79	2.15	8.0
Young children in home	86	87	.67	.47	.89	.83	4.0

* Difference was significant at the $p < .05$ level

*** Difference was significant at the $p < .001$ level

Hypotheses and Research Questions

A multiple linear regression was performed in order to assess the power of the following variables in predicting the amount to which students exhibited school refusal behavior, as stated in Hypotheses Ia and Ib: Models of Academic Achievement, the strength of the Parent-School Mesosystem, total Life

Transitions experienced, and Neighborhood Social Disorganization (comprised of the variables neighborhood support, neighborhood youth behavior, and neighborhood safety). Due to reliability concerns, the Family Achievement Orientation subscale of the FES was not included in the analyses as planned. Since the use of greater numbers of variables introduces increasing amounts of error, the relatively large number of predictor/independent variables to be included in the regression (six) begged the question of what sample size was necessary in order to conduct an analysis with adequate power. Drawing from the work of Cohen (1992), a sample size of at least $n = 97$ is required for six independent regression variables when a medium effect size is anticipated at an alpha level of .05. Based on the literature reviewed earlier, from which the majority of the identified variables were derived, it seems that an anticipated medium effect size is appropriate and that the sample size of 173 was sufficient.

Results of the regression analysis with the remaining variables indicated a significant effect for the overall model ($p = .05$). However, further assessment of the statistical contributions of the variables included revealed that only one variable, neighborhood youth behavior (e.g., whether or not neighborhood youth were likely to use drugs, join a gang, or go to college), was significant in predicting the severity of school refusal behavior observed ($p = .001$). Subsequent bivariate correlational analysis indicated a negative correlation ($r = -.248$, $p = .001$) between neighborhood youth behavior and severity of school refusal behavior in which students who displayed higher rates of school refusal behavior reported that

children in their neighborhood were less likely to engage in problematic behaviors. This finding was in the opposite direction of that predicted in Hypothesis Ia.

In light of contemporary research studies in which excused and unexcused absences were not differentiated (e.g., Kearney, 2007), the analyses used to test Hypothesis I were also conducted using total absences (a combination of excused and unexcused absences) to operationalize school refusal behavior. A multiple linear regression using the same predictor variables as Hypothesis I and this alternative conceptualization of school refusal behavior (total absences) as the dependent variable also yielded a significant main effect ($p=.01$). In this analysis, both neighborhood youth behavior ($p=.002$) and the student-rated parent-school mesosystem (e.g., “My parent says nice things about my teacher,” $p=.035$) contributed significantly to the model. Similar to the analyses using unexcused absences, correlational analysis using total absences revealed a negative bivariate correlation between problematic neighborhood youth behavior and school refusal behavior ($r=-.239$, $p=.002$) in which higher levels of absence were associated with better behavior among youths in participants’ neighborhoods. Further bivariate correlational analysis indicated a weak, but significant, positive relationship between total absences and the parent-school mesosystem ($r=.160$, $p=.036$) so that higher levels of absences (excused and unexcused) were associated with higher levels of parent-school interactions (as rated by the teachers).

Additional alternative conceptualizations of school refusal behavior and alternative analyses used to test Hypothesis I included the use of logistic regression to predict participant membership in school refusing or comparison

groups. In these analyses, varying levels of unexcused absence were used as cutoffs for group division (2%, 3%, 4%, 5%, 6%, & 7%) as well as high and low quartile comparisons and comparisons of top and bottom thirds in the sample. The various methods produced both significant and nonsignificant results for the regression analysis. In the case of significant results, neighborhood youth behavior was consistently found to be responsible for the main effect.

Hypothesis II was divided into three sub-hypotheses that addressed the specific relationships of positively- and negatively-reinforced school refusal behavior to numerous variables measured (see Table 4 for regression beta coefficients and bivariate correlation significance levels). These hypotheses were tested only for participants who displayed some level of observed school refusal behavior as defined by unexcused absences for at least 1% of the school days preceding data collection (n=111). Hypothesis IIa stated that the extent to which students endorsed aspects of negatively-reinforced school refusal behavior would be predicted by low academic achievement (relative to peers and school norms), poor social skills, and negative perceptions of the school environment. This hypothesis was assessed by a multiple linear regression in which the negative reinforcement dimension of the SRAS-R served as a continuous dependent variable and academic achievement, social skills, and perceptions of the school environment served as continuous independent variables. Results of the regression analysis demonstrated a significant overall effect for the hypothesized model ($p < .01$). However, further inspection of the individual contributions of each variable in the model revealed that the significant finding was largely due to

the influence of a single variable, teacher-rated peer social skills (i.e., the degree to which students have friends, are friendly toward peers, make friends easily, and are well-liked by classmates), which was highly significant in predicting scores on the negatively-reinforced subscale of the SRAS-R ($p < .001$). Subsequent bivariate correlational analysis was performed in order to further explore the relationship between teacher-rated peer social skills and the negative reinforcement subscale. Results revealed a significant correlation in the expected direction ($r = -.344$, $p < .001$), indicating that students who were rated as less socially skilled by their teachers were more likely to endorse avoiding school in order to avoid situations (social and otherwise) that provoked negative emotions.

Hypothesis IIb predicted that three family microsystem variables, the parental organization and parental control subscales of the FES and the number of children in the home not yet attending school, would predict the extent to which participants endorsed avoiding school for attention-getting reasons. Due to problems with the reliability of the parental control subscale ($\alpha = .32$), only the parental organization subscale of the FES and the number of young children in the home were utilized in the analysis. Overall, the model tested was found to be significant ($p < .05$). However, further assessment of the individual predictors yielded a significant effect only for the influence of the number of young children in the home ($p < .05$). Post hoc bivariate correlational analysis confirmed the significant, positive relationship between young children in the home and the attention-getting subscale of the SRAS-R ($r = .20$, $p < .05$), indicating that students who lived with higher numbers of young children were more likely to endorse

avoiding school for attention-getting reasons (e.g., “How often do you feel you would rather be with your parents than go to school?” “How often do you think about your parents or family when in school?”).

Multiple linear regression was also used to test Hypothesis IIc, which predicted that school refusal behavior rooted in tangible reinforcement would also be predicted by high numbers of youths not yet school-aged in the home as well as the extent to which students’ friends were academically oriented (e.g., “I have friends who make bad grades in school” – reverse-coded). The tangible reinforcement dimension of the SRAS-R served as a continuous dependent variable and the number of young children at home and friends’ academic orientation served as continuous independent variables. Results of the regression analysis revealed a significant overall effect for the model ($p < .05$). Again, investigation into the contributions of the individual predictors in the model tested indicated the significant result was driven primarily by the predictive power of a single variable, the extent to which students’ friends were academically oriented ($p < .05$). Subsequent bivariate correlational analysis confirmed the significant relationship ($r = .21$, $p < .05$) but indicated a result in the opposite direction expected so that students who reported that their friends were more invested in school also endorsed higher levels of school refusal behavior due to tangible reinforcement.

Table 4

Hypothesis II –Regression Beta Coefficients and Bivariate Correlation Significance Levels

	Regression β	Bivariate p-value
Hypothesis IIa		
3 rd quarter GPA (math and reading)	-.001	.810
Peer Social Skills (T-CRS)	-.390	.000
SSP School Satisfaction	.223	.368
SSP Teacher Support	.037	.512
SSP School Safety	.046	.688
Hypothesis IIb		
FES Organization	-.140	.330
Young children in home	.189	.020
Hypothesis IIc		
Peer academic orientation	.197	.030
Young children in home	.098	.262

Hypotheses IIa, IIb, and IIc were also examined using the alternative conceptualization of school refusal behavior, which included a combination of both excused and unexcused absences. While patterns of significance using this alternative method were similar to those discovered for an unexcused absence, they produced less significant findings than the original operationalization for Hypotheses IIa, IIb, and IIc ($\alpha=.004$, .380, and .056, respectively). As with the original operationalization, the significant Hypothesis IIa finding was largely due to the highly significant relationship between student social skills and school refusal behavior.

Finally, in order to answer Research Question I, which asked how the families of children exhibiting some degree of school refusal behavior differed from those who did not on measures of internal family functioning, a multivariate analysis of variance (MANOVA) procedure was used. Originally, the presence or

absence of some degree of school refusal behavior (>1% unexcused absence) was to serve as the categorical independent variable and the three relationship dimensions of the FES (Cohesion, Expressiveness, and Conflict) were to serve as dependent variables. However, inadequate inter-item reliability for the Expressiveness subscale ($\alpha = .45$) precluded its inclusion in the analysis.

Missing values were below 5% on both the Cohesion and Conflict variables and did not require any adjustment. No multivariate within-cell outliers were found. One univariate outlier was identified on the Cohesion dimension of the FES at $p < .001$. The case displayed a score of 1 on the dimension, indicating a low level of family togetherness. Despite this, it was decided that the outlier would be retained in the MANOVA analysis because of its close proximity to non-outlier values (two cases with a value of 2 that were not outliers) and because of the logical possibility of very low family cohesion among the students in the sample. Results of evaluation of assumptions of homogeneity of variance-covariance matrices, linearity, and multicollinearity were satisfactory. A small negative skew (i.e., >3.29) was identified for the Conflict variable in both groups, but did not require a transformation as MANOVA analyses are robust to nonnormality with large sample sizes, such as the one in the present study (Tabachnick & Fidell, 2007). Nevertheless, the MANOVA analysis using Cohesion and Conflict as dependent variables yielded no significant results.

CHAPTER IV

DISCUSSION

The results of the current research should be interpreted carefully within the context of the sampling procedures utilized. Consent requirements by the research review boards that oversaw the project's data collection appear to have limited the sample's representativeness and resulted in a restricted range of nonattendance levels in which more extreme levels of nonattendance were rare. According to anecdotal teacher reports, the more severe nonattenders in their classrooms were less likely to have returned their parental consent forms. Consequently, the students with higher levels of absences seem to have participated in the data collection at a lower rate than other students. Additionally, due to the fact that the research was conducted at school, children with high levels of absences were also less likely to be present at school on the day of data collection. Overall, the current study had a participation rate of just over 50 percent. Reasons for non-participation included absence on the day of data collection, children's personal choice not to participate, and children who were unable to provide parental consent to participate. Of these reasons, a lack of a signed parental consent form was the most common reason for nonparticipation. Despite the difficulties with sample representativeness, findings from the early adolescents who participated in the current study represent a considerable step forward in school refusal research. Low-SES, ethnic minority youth living in urban settings have been almost entirely absent from previous studies on the topic. When assessing this population, the current project utilized a broad

conceptualization of school refusal behavior, which incorporates all varieties of school refusing youth as well as those students who might otherwise be identified as truant.

Demographic differences

Analyses by gender indicated that males reported that their families engaged in higher levels of organization and planning (as measured by the FES), indicated living with fewer young children in the home, identified higher levels of education among the adults in their lives, and rated their neighborhoods as significantly more supportive than females. Previous research has found gender differences on the FES regarding perceptions of family achievement orientation, in which boys were more likely than girls to see their families as achievement oriented (Enos & Handal, 1985). However, other studies have found few gender differences on any FES dimensions (e.g., Staab, 1989) and no studies could be found documenting specific gender differences on the organization dimension. One explanation for the finding that males reported higher levels of organization and planning is that males might have more opportunities to be included in the organizational structure and planning of family activities than females. It is noteworthy that the FES has been used more widely with White rather than ethnic minority families and cultural differences in family processes might lie at the root of the differences observed in the current data, which have not been reported elsewhere. In this vein, it has been asserted that African American families sometimes “raise their daughters and love their sons” (Boyd-Franklin, 2003, p. 90), perhaps in order to compensate for the intense discrimination sons experience

on a daily basis in a racist and hostile society. Incarceration and violence claim an astonishingly high number of African American males. Family efforts to protect young men in the community from these negative effects or to make their limited time more enjoyable could serve a compensatory function (Boyd-Franklin, 2003). Research studies have supported this conceptualization of the male African American experience and found that males are often allowed greater amounts of freedom and autonomy than females (e.g., Bulcroft, Carbody, & Bulcroft, 1996). Nevertheless, it is also possible that girls are simply more aware of how their families function and that their responses might reflect family processes more accurately. Consistent with this notion, some authors have suggested that African American females are socialized to be more interdependent with their families (Boyd-Franklin, 2003), which could lead to a more in-depth and accurate understanding of family functioning.

Gender differences were also found in the levels of academic attainment among important adults in participants' lives with boys reporting higher levels of education. Previous research has found that boys are likely to have more unrealistic perceptions of themselves and their academic abilities in childhood and early adolescence (Fredrick & Eccles, 2002). However, it is unclear if those perceptions extend to other individuals in boys' lives, such as close adults seen in the past two weeks in the current study. It has been demonstrated in prior studies that gender differences in adolescents' perceptions of themselves lessen over time (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002) and it would be worthwhile to examine whether or not the differences in perceptions of important adults'

educational attainment observed in the current research persist into high school and beyond.

In addition to gender, a number of variables were found to differ by grade level and, correspondingly, by participant age; the mean age for fifth graders was 11.1 years and the mean age for sixth graders was 12.1 years. When compared to their sixth grade counterparts, fifth graders reported significantly more life transitions, less conflict and less openly expressed anger at home, more accomplished models of academic achievement, and safer neighborhoods. A significant difference by grade was also identified in the degree to which school refusal behavior was rooted in attempts to garner parental attention. Although these differences are potentially surprising in that they are presumably based on only one year of development and experience, the cognitive differences between students in the fifth and sixth grade classrooms were notable. Anecdotal reports from research project personnel administering the surveys indicated that the fifth grade students requested more explanation of study materials and took longer to complete research measures than students in sixth grade classrooms.

Differences by age in exposure to violence and appraisals of environmental or neighborhood safety have been found previously with older children reporting higher levels of community violence (Buckner, Beardslee, Bassuk, 2004; Price, Telljohann, Dake, Marsico, & Zyla, 2002). Additional research with low-income, African American youth has identified that exposure to violence increases with age for that group (DuRant, Cadenhead, Pendergast, Slavens, & Linder, 1994). It may be that younger children are shielded from

conflict and openly expressed anger within the family in addition to that occurring in the community when compared to their older counterparts. Furthermore, because the accuracy of adolescents' general perceptions of their environments has been found to increase with age (Smith & Rosenthal, 1995), it seems that the responses of older children may more closely reflect the actual levels of violence in the surrounding community. The same developmental factors that might have affected younger and older participants' reports of their experiences with violence also could have been responsible for the differences observed between grades on the reported levels of close adults' academic achievement. It may be younger children were not yet as aware as older children of the existence or implications of different levels of academic attainment and were consequently less able to provide detailed information about the level of schooling completed by the important adults in their lives.

Finally, differences were also observed between grades on the attention subscale of the SRAS. This finding was consistent with previous research with clinical samples that has found higher ratings on the attention subscale for younger children (e.g., Kearney and Albano, 2004). The attention subscale of the SRAS measures the degree to which children avoid school or desire to avoid school in order to remain home and receive attention from significant others, usually parents (Kearney, 2000). It seems developmentally appropriate that younger children would be more overtly oriented toward eliciting parental attention than their older counterparts. A body of research has indicated that, as

adolescents grow older, they tend to rely more on their peers for information and support (Furman & Buhrmester, 1992; Lieberman, Doyle, & Markiewicz, 1999).

The Reliability of the Family Environment Scale

When assessing the reliability of various subscales of the Family Environment Scale, significant problems were observed which precluded their use in subsequent analyses. This result was disappointing considering the care that was taken in the selection and administration of the FES in the current research. Based on good reported reliability levels by the authors, specific norms for African American families, and numerous studies in which the measure has been employed with various ethnic minority groups (e.g., Coatsworth, Maldonado-Molina, Cooley-Quille, Boyd, Frantz, & Walsh, 2001; Coatsworth, Maldonado-Molina, Pantin, & Szapocznik & 2005; Plybon & Kliewer, 2001), the FES was determined to be a particularly good choice for the project. In addition, students' understanding of FES items was facilitated by oral administration of the measure and having multiple project personnel on hand to answer questions and help students when necessary.

Following discovery of the problematic reliability levels, an extensive literature search revealed previous research documenting similar reliability difficulties with a variety of samples (Garton, Harvey, & Price, 2004; Munet-Vilaró & Egan, 1990; Roosa and Beals, 1990a; Tolan & Wilson, 1990). For example, Munet-Vilaró and Egan (1990) assessed the cross-cultural applicability of the FES using Latino and Vietnamese samples. While both samples produced some acceptable reliability levels (highest = .66), the vast majority of the subscale

item intercorrelations were less than acceptable (ranging from .10 to .45). Consequently, the measure was not included in the authors' final analyses. Munet-Vilaró and Egan explained their poor psychometrics through four processes: (1) The use of questions for which an equivalent translation could not be found, (2) Use of subscales with "dissimilar value orientation," which differed to the extent the underlying construct being measured (such as achievement orientation) was valued in the participant's culture, (3) Colloquial statements and phrases within individual FES items that may not apply to other groups, and (4) Negatively worded questions that interact with the true-false response choices to create confusion, especially cross-culturally. With the exception of number 1, each of these explanations for poor subscale reliability is applicable – to one extent or another – in the current sample and likely affected the reliability of subscale items. For example, the item, "If we feel like doing something on the spur of the moment we often just pick up and go" could be considered too colloquial to be meaningful to study participants. Even though efforts were made to provide non-leading explanation whenever possible, questions from study participants indicated a variety of misunderstandings about question meaning.

In spite of the reliability difficulties observed, the Family Environment Scale's author has maintained that the instrument is sound and has argued that too much emphasis is placed on psychometrics over conceptual understanding of the underlying constructs measured (Moos, 1990). Furthermore, the subscale reliabilities published by the FES authors (Moos & Moos, 1994a) are significantly higher than those found in studies by some other research groups. In an attempt

to shed some light on these discrepancies, Roosa and Beals (1990b) explained that the original norms and psychometrics for the instrument were obtained by surveying multiple members within each participating family, but that it is quite common for studies using the FES to survey only one family member. The former method, they continued, may lead to “probable nonindependence of observations; in other words, one would expect higher internal consistencies when a study has over 1,000 people rating 285 family environments” (p209). Although it is a good rule of thumb in psychological research to obtain the viewpoints of multiple informants whenever possible, it seems that combining those reports when assessing measure psychometrics has the potential to bias results to a significant degree. This explanation helps to clarify some of the findings of the current research, which yielded low subscale reliabilities making approximately half of the FES subscales unusable. Although previous research studies have used the FES in its entirety, despite very low reliabilities on some subscales, the current study has not included those subscales with unacceptable reliabilities in its analyses.

Predicting School Refusal Behavior

Hypothesis I predicted that the degree to which children in the sample were exhibiting school refusal behavior (operationalized as unexcused absences pro-rated to account for the number of days a student had been enrolled in his or her current classroom) could be predicted by assessing variables at different levels of an adolescent’s ecology. Due to the lack of research attention low-SES, ethnic minority youth have received and the scarcity of community samples in the school

refusal literature, a wide array of variables believed to be associated with school refusal were selected. Hypothesis I included predictions about variables that would be both positively and negatively associated with school refusal behavior in the sample of low-SES, urban, African American early adolescents.

Hypothesis Ia stated that the presence of unexcused absences would be negatively associated with the presence of individuals who served as models of academic achievement, family achievement orientation, and the strength of the parent-school mesosystem. Hypothesis Ib stated that unexcused absences would be positively associated with individual transitions and neighborhood social disorganization (including problematic levels of neighborhood support, neighborhood youth misbehavior, and neighborhood safety). Of these variables, only neighborhood youth behavior was significant in predicting degree of school refusal behavior. Additionally, the finding was in the opposite direction of that predicted so that more negative (e.g., gang involvement, drug use) and less positive (e.g., potential to graduate from high school or make good grades in school) neighborhood youth behaviors were associated with lower levels of unexcused absence. Although it is tempting to suggest that less desirable behavior in neighborhood youth could have the effect of making school more attractive (i.e., safe) by comparison, it is presently unknown why the unexpected positive relationship between school refusal behavior and positive perceptions of the behavior of neighborhood youth was discovered.

The limited representativeness of the current sample might help to explain the counter-intuitive finding above. If the hypothesized relationship between

neighborhood youth behavior and school refusal exists (in which higher levels of negative behavior are linked to more school refusal behavior), it might only be identifiable in more severe school refusing samples. The relatively low severity sample presently utilized does not appear to have demonstrated this effect.

Although school refusal behavior was operationalized as a continuous variable in Hypothesis I, the percentage of days for which a student was absent without being excused, there were a number of alternative methods considered for conducting the analyses for that hypothesis. Full analyses testing Hypothesis I were conducted using each of these alternative methods, all of which will be briefly described. First, a variable was created that operationalized school refusal behavior by combining excused and unexcused absences. Previous articles have documented that the parents of children exhibiting school refusal behavior are sometimes aware of their children's nonattendance and will even call in order to excuse them from school (e.g., Berg et al., 1980; Huffington & Sevitt, 1989; Naylor et al., 1994). Therefore, it was proposed that a variable that combined excused and unexcused absences might better capture the phenomenon of interest and result in more significant findings. However, when this new composite variable was included in the regression analysis, there were very few differences observed from when unexcused absences were used in isolation. In general, there was a minor decrease in significance levels. Additional alternative operationalizations for the analysis included logistic regression using the same variables listed above in order to differentiate groups of students based both on their upper and lower quartiles and upper and lower thirds of unexcused absences.

None of the alternative methods produced results remarkably different from those reported for Hypothesis I above.

The lack of differences among analyses using various operationalizations and cutoffs in the current data to indicate school refusal behavior suggests that absenteeism severity in isolation might not be a sensitive variable when assessing school refusers. Indeed, when actual attendance rates are reported, even studies of clinically-referred school refusers demonstrate wide variability in the levels of nonattendance observed, ranging from 0% absent to over 90% (C. Kearney, personal communication, June 30, 2006). In the current community sample, levels of school refusal behavior (operationalized as unexcused absences) ranged from 0% to 18% with an average of 3%. Instead of focusing primarily on nonattendance levels, it might be more worthwhile to place emphasis on the underlying functions of school refusal behavior detailed by Kearney and Silverman (1992), because these functional categories are believed to precede and lead to actual nonattendance. Consistent with models of early intervention, early measurement of functional categories might allow researchers and clinicians to predict which students might later develop problems. Early intervention or prevention approaches are particularly relevant to the current sample as multiple studies have identified ethnic minority individuals as a population that does not receive appropriate mental health services (Rawal et al., 2004; Snowden, 1999; Stephenson, 2000).

Recently, a study by Kearney (2007) explored predictors of the degree of student absenteeism (i.e., number of days absent from school) in a clinical sample

of school refusers treated at a specialty clinic. However, unexcused and excused absences were not differentiated and level of absenteeism was derived exclusively from parental reports. In his study, Kearney compared the individual and combined roles of behavior *forms*, that is, the clinical symptoms displayed by school refusing youth, and behavior *function*, as assessed by the SRAS-R using structural equation modeling. Kearney's school refusing population (n=222) ranged from 5-17 years and missed an average of 38.2% percent of school days (sd = 32.3). Consistent with previous findings that have called into question the role of clinical diagnoses in identifying school refusers (e.g., Berg et al., 1993; Egger et al., 2003; Kearney & Albano, 2004), findings indicated that the function of school refusal behavior was a better predictor of level of school absenteeism than form of behavior. None of his measures of psychiatric symptomatology (e.g., the Revised Children's Manifest Anxiety Scale, the Children's Depression Inventory) were significant predictors of level of absenteeism. In contrast, each of the four functional dimensions of the SRAS was significant in its ability to predict degree of absenteeism. Interestingly, delinquent and aggressive behaviors were removed from Kearney's final model in order to meet goodness of fit criteria. The author suggested that the function of school refusal behavior was more likely to be stable than the form of behavior, which might switch from week to week in an attempt to miss school (e.g., being tardy, skipping an afternoon), and that it is a more useful predictor as a consequence. Based on the results of Kearney's work, it appears that the functions of school refusal behavior might create a better foundation for school refusal assessment than nonattendance levels because the

presence of the functional dimensions preceded actual nonattendance. This approach has clear implications for early assessment efforts, which strive to identify school refusers before their nonattendance becomes too severe. Clearly, the next step in identifying the predictive power of Kearney's functional dimensions should involve longitudinal investigations that examine the predictive power of the functional approach over time. This research should focus primarily on community samples of children and adolescents and include substantial numbers of low-SES and ethnic minority youth in order to offset the conceptualization biases that run rampant in the field today and differentially assign labels of school refusal or truancy.

Attending primarily to the function of school refusal behavior, as measured by the School Refusal Assessment Scale, rather than nonattendance levels in the identification of school refusal seems most useful from an early intervention perspective. In contrast, simply looking at levels of absence has the potential to result in assessments that miss children who wish to avoid school but are not successful in doing so. As stated earlier, Kearney (2003) has long included those children who want to miss school but "have not yet reached that goal" in his conceptualizations of school refusers (p.60). Frequently, children who do not demonstrate problematic levels of nonattendance, but who have nevertheless been referred to specialty clinics, are still included in school refusal studies. However, it is rare for such children to receive much direct attention in the school refusal literature. Such children, who demonstrate *school refusal ideation* without problematic levels of nonattendance, should be a population of

great interest to researchers concerned with secondary prevention efforts. At present, the extent to which school refusal ideation at one point in time is associated with eventual nonattendance is unknown. Longitudinal studies that look at the patterns of SRAS subscales and school attendance over a period of months or years have the potential to yield useful information about this frequently overlooked group.

Predicting the Functional Dimensions

Hypothesis II made predictions about specific individual and ecological variables that predict participants' subscale scores on the School Refusal Assessment Scale. Each sub-hypothesis made specific predictions about the variables that would be associated with negative reinforcement (a composite of avoidance of negative affectivity and aversive social/evaluative situations), attention-getting behavior, and tangible reinforcement. The hypotheses were tested only for participants who displayed some level of observed school refusal behavior as defined by unexcused absences for at least 1% of the school days preceding data collection.

Hypothesis IIa stated that the amount to which school refusal behavior was rooted in negative reinforcement in the current sample would be predicted by variables associated with the school microsystem. These variables included low academic achievement, teacher ratings of peer social skills (ratings of to what degree the student "has many friends," "is friendly toward peers," "makes friends easily," etc) and perceptions of the school environment as unsatisfying, unsupportive, or dangerous (e.g., "Fights among students," "Student use of illegal

drugs,” “students verbally abusing teachers”). Many of the variables selected for inclusion in this hypothesis were chosen because of the extent to which they are influential in the lives of low-SES, urban, African American early adolescents. Physically, inner-city schools are frequently in states of disrepair (Agron, 1998; Pilkington & Piersel, 1991) and the psychological impact of such environments should not be ignored. In Hypothesis IIa, it was believed that the selected constructs would predict the negative reinforcement dimension of the SRAS because each had the potential to create a negative impression of the experience of attending school. For example, low levels of social skills have previously been associated with increased teasing and peer rejection (Fox & Boulton, 2006). It was expected that such negative experiences with peers and an inability to form and maintain successful peer relationships could result in a desire to avoid school.

Interestingly, of the variables assessed in Hypothesis IIa, only peer social skills were a significant predictor of scores on the negative reinforcement dimension of the SRAS. Results of the regression analysis indicated that children who were identified by their teachers as displaying lower competence interacting with their peers and making friends were more likely to endorse avoiding or wanting to avoid school because it allowed them to escape from situations that caused them to engage socially with other children, be evaluated, or experience negative emotions. This finding was anticipated and was found to be significant. It also helps to provide independent validation for the negative reinforcement dimensions of the measure, one of which deals specifically with social and evaluative situations, in a low-SES, African American sample. More generally,

the etiological or maintaining role of social skills in school refusal behavior has been identified previously in school refusal and nonattendance research (e.g., Barth, 1984; Corville-Smith et al., 1998; Kearney & Hugelschofer, 2000) and addressed by multiple school refusal treatment programs (e.g., Heyne et al., 2002; Kearney & Bensaheb, 2006; Kearney & Silverman, 1993). The IIA finding also suggests that the children assessed possessed a developmentally-appropriate awareness of their own social struggles and their emotional reactions to them. Previous research has described adolescence as a time when individuals' perceptions of themselves become increasingly accurate based in part on the direct and indirect feedback they receive from others in social situations (Fredricks & Eccles, 2002). Additionally, the strong relationship between the teacher social skills ratings and the negative reinforcement dimension of the SRAS suggests that classroom teachers possessed important knowledge about the social skills of the students in their classrooms and could serve as a good information source for intervention efforts for children with inadequate social skills.

Despite the finding linking peer social skills to SRAS negative reinforcement, it is unclear what can be concluded about participants' in-school social experiences. The peer social skills variable assessed the extent to which students were perceived by their teachers as good at making friends and well-liked by classmates. However, it is difficult to draw conclusions about students who were not rated highly. Some students might be introverted, withdrawn and ignored by peers, while others could be actively teased and victimized by their

classmates. Still others might be avoided by classmates due to difficulties with impulse control and aggression. Conclusions based on the findings in the current study must be made cautiously until the different presentations of problematic peer relationships in school refusing youth can be investigated in more detail.

Hypothesis IIb stated that the amount to which school refusal behavior was rooted in attention-getting desires (e.g., “How often do you feel you would rather be with your parents than go to school?”) would be predicted by variables connected to the family microsystem. The variables identified included two that were assessed by the Family Environment Scale, family organization (e.g., “Being on time is very important in our family,” “We are generally very neat and orderly”) and family control (e.g., “There is a strong emphasis on following rules in our family”), as well as high numbers of youths in the home who were not yet school aged. Results of the regression analysis indicated that the number of young children in the home was the only variable that significantly predicted the amount to which participants endorsed avoiding school or wanting to avoid school in order to garner parental attention. This finding was expected because the attention-getting functional dimension deals exclusively with the desire to garner the attention of parents and caregivers and represents the first known assessment of the influence of family factors on school refusal behavior and ideation in African American families. The positive relationship between number of young children (i.e., those below school age) in the home and attention-based school refusal behavior highlights the important influence of family structure on family functioning and ultimately on school-based behavior in the current sample.

Conceptually, the relationship among the variables seems particularly direct and concrete. It is easy to hypothesize a direction of causation in which higher numbers of young children in the home could influence caregivers' abilities to provide as much attention to older family members due to practical constraints. Consequently, if participant children felt as if they were not provided with adequate attention at home, they may have been more likely to endorse missing school (or wanting to miss school) in order to get more attention from their parents. However, it should be noted that the relationship identified in the current data does not indicate causation. Additional research is necessary in order to more fully determine the connections between these two variables.

The results from Hypothesis IIb and the strong connection between number of youth in the home and reports of children avoiding school for attention-getting reasons serve as an example of the ways in which different microsystems can be interrelated. Although correlations among variables in two different microsystems have been identified as a less ideal method for measuring mesosystem phenomena than approaches that measure the mesosystem directly (McIntosh, Lyon, Apling, Bates, & Lorea, under review), they nevertheless suggest that mesosystemic influences are at work. Children who do not feel they receive adequate attention in the home microsystem may experience different cognitions, behaviors, and emotions while in the context of the school microsystem. For example, such home-based experiences might cause distractibility or depressed mood at school, which could affect school performance and social functioning. In addition to potential current or future

attendance difficulties, these children might be at risk for a host of learning and school-related problems.

Hypothesis IIc stated that the degree to which school refusal behavior was rooted in tangible reinforcement (e.g., “When you are not in school during the week, how often do you leave the house and do something fun?”) would be predicted by high number of youths in the home that were not yet school aged and the extent to which students perceived that their friends valued and pursued education and academic success (e.g., friends who do not cut classes, make bad grades, etc). The former variable is most relevant to the family microsystem, while the latter is most relevant to the peer microsystem. It was anticipated that the two variables would be most influential in predicting the tangible reinforcement dimension of the SRAS because time away from school could be spent engaging in enjoyable activities with friends or with younger children in the home. However, results of the regression analysis indicated that only friends’ behavior was related to the tangible reinforcement dimension of the SRAS and that the relationship was in the opposite direction of what was anticipated. The finding seems to indicate that students who viewed their friends as more successful and engaged in academic activities were more likely to report refusing school or wanting to refuse school for reasons of tangible reinforcement.

One potential explanation for this unexpected finding is that some of the early adolescents in the sample experienced discomfort in school when they compared their own academic performance to that of their close friends. It is possible that such social comparisons indicated to them that their own academic

performance was inadequate. As a response to such upward comparisons, they might have become more oriented toward fun-seeking activities and, consequently, endorsed the tangible reinforcement dimension of the SRAS to a greater extent. Further research is needed to assess the connection between friends' perceived academic orientation and early adolescents' views toward school and other activities. This is especially true because the findings in the current study appear to conflict with the dominant view that peer groups become increasingly similar over time with regard to academic orientation and behavior (e.g., Ryan, 2000).

The finding for Hypothesis IIc may also be a result of the degree to which participants felt comfortable answering the questions that loaded on the tangible reinforcement dimension. Overall, the tangible reinforcement dimension of the SRAS was endorsed by participating students at substantially higher levels than any other SRAS subscale. As suggested by previous authors, it is possible that items from this subscale were perceived as being safer, less stigmatizing, and more socially desirable to endorse than items that loaded on the other subscales (Brandibas, Jeunier, Clanet, & Fouraste, 2004). For example, most children do not have difficulty expressing that they would rather be having fun at home or in their neighborhood than in their classrooms at school (e.g., "Would it be easier for you to go to school if you could do more things you like to do after school hours?"). In contrast, parental attention violates the socially desirable norm of independence in adolescence (especially for older children) and the negative reinforcement dimensions, which require the participant to indicate fear or other negative emotions, could be interpreted as an admission of weakness. In light of

these differences, some researchers have pointed out that there is little evidence that a particular score on any one subscale of the SRAS can be considered equivalent to the same score on another (Daleiden & Chorpita, 1999). This is particularly true in light of the current population of interest, with which the SRAS has received almost no investigation. Additional normative data from a broad, representative sample of clinical and nonclinical children and scaled scores based on those data would be very useful in determining the meaning of different subscale scores.

In all, the results of analyses used to test Hypotheses IIa, IIb, and IIc yielded a small number of specific variables that could be monitored in order to predict early levels of school refusal behavior or ideation. Specifically, low-SES, African American early adolescents' social skills, family structure, and peer academic behaviors were significantly associated with the functional dimensions of the SRAS. Although some cases of school refusal behavior are known to spontaneously remit without intervention (Kearney & Albano, 2000), it has been well documented that problems with school absence are most likely to increase over time (Alexander, et al., 1997; Barth, 1984; Robins & Ratcliff, 1980; Zhang, 2003). Findings in the current research regarding the connections of the discrete set of variables listed above to the functional categories of school refusal behavior largely parallel those that have previously been found, which link social skills, family structure, and peer behaviors to academic success (e.g., Jeynes, 2005; Ryan, 2001; Wentzel, 1991). However, some of the findings in the current data were in the opposite direction of what was expected. Nevertheless, because the

extent to which the SRAS subscales are able to predict later school absence is largely unknown, more longitudinal research is needed to assess the relationships of the three identified ecological variables and the SRAS subscales over time. Longitudinal research is an integral piece of the ecological model, which posits that observing changes over time is often the only effective way to accurately identify relationships among constantly changing individual and environmental variables (Bronfenbrenner, 1994).

Families and School Refusal

Research Question I was designed to assess how the families of children identified as school refusers differed on measures of internal family functioning, as assessed by the Family Environment Scale subscales, cohesion, expressiveness, and conflict. However, due to reliability concerns with the measure, only two of the three dimensions were included in the final analysis, cohesion and conflict. As with Hypothesis II, school refusal behavior was operationalized as 1% unexcused absence or more. Results of the analysis were nonsignificant, indicating that the presence or absence of school refusal behavior as operationalized was not associated with internal family functioning as measured by the FES. Although this might have been due to measurement issues associated with the use of the FES, it also might indicate that there are not many meaningful differences between the school refusing and regularly attending groups as distinguished in this study. However, the results of the analyses for Hypothesis IIb nevertheless indicate that some family microsystem variables may indeed be

important when assessing the influence of ecological factors of low-SES, African American school refusing children.

Family variables have long been a significant piece of school refusal conceptualizations, especially those that point to family enmeshment and separation anxiety as a key component of anxiety-based conceptualizations (Johnson et al., 1941; Partridge, 1939). However, family dynamics are notoriously difficult to measure, and it could be the case that the specific measures used in the study were not sufficiently sensitive to assess the desired constructs. The use of different tools and methods of assessment such as the Family Adaptability and Cohesion Evaluation Scale (Olson & Gorall, 2006) or the Family Assessment Measure (Skinner, et al., 1983) might have allowed differences between families to be identified and could be considered in future research even though these measures have been used less extensively in research with African American families. Nevertheless, it is also possible that the relatively low severity of school refusal behavior among the participants studied did not produce a large enough difference in family functioning to be identified between groups. Much of what has been written about family influences on school refusal behavior has dealt with clinical samples of children with diagnosable anxiety disorders. Such individuals are arguably at the most severe end of the spectrum of school refusal behavior. Consequently, it might be easier to identify family differences when comparing that severe group to their nonclinical, regularly-attending counterparts.

Function and Severity

Overall, the finding for Hypothesis I that only one variable was predictive of school refusal severity and the multiple significant findings for Hypothesis II indicate that it might be more useful to attend to the specific functions of school refusal behavior and ideation rather than the number of absences students have accrued, at least when dealing with sub-clinical populations in low-SES, African American communities. It is important to note that the sample in the current research did not include severe school refusers who were not attending school or those who were attending with some regularity, but whose parents were not able to return the consent forms. Anecdotal teacher reports suggested that the children not included due to consent issues were more likely to exhibit greater levels of school refusal behavior. Nevertheless, information about the wide variability of nonattendance levels in clinical samples suggests that the function of school refusal behavior might be a more useful indicator for that current population of interest. In general, the functional dimensions appear to provide more specific and useful information about the students being assessed than a simple review of their attendance records. Exploration of days missed only identifies those children who have been successful while the SRAS and its functional model addresses a cognitive desire to miss school, or school refusal ideation. In the next section, warning signs are identified that could facilitate the early identification of potential school refusing youth in the absence of high levels of unexcused absence.

In addition, SRAS subscale reliability findings from the current community-based study suggest that the underlying constructs represented by the

functional categories are quite similar to those found for children referred to clinics for school refusal behavior (e.g., Kearney, 2002). This finding supports the valid use of the SRAS for the unique ethnic minority population studied in the present research. Nevertheless, as with previous research (e.g., Higa, Daleiden, & Chorpita, 2002), reliability coefficients for the SRAS with the current sample did not allow for the independent use of the two negative reinforcement dimensions (i.e., escape from social/evaluative situations and those that promote negative affectivity) even when the alternative method of subscale calculation proposed by Kearney (2007) was attempted. This method involved the removal of two items from the reliability analysis (“Would it be easier for you to go to school if you could do more things you like to do after hours [e.g., be with friends]?” and “Would you rather be doing fun things outside of school more than most kids your age?”). Although it proved successful for Kearney, the approach failed to substantially increase subscale reliability in the current study. In light of these results, it might be the case that it is possible to differentiate between the two negative reinforcement dimensions in clinic-referred school refusing populations, but not in community samples such as the one used in the current research.

Implications and Recommendations for Assessment

The findings of the current research have a number of implications for the assessment and identification of school refusal behavior, particularly in groups of children who have not been referred for psychological services. First, the relationship of participant social skills to the negative reinforcement dimension of the SRAS suggests that low-SES, African American children and adolescents

with social deficits could be at increased risk for school refusal behavior in addition to a host of other difficulties. The results also suggest that teachers are aware of which of their students experience social struggles and, as a result, are well situated to identify those children who may be at risk for school refusal behavior, rooted in the negative reinforcement dimensions of the functional model. Careful monitoring of these children and, if necessary, a social skills intervention, could be an effective way to prevent future school refusal behavior in this understudied population.

Second, the identified connection of the number of young children in the home to the attention-getting subscale of the SRAS emphasizes the importance of family structure in school refusal behavior in the current sample. However, it is important to note that the significant relationship identified between the presence of young children and the attention subscale of the SRAS does not indicate a causative relationship. It is possible that these two variables are both impacted by a third variable, such as socioeconomic status, or that a variable such as parents' caretaking responsibilities could mediate the connection. Future research should explore this relationship further for children at risk for school refusal behavior. Research should also examine the relationship of other aspects of family structure and composition (e.g., number and relationship of caretaking adults living in the home) to the attention-getting subscale as well as other subscales of the SRAS in ethnic and economic minority samples such as the one studied in the present research.

In addition to the recommendations above, further assessment-oriented school refusal research should be conducted that examines parent reports of child and adolescent behaviors such as verbal distress when faced with school attendance, attempts at bargaining, deception, and other generally non-documented attempts to escape school attendance in non-referred community samples. Such research would allow for an increasingly in-depth understanding of school refusal behavior in underserved groups less likely to access services. It would help to further examine the relationship between the subscales of the SRAS, which assess school refusal behavior and ideation, and documented, concrete behaviors designed to help a child miss school (e.g., hiding clothes or running away in the morning). Assessing students at such a level of specificity is necessary in order to determine the actual rate of unreferred school refusal behavior in community samples such as the one in the current research.

In order to achieve the goal above, it will also be necessary to determine what constitutes a basic occurrence of school refusal behavior in unreferred populations. Most likely, parental reports of impairment in school (actual attendance rate, academics, social experiences), home (parent-child relationships, disruption of morning routines, interference with the attendance of siblings), and community functioning (engaging in destructive/dangerous/delinquent behaviors in the neighborhood) should drive these decisions. Referral to a clinic (Bernstein et al., 1990; Borchardt et al., 1994; Heyne et al., 1998; Kearney & Albano 2004) or incarceration (Kearney, 2002; 2006) for the amorphous “primary behavior problem” of school refusal is an inadequate criterion for identification even if it

does imply functional impairment. There is no way to ensure that referral sources are using similar parameters to make their decisions or that different groups will be referred at comparable rates. The current study has identified that African American early adolescents who rate themselves more highly on the negative reinforcement dimensions of the SRAS are rated by their teacher as having less well developed social skills. However, as stated previously, the form these potential deficits might take (i.e., ignored, victimized, etc) is largely unknown. In addition, it remains to be seen if the identified social skill deficits resulted in a notable level of functional impairment in the current sample. In general, an increasingly clear understanding of the relationship between each of the subscales

that were systemic and targeted the schools themselves; individualized methods such as relaxation training, exposure therapy, and pharmacological interventions; group interventions such as social skills training; and parent or teacher behavior-management training approaches. The current findings, which highlight the connection of student social skills to student cognitions and behaviors surrounding school attendance, indicate that social skills training programs and other group interventions might be viable prevention or intervention approaches, particularly for children who indicate missing school or wanting to miss school for reasons of negative reinforcement. It is important to note that groups of children for whom social skills training interventions are most appropriate may also be those who most closely resemble the traditional, anxiety-based models of school refusal. Indeed, Spence, Donovan, and Brechman-Toussaint (2000) described a 12 week social skills training program for children and adolescents with principal diagnoses of social phobia, which the authors argued is a potential precursor to school refusal behavior. The program included standard social skills training elements such as direct instruction in verbal and nonverbal skills and supported the acquisition of the skills through modeling, role-plays, and reinforcement. It also utilized cognitive-behavioral techniques like positive self-talk and cognitive restructuring. The authors reported statistically equivalent efficacy for the CBT-social skills program and an enhanced version that added a parent involvement component.

Social skills training programs such as the one implemented by Spence et al. (2000) might have relevance to children who are missing school at problematic

levels due to social anxiety or discomfort as well as to those who have developed negative cognitions regarding school attendance due to inadequate social skills, but have not yet missed large amounts of school. Wise and colleagues (1991) implemented a brief (six sessions), classroom-wide assertive social skills training program, which could serve as a potential model for use with the latter group of children. The authors reported significant gains in social skill awareness in the treatment group immediately after treatment and at six-month follow-up when compared to controls, but unfortunately did not conduct any direct observations of participants' behavior. Nevertheless, short-term programs such as Wise et al.'s, which are implemented classroom wide (primary prevention) or with students who endorse elevations on the negative reinforcement subscales of the SRAS in the absence of high levels of absence (secondary prevention), represent a potentially useful approach for some children who might be at risk for anxiety-based or negatively-reinforced school refusal behavior.

When assessing the efficacy and effectiveness of intervention programs for children and adolescents at all levels of severity, it will also be important to heed Kearney's (2003) recommendation that specific factors predictive of positive responses to school refusal interventions receive greater attention. This sentiment is well-placed and is consistent with current trends in the field of clinical psychology that emphasize moderators and mediators of treatment change rather than simply indicating whether or not a particular intervention yielded significant improvement in the treatment group (e.g., Kazdin, 2003; Weisz & Jensen, 2001). These efforts are particularly relevant to clinical research with populations such as

low-SES, ethnic minority families, who have traditionally been overlooked by researchers and for whom the results of such interventions have generally been less consistent.

The results of the current analyses also identified a strong relationship between family composition (i.e., number of young children present in the home) and the attention-getting dimension of the SRAS in a community sample of low-SES African American students. On the basis of work with primarily White families, Kearney (2001) has explained that school refusal in order to get attention from significant others, especially parents, can be best addressed by parent behavioral management training designed to improve parent-child communication and establish appropriate parental dominance. In some cases, Kearney has even suggested that established, intensive parent training interventions such as Parent-Child Interaction Therapy (PCIT; Brinkmeyer & Eyberg, 2003) might be indicated. He also noted that these interventions are intended for young children and, as such, are particularly well-suited for children who refuse school for attention because they tend to be younger than children who refuse school for other reasons (Kearney & Silverman, 1993). A comparable finding in which younger children rated themselves significantly higher on the attention subscale of the SRAS was found in the current data and, even though the age of the participants does not make them appropriate PCIT candidates, principles central to PCIT such as ignoring inappropriate behavior, giving specific commands, establishing routines and rules, and consequences for noncompliance remain relevant and useful behavioral strategies (Kearney, 2001).

Despite the likely utility of behavioral parent training for children displaying high levels of school refusal for reasons of attention, the extent to which such techniques are useful in prevention efforts remains unknown. Parent training, unlike social skills interventions, cannot be easily conducted during school hours and might be too time consuming and expensive to justify simply as a primary or secondary prevention technique. Outcomes of attempts to attain parental consent in the current research suggest that the parents of the children most at risk for school refusal problems could also be those most difficult to reach. In addition, the results of this study indicate a connection between attention-getting behavior or cognitions and high numbers of young children in the home, who presumably demand a significant amount of caregiver time and energy. It may be the case that the children surveyed in this study do not receive an ideal amount of parent contact as a practical result of the limited time their parents have to offer. If that is the case, parent training is unlikely to be an effective means of changing adolescents' perceptions of school attendance. Instead, case management services might first be warranted in order to address family stressors. Only then could parents become more available for and invested in subsequent interventions.

Furthermore, the results of Hypothesis IIc suggest that friends' behaviors play a significant role in the extent to which early adolescents endorse items on the tangible reinforcement subscale of the SRAS. However, the unanticipated direction of the finding, which seems to indicate that adolescents with friends who engaged in more academically-oriented behavior were more likely to miss school

or want to miss school for reasons of tangible reinforcement, makes it difficult to draw data-driven prevention or intervention recommendations. This is similar to the counter-intuitive finding in Hypothesis I, which indicated that participants who reported lower levels of problematic youth behavior in their neighborhoods demonstrated greater levels of school refusal behavior. Like the result of Hypothesis IIc, the Hypothesis I finding highlights the significant, but poorly understood, role of peers and behavioral norms. As stated above, the influence of peers on a wide variety of school-oriented behaviors in adolescence is well established across groups. For this reason, it is likely that any prevention efforts implemented with adolescents who report elevations on any of Kearney's functional dimensions could be effective if presented in a group format. Aside from the efficiency and economy of group-based work, peer groups provide an opportunity to establish new behavioral norms. This proposed emphasis on group-based prevention efforts contrasts with the growing consensus that clinical levels of school refusal behavior are best addressed on an individualized basis (Kearney, 2001; Kearney & Albano, 2000; Lauchlan, 2003). Indeed, the SRAS was initially developed with the intention of creating more individualized intervention programs. Nevertheless, such individualized efforts do not appear to be a practical means of prevention in light of the relatively low mean rates of unexcused absence observed in the current sample (3%).

Finally, some authors have drawn attention to the specific characteristics of the school ecology, including schools' physical states and emotional climates (e.g., Pilkington & Piersel, 1991). It is essential that such factors, which have a

profound influence on how each student experiences school, be considered when designing intervention or prevention programs for children at risk for or experiencing school refusal behavior. In an attempt to create a more appealing environment and reduce problematic nonattendance, a number of authors have suggested that curriculum changes in which outdated lesson plans are replaced with updated ones that incorporate the specific cultural contexts of students might be a successful approach in the prevention of nonattendance (e.g., Reid, 2003; Teasley, 2004). Presumably, any efforts to make schools and school-based activities more inviting should have the effect of reducing the negative reinforcement functional dimensions of school refusal behavior, especially the dimension dealing with the reduction of negative affectivity.

Conclusions and Future Directions

In summary, the current findings extend previous research and theory, which has indicated the importance of multisystemic variables in the generation and maintenance of school refusal behavior, to a nonclinical, community sample of low-SES, African American early adolescents. Results were likely affected by sampling constraints that seem to have prevented the study from recruiting participants who were fully representative of the target population. The behavior of neighborhood youth was found to be predictive of school refusal behavior (operationalized as unexcused absence from school) in the entire sample, but the direction of the relationship was unexpected in that higher rates of school refusal behavior were observed in children who reported less negative behavior by neighborhood peers. Due to the relatively low levels of nonattendance observed,

it is unsurprising that the more noteworthy results involved the subscales of the SRAS, which measured participant reports of their school-related cognitions as well as behaviors. In particular, the social skills of early adolescents who had accrued at least one percent unexcused absence were found to be highly predictive of the combined negative reinforcement subscale. Furthermore, the presence of multiple young children in the home predicted the attention subscale in this subset of the overall sample and participants' friends' academic behaviors were linked to the tangible reinforcement subscale. Although it is believed that negative cognitions regarding school attendance (such as those measured by the SRAS subscales) are likely to result in later school refusal behavior, future research will be required in order to explore this link longitudinally in the understudied population investigated in the current study. If this link can be established, then the current findings should be used to inform group-based prevention efforts that address the factors contributing to school refusal behavior (e.g., social skill deficits) before it reaches problematic levels. Future prevention programs may also be advised to attend carefully to gender and age during program formulation in light of the current results. Boys and girls differed significantly in their perceptions of family functioning, potentially due to differences in the amount of autonomy granted to each gender in the communities assessed. If boys are granted more autonomy within their families and communities, they may be more likely to engage in future school refusal behavior.

In addition to the recommended increase in longitudinal research on school refusal behavior noted above, future community studies must make the

recruitment of representative samples a top priority. The current project was limited considerably and understandably by sampling constraints required by the approving research review boards. If a more representative sample could be recruited, more of the identified multisystemic predictors of school refusal behavior and ideation might prove to be statistically meaningful. The inclusion of representative samples, especially from communities that are not typically the focus of research activities, has been identified as a major obstacle to conducting externally valid research (Hinshaw et al., 2004). One especially important method for overcoming this barrier involves forging strong, ongoing partnerships with community research sites from the outset and attending carefully to the stated needs of collaborating institutions (Jensen, Hoagwood, & Trickett, 1999). Regarding school refusal research, the most effective means of recruiting representative samples should come from long-term, interactive partnerships with participating schools and broader school systems. Even though the school partnerships may result in the recruitment of a more complete sample of children who attend school, broader community partnerships will also be necessary to access populations of more severe school refusing youth (i.e., those who do not attend regularly enough to be recruited in the school setting). Although it is no easy task, establishing enduring partnerships with organizations such as after-school programs, community parks, and other community stakeholders will be essential in order to reach such students for assessment and intervention research. Enduring community relationships that yield truly representative data will set the

stage for externally valid school refusal research with low-SES, ethnic minority youth.

Subsequent studies should build on the results of the current project by continuing to examine the applicability of the functional model of school refusal behavior and the utility of the SRAS-R. A confirmatory factor analysis of the SRAS-R with low-SES, ethnic minority children and adolescents is desperately needed before the functional model can be confidently applied in non-referred samples of school refusers. Community samples may have a lower incidence of internalizing symptomatology compared with clinic-referred populations. Based on the findings of the current study, which identified the significant role of social skills and the behaviors of friends and neighborhood youth, future community research should place greater emphasis on the social aspects of school refusal behavior and ideation. Furthermore, it could prove particularly fruitful to longitudinally examine how social factors are associated with changes in the SRAS in order to better understand the mechanisms of peer influence.

In the context of the current project data, the suggestions above provide a series of important future steps in school refusal research with the ultimate goal of reducing the biased assessment and intervention practices currently observed in the field. A representative and externally valid literature using community samples from underrepresented groups is an essential next step in this process.

CHAPTER V

SUMMARY

The school refusal field is a growing and changing one and will no doubt continue to experience change over the coming decades. Presently, school refusal assessment practices and research are full of biases that encourage subjectivity and, for many children, promote punitive tactics in the name of intervention. While there exists a common goal among professionals from different disciplines that children remain in school, low-income, urban, ethnic minority populations are routinely denied psychosocial interventions. Expanding research samples, operational definitions, and attention to contextual factors in school refusal assessment can help to address these biases. Consequently, we can enhance the ability of professionals to properly identify and intervene in a manner more consistent with this population's needs.

The present research utilized ecological systems theory and Kearney's (2002) functional model to explore the relationships of a variety of individual and systemic factors to school refusal behavior and ideation in a school-based sample of low-SES, urban, African American early adolescents who were not referred for mental health services (N = 173). The two primary goals of the study were (1) to explore which factors predicted school refusal behavior (operationalized as percentage of days with unexcused absences) in the sample and (2) to investigate which individual and systemic factors predicted subscale scores on the School Refusal Assessment Scale for early adolescents who were displaying some level

of school refusal behavior (operationalized as one percent or more unexcused absence; N = 111). Findings support previous research linking social skill deficits to the negative reinforcement dimension of the SRAS and those linking younger students' responses to the attention-getting dimension of the SRAS. Additionally, the role of family influences in the attention dimension was supported in that children with more young children living in their homes were more likely to endorse missing or wanting to miss school for attention-getting reasons. Analyses that identified inverse relationships (1) between neighborhood youths' problem behavior and participants' school refusal and (2) between participants' friends' academic orientation/behaviors and the tangible reinforcement dimension of the SRAS were inconclusive in that the findings were in the opposite direction of those anticipated, but nevertheless suggest a noteworthy social component. The data indicated that early adolescents who reported that youth in their neighborhoods engaged in dangerous or destructive behaviors were less likely to have unexcused absences and that those who report that their friends engaged in more academically oriented behavior were also more likely to miss school or want to miss school for tangible rewards such as doing fun activities. The current study also introduced the term *school refusal ideation*, defined as favorable cognitions regarding school avoidance and school refusal behavior.

Overall, the present research has identified a small number of variables relevant to the assessment and potential prevention of school refusal behavior. However, the connection between school refusal ideation (as measured by the SRAS subscales) and eventual school refusal behavior that results in actual

nonattendance remains unclear. Future research should examine if SRAS subscale scores demonstrate continuity across time and if they are predictive of future nonattendance. This link must be addressed in future research to determine the utility of the SRAS as a screening tool for use with community samples in order to determine the appropriateness of individual students for inclusion in prevention efforts.

References

- Agron, J. (1998). The urban challenge. *American School and University*, 70, 18-23.
- Alexander, K.L., Entwisle, D.R., & Horsey, C.S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education*, 70, 87-107.
- Angold, A., Pendergast, M., Cox, A., Harrington, R., Simonoff, E., & Ratter, M. (1995). The Child and Adolescent Psychiatric Assessment (CAPA). *Psychological Medicine*, 25, 739-753.
- American Psychiatric Association (2000). Diagnostic and statistical manual of mental disorders, text revision (4th edition). Washington, DC: American Psychiatric Association.
- Astone, N. & McLanahan, S. (1991). Family structure, parental practices, and high school completion. *American Sociology Review*, 56(3), 309-320.
- Baker, M.L., Sigmon, J.N., & Nugent, M.E. (2001). Truancy reduction: Keeping students in school. *U.S. Department of Justice, OJJDP*.
- Barnard, W.M. (2004). Parent involvement in elementary school and educational attainment. *Children & Youth Services Review*, 26(1), 39-63.
- Barth, R.P. (1984). Reducing nonattendance in elementary schools. *Social Work in Education*, 6(3), 151-166.
- Bell, A.J., Rosen, L.A., & Dynlacht, D. (1994). Truancy Intervention. *The Journal of Research and Development in Education* 27(3), 203-211.
- Berg, I., Butler, A., Franklin, J., Hayes, H., Lucas, C., & Sims, R. (1993). DSM-III-R disorders, social factors, and management of school attendance problems in the normal population. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 34, 1187-1203.
- Berg, I., Casswell, G., Goodwin, A., Hullin, R., BcGuire, R., & Tagg, G. (1985). Classification of severe school attendance problems. *Psychological Medicine*, 15, 157-165.
- Berg, I., Nichols, K., Pritchard, C. (1969). School phobia: Its classification and relationship to dependency. *Journal of Child Psychology and Psychiatry*, 10, 123-141.
- Bernstein, G.A., Borchardt, C.M., Perwein, A.R., Crosby, R.D., Kushner, M.G.,

- Thuras, P.D., & Last, C.G. (2000). Imipramine plus cognitive-behavioral therapy in the treatment of school-refusal. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(3), 276-283.
- Bernstein, G.A. & Garfinkel, B.D. (1988). Pedigrees, functioning, and psychopathology in families of school phobic children. *American Journal of Psychiatry*, 145(1), 70-73.
- Bernstein, G. A., Garfinkel, B. D., & Borchardt, C. M. (1990). Comparative studies of pharmacotherapy for school refusal. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29, 773-781.
- Bernstein, G.A., Warren, S.L., Massie, E.D., & Thuras, P.D. (1999). Family dimensions in anxious-depressed school refusers. *Journal of Anxiety Disorders*, 13(5), 513-528.
- Blagg, N. & Yule, W. (1984). The behavioral treatment of school refusal: A comparative study. *Behavior Research & Therapy*, 22, 2, 119-127.
- Bools, C., Foster, J., Brown, I., Berg, I. (1990). The identification of psychiatric disorders in children who fail to attend school: A cluster analysis of a non-clinical population. *Psychological Medicine*, 20(1), 171-181.
- Borchardt, C.M. & Giesler, J. (1994). A comparison of inpatient and outpatient school refusers. *Child Psychiatry and Human Development*, 24, 255-264.
- Bowen, N.K., Bowen, G.L., & Ware, W.B. (2002). Neighborhood social disorganization, families, and the educational behavior of adolescents. *Journal of Adolescent Research*, 17(5), 468-490.
- Boyd-Franklin, N. (2003). *Black families in therapy: A multisystems approach* (2nd Ed.). New York: The Guilford Press.
- Brandibas, G., Jeunier, B., Clanet, C., & Fourtasté, R. (2004). Truancy, school refusal, and anxiety. *School Psychology International*, 25(1), 117-126.
- Bridgemohan, R., van Wyk, N., & van Staden, C. (2005). Home-school communication in the early childhood development phase. *Education*, 126(1), 60-77.
- Brinkmeyer, M.Y. & Eyberg, S.M. (2003). Parent-child interaction therapy for oppositional children. In A.E. Kazdin & J.R. Weisz, J.R. (Eds.), *Evidence-Based Psychotherapies for Children and Adolescents* (pp. 204-223). New York: Guilford Press.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by*

nature and design. Cambridge, MA: Harvard University Press.

- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T. N. Postlethwaite (Ed.), *The international encyclopedia of education* (2nd ed., pp. 1643-1647). New York: Elsevier Science.
- Buckner, J., Beardslee, W.R., & Bassuk, E.L. (2004). Exposure to violence and low-income children's mental health: Direct, moderated, and mediated relations. *American Journal of Orthopsychiatry*, 74, 413-423.
- Bulcraft, R., Carmody, D., & Bulcraft, K. (1996). Patterns of parental independence giving to adolescents: Variations by race, age, and gender of child. *Journal of Marriage and the Family*, 58, 866-883.
- Campbell, J. R. (1994). *Technical supplement: Cross-national and cross-cultural mathematics achievement studies*. Jamaica, NY: St. John's University.
- Carter, R.S. & Wojtkiewicz, R.A. (2000). Parental involvement in adolescents' education: Do daughters or sons get more help? *Adolescence*, 35(137), 29-44.
- Cerio, J. (1997). School phobia: A family systems approach. *Elementary School Guidance & Counseling*, 31(3), 180-192.
- Chávez, R.C., Belkin, L.D., Hornback, J.G., & Adams, K. (1991). Dropping out of school: Issues affecting culturally, ethnically, and linguistically distinct student groups. *The Journal of Educational Issues of Language Minority Students*, 8, 1-18.
- Chicago Public Schools (2004). *Elementary schools at a glance, 2003-2004*. Retrieved 10 November 2005, from <http://research.cps.k12.il.us/resweb/SiteServlet?page=schoolwide>.
- Chicago Public Schools (2005, Jan. 26). Absenteeism and truancy. *Chicago Public Schools Policy Manual*.
- Clark, R. M. (1983). *Why poor black children succeed or fail*. Chicago: University of Chicago Press.
- Coatsworth, J. D., Pantin, H., McBride, C., Briones, E., Kurtines, W., & Szapocznik, J. (2002). Ecodevelopmental correlates of behavior problems in young Hispanic females. *Applied Developmental Science*, 6(3), 126-143.
- Coatsworth, J.D., Maldonado-Molina, M., Pantin, H., & Szapocznik, J. (2005). A

person-centered and ecological investigation of acculturation strategies in Hispanic immigrant youth. *Journal of Community Psychology*, 33(2), 157-174.

Conduct Problems Prevention Research Group. (1995). *Technical reports for the construct development for the measures for Year 2 outcome analyses*. Unpublished technical report.

Cooley-Quille, M., Boyd, R.C., Frantz, E., Walsh, J. (2001). Emotional and behavioral impact of exposure to community violence in inner-city adolescents (2001). *Journal of Clinical Child Psychology*, 30(2), 199-207.

Council of the Great City Schools (2003, Feb). Chicago district rewards attendance, fights truancy, *Urban Educator*, 12(1), 1-2.

Corville-Smith, J., Ryan, B.A., Adams, G.R., & Dalicandro, T. (1998). Distinguishing absentee students from regular attenders: The combined influence of personal, family, and school factors. *Journal of Youth and Adolescence*, 27(5), 629-640.

Crocker, J. & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, 96(4), 608-630.

Crosbie-Burnett, M. (n.d.). The Student Mesosystem Perception Scale. Unpublished measure. University of Miami, Florida.

Daleiden, E.L., & Chorpita, B.F. (1999). Factors affecting the reliability of clinical judgments about the function of children's school refusal behavior. *Journal of Clinical Child Psychology*, 28, 396-407.

De La Sierra, M. D. (2001). Parent and child perceptions of the family-school relationship in a Hispanic population. *Dissertation Abstracts International: Section B: the Sciences & Engineering*, 62(5-B), 2533.

DuRant, R.H., Cadenhead, C., Pendergrast, R.A., Slavens, G., & Linder, C.W. (1994). Factors associated with the use of violence among urban black adolescents. *American Journal of Public Health*, 84, 612-617.

Desimone, L. (1999). Linking parent involvement with student achievement: Do race and income matter? *Journal of Educational Research*, 93(1), 11-30.

Duckworth, K. & DeJung, J. (1989). Inhibiting class cutting among high school students. *The High School Journal*, 72, 188-195.

Egger, H.L., Costello, E.J., & Angold, A. (2003). School refusal and psychiatric disorders: A community study. *Journal of the American Academy of Child*

and Adolescent Psychiatry, 42(7), 797-807.

- Enos, D.M., & Handal, P.J. (1985). Relation of sex and age to old and new Family Environment Scale standard scores of white adolescents: Preliminary norms. *Psychological Reports*, 57, 327-330.
- Epstein, J. L. (1991). Effects of teacher practices of parent involvement on student achievement in reading and math. In S. Silvern (Ed.), *Literacy through family, community and school interaction* (pp. 261–276). Greenwich, CT: JAI.
- Epstein, J.L. & Sheldon, S.B. (2002). Present and accounted for: Improving student attendance through family and community involvement. *The Journal of Educational Research*, 95(5), 308-318.
- Florida Department of Education (2004, March). *Chronic student absenteeism 2002-2003* (Florida Information Notes, Education Information & Accountability Services). Available from Florida Department of Education Web Site: <http://www.fldo.org>.
- Flouri, E. (2004). Correlates of parents' involvement with their adolescent children in restructured and biological two-parent families: The role of child characteristics. *International Journal of Behavioral Development*, 28(2), 148-156.
- Flouri, E. & Buchanan, A. (2004). Early father's and mother's involvement and child's later educational outcomes. *British Journal of Educational Psychology*, 74(2), 141-153.
- Foreman, D.M., Dover, S.J., & Hill, A.B. (1997). Emotional and semantic priming as a measure of information processing in young people with school refusal: A research note. *Journal of Child Psychology and Psychiatry*, 38(7), 855-860.
- Fox, C.L. & Boulton, M.J. (2006). Friendship as a moderator of the relationship between social skills problems and peer victimization *Aggressive Behavior*, 32, 110-121.
- Fredricks, J.A., & Eccles, J.S. (2002). Children's competence and value beliefs from childhood through adolescence: Growth trajectories in two male-sex-typed domains. *Developmental Psychology*, 38, 519-533.
- Furman, W. & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. *Child Development*, 63, 103-155.
- Garton, A.F., Harvey, R., & Price, C. (2004). Influence of perceived family

environment on adolescent leisure participation. *Australian Journal of Psychology*, 56, 18-24.

Gorall, D.M., Tiesel, J., & Olson, D.H. (2004). *FACES-IV: Development and Validation*. Minneapolis: Life Innovations, Inc.

Grolnick, W.S. & Slowiaczek, M.L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivation model. *Child Development*, 65, 237-252.

Gosschalk, P.O. (2004). Behavioral treatment of acute onset school refusal in a 5-year old girl with separation anxiety disorder. *Education and Treatment of Children*, 27(2), 150-160.

Granell de Aldaz, E., Vivas, E., Gelfnad, D., & Feldman, L. (1984). Estimating the prevalence of school refusal and school-related fears: A Venezuelan sample. *Journal of Nervous Mental Disorders*, 172, 722-729.

Hanley, B., Tassé, M.J., Aman, M.G., & Pace, P. (1998). Psychometric properties of the Family Support Scale with Head Start families. *Journal of Child and Family Studies*, 7(1), 69-77.

Hansen, C., Sanders, S.L., Massaro, S., & Last, C.G. (1998). Predictors of severity of child absenteeism in children with anxiety-based school refusal. *Journal of Clinical Child Psychology*, 27, 246-254.

Hersov L. (1960). Persistent non-attendance at school. *Journal of Child Psychology and Psychiatry*, 1, 130-136.

Heyne, D., King, N., Tonge, B., Rollings, S., Pritchard, M., Young, D., & Myerson, N. (1998). The self-efficacy questionnaire for school situations: Development and psychometric evaluation. *Behaviour Change*, 15(1), 31-40.

Heyne, D., King, N.J., Tonge, B.J., Rollings, S., Young, D., Pritchard, M., & Ollendick, T.H. (2002). Evaluation of child therapy and caregiver training in the treatment of school refusal. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(6), 687-695.

Higa, C. K., Daleiden, E. L., & Chorpita, B. F. (2002). Assessing school refusal behavior: Psychometric properties and clinical utility of the School Refusal Assessment Scale (SRAS). *Journal of Psychopathology and Behavior Assessment*, 24, 247-258.

Hightower, A.D., Work, W.C., Cowen, E.L., Lotyczewski, B.S., Spinell, A.P.,

- Guare, J.C., & Rohrbeck, C.A. (1986). The Teacher-Child Rating Scale: A brief objective measure of elementary children's school problem behaviors and competencies. *School Psychology Review*, 15(3), 393-409.
- Hinshaw, S.P., Hoagwood, K., Jensen, P.S., Kratochvil, C., Bickman, L., Clarke, G., Abikoff, H.B., Atkins, M., & Vitiello, B. (2004). AACAP 2001 research forum: Challenges and recommendations regarding recruitment and retention of participants in research investigations. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(8), 1037-1045.
- Holyes, D. (1998). Constructions of pupil absence in the British education service. *Child and Family Social Work*, 3, 99-111.
- Huffington, C.M., & Sevitt, M.A. (1989). Family Interaction in Adolescent School Phobia. *Journal of Family Therapy*, 11, 353-375.
- Jacobs, J. E., Lanza, S., Osgood, D. W., Eccles, J. S., & Wigfield, A. (2002). Changes in children's self-competence and values: Gender and domain differences across grades one through twelve. *Child Development*, 73, 509 – 527.
- Jason, L.A., Pokorny, S., & Katz, R. (2001). Passive versus active consent: A case study in school settings. *Journal of Community Psychology*, 29(1), 53-68.
- Jensen, P.S., Hoagwood, K., & Trickett, E.J. (1999). Ivory towers or earthen trenches? Community collaborations to foster real-world research. *Applied Developmental Science*, 3(4), 206-212.
- Jeynes, W.H. (2005). Effects of parental involvement and family structure on the academic achievement of adolescents. *Marriage & Family Review*, 37, 99-116.
- Johnson, A.M., Falstein, E.I., Szurek, S.A., & Svendsen, M. (1941). School phobia. *American Journal of Orthopsychiatry*, 11, 702-711.
- Kaplan, D.S. Peck, B.M. & Kaplan, H.B. (1995). A structural model of dropout behavior: A longitudinal analysis. *Applied Behavioral Science Review*, 3, 177-193.
- Kawash, G.F. & Clewes, J.L. (1987). A factor analysis of a short form of the CRPBI: Are children's perceptions of control and discipline multidimensional? *Journal of Psychology*, 122, 57-67.
- Kazdin, A.E. (2003). Psychotherapy for children and adolescents. *Annual Review of Psychology*, 54, 253-277.

- Kearney, C.A. (2001). *School Refusal Behavior in Youth: A Functional Approach to Assessment and Treatment*. Washing, DC: American Psychological Association.
- Kearney, C.A. (2002). Identifying the function of school refusal behavior: A revision of the school refusal assessment scale. *Journal of Psychopathology and Behavioral Assessment*, 24(4), 235-245.
- Kearney, C.A. (2003). Bridging the gap among professionals who address youths with school absenteeism: Overview and suggestions for consensus. *Professional Psychology: Research and Practice*, 34(1), 57-65.
- Kearney, C.A. (2007). Forms and functions of school refusal behavior in youth: An empirical analysis of absenteeism severity. *Journal of Child Psychology and Psychiatry*, 48(1), 53-61.
- Kearney, C.A. & Albano, A.M. (2004). The functional profiles of school refusal behavior: Diagnostic aspects. *Behavior Modification*, 28(1), 147-161.
- Kearney, C.A. & Albano, A.M. (2000). *When Children Refuse School: A Cognitive-Behavioral Therapy Approach*. United States: Graywind Publications Inc.
- Kearney, C.A. & Beasley, J.F. (1994). The clinical treatment of school refusal behavior: A survey of referral and practice characteristics. *Psychology in the Schools*, 31, 128-132.
- Kearney, C.A. & Bensaheb, A. (2006). School absenteeism and school refusal behavior: A review and suggestions for school-based health professionals. *Journal of School Health*, 76, 3-7.
- Kearney, C.A. & Hugelshofer, D.S. (2000). Systemic and clinical strategies for preventing school refusal behavior in youth. *Journal of Cognitive Psychotherapy*, 14, 51-65.
- Kearney, C.A. & Silverman, W.K. (1993). Measuring the function of school refusal behavior: The school refusal assessment scale. *Journal of Clinical Child Psychology*, 22(1), 85-96.
- Kearney, C.A. & Silverman, W.K. (1995). Family environment of youngsters with school refusal behavior: A synopsis with implications for assessment and treatment. *The American Journal of Family Therapy*, 23(1), 59-72.
- Kearney, C.A. & Silverman, W.K. (1996). Evolution and reconciliation of taxonomic strategies for school refusal behavior. *Clinical Psychology: Science and Practice*, 3(4), 339-354.

- Kindermann, T.A. (1993). Natural peer groups as context for individual development: The case of children's motivation in school. *Developmental Psychology*, 29, 970-977.
- Kindermann, T.A., McCollam, T.L., & Gibson, E. (1996). Peer networks and students' classroom engagement during childhood and adolescence. In J. Juvonen & K.R. Wentzel (Eds.), *Social motivation: Understanding children's social adjustment*. New York: Cambridge University Press.
- King, N.J. & Bernstein, G.A. (2001). School refusal in children and adolescents: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(2), 197-205.
- King, N.J., Ollendick, T.H., & Tonge, B.J. (1995). *School refusal: Assessment and treatment*. Needham Heights, MA: Allyn & Bacon.
- King, N.J., Tonge, B.J., HEyne, D., Pritchard, M., Rollings, S., Young, D., Myerson, N., & Ollendick, T.H. (1998). Cognitive-behavioral treatment of school-refusing children: A controlled evaluation. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37(4), 395-403.
- Knezevich, S.J. (1984). *Administration of Public Education: A Sourcebook for the Leadership and Management of Educational Institution (4th Ed.)*. New York: Harper & Row.
- Kohl, G.O., Lenuga, L.J., & McMahan, R.L. (2000). Parent involvement in school conceptualizing multiple dimensions and their relations with family and demographic risk factors. *Journal of School Psychology*, 38(6), 501-523.
- Kooker, E. (1976). Changes in grade distributions associated with changes in class attendance policies. *Psychology in the Schools*, 13, 57-59.
- Lamdin, D.J. (1996). Evidence of student attendance as an independent variable in education production functions. *The Journal of Educational Research*, 89, 155-162.
- Last, C.G., Hansen, C., & Franco, N. (1998). Cognitive-behavioral treatment of school phobia. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37(4), 404-411.
- Last, C.G. & Strauss, C.C. (1990). School refusal in anxiety-disordered children and adolescents. *Psychiatry*, 29, 31-35.
- Last, C.L., Francis, G., Hersen, M., Kazdin, A.E., & Strauss, C.C. (1987).

Separation anxiety and school phobia: A comparison using DSM-III criteria. *American Journal of Psychiatry*, 144(5), 653-657.

Lauchlan, F. (2003). Responding to chronic non-attendance: A review of intervention approaches. *Educational Psychology in Practice*, 19, 133-147

LaVeist, T.A., & McDonald, K.B. (2002). Race, gender, and educational advantage in the inner city. *Social Science Quarterly*, 83, 832-852.

Layne, A.E., Bernstein, G.A., Egan, E.A., & Kushner, M.G. (2003). Predictors of treatment response in anxious-depressed adolescents with school refusal. *Journal of the American Academy of Child and Adolescent Psychiatry*, 42, 319-326.

Lieberman, M. Doyle, A. & Markiewicz, D. (1999). Developmental patterns in security of attachment to mother and father in late childhood and early adolescence: Associations with peer relations. *Child Development*, 70(1), 202-213.

Loeber, R. & Farrington, D. (2000). Young children who commit crime: Epidemiology, developmental origins, risk factors, early interventions, and policy implications. *Development and Psychopathology*, 12(4), 737-762.

McCluskey, C.P., Bynum, T.S., & Patchin, J.W. (2004). Reducing chronic absenteeism: An assessment of an early truancy initiative. *Crime & Delinquency*, 50(2), 214-234.

McIntosh, J.M., Lyon, A., Apling, G.A., Bates, C., & Lorea, S. (under review). Measuring the mesosystem in adolescence. Manuscript submitted to *Families, Systems, and Health*.

McNeal, R.B. (1999). Parental involvement as social capital: Differential effectiveness on science achievement, truancy, and dropping out. *Social Forces*, 78, 117-144.

McShane, G., Walter, G., & Rey, J.M. (2001). Characteristics of adolescents with school refusal. *Australian and New Zealand Journal of Psychiatry*, 35, 822-826.

McWayne, C., Hampton, V., Fantuzzo, J., Cohen, H.L., & Sekino, Y. (2004). A multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. *Psychology in the Schools*, 41(3), 363-377.

Moffitt, C.E., Chorpita, B.F., & Fernandez, S.N. (2003). Intensive cognitive-

behavioral treatment of school refusal behavior. *Cognitive and Behavioral Practice*, 10, 51-60.

- Moos, R.H. (1990). Conceptual and empirical approaches to developing family-based assessment procedures: Resolving the case of the Family Environment Scale. *Family Process*, 29, 199-208.
- Moos, R.H. & Moos, B.S. (1994a). *Family Environment Scale Manual*. Consulting Psychologists Press, Palo Alto, CA.
- Moos, R.H. & Moos, B.S. (1994b). *Family Environment Scale: A Users Guide*. Consulting Psychologists Press, Palo Alto, CA.
- Meyer, E. A., Hagopian, L. P., & Paclawskyj, T. R. (1999). *A function-based treatment for school refusal behavior using shaping and fading*. (ERIC Document Reproduction Service No. EJ601399)
- Munet-Vilaró, F. & Egan, M. (1990). Reliability issues of the Family Environment Scale for cross-cultural research. *Nursing Research*, 39(4), 244-247.
- National Center for Education Statistics (1996). *Condition of education 1996*. Washington, DC: Author.
- Naylor, M.W., Staskowski, M., Kenney, M.C., & King, C.A. (1994). Language disorders and learning disabilities in school-refusing adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 33, 1331-1337.
- Office of Educational Research and Improvement. (1992). *At risk youth in crisis: A handbook for collaboration between schools and social services*. Vol 5: Attendance Services. (ERIC Document Reproduction Services No. ED 347 621). Washington, DC: Author.
- Ogbu, J.U (1994). Racial stratification and education in the United States: Why inequality persists. *Teachers College Record*, 96(2), 264-298.
- Ogbu, J.U. (2004). Collective identity and the burden of “acting white” in black history, community, and education. *The Urban Review*, 36(1), 1-35.
- Ollendick, T.H. & King, N.J. (1999). Child behavioral assessment and cognitive-behavioral interventions in the schools. *Psychology in the Schools*, 36(5), 427-436.
- Olson, D.H. & Gorall, D.M. (2006). *FACES-IV and the circumplex model*. University of Minnesota, St. Paul, MN.

- Partridge, J.M. (1939). Truancy. *Journal of Mental Science*, 85, 45-81.
- Phemister, A.A. & Crewe, N.M. Objective self-awareness and stigma: Implications for persons with visible disabilities. *Journal of Rehabilitation*, 70(2), 33-38.
- Pilkington, C.L. & Piersel, W.C. (1991). School phobia: A critical analysis of the separation anxiety theory and an alternative conceptualization. *Psychology in the Schools*, 28, 290-303.
- Plybon, L.E. & Kliwer, W. (2001). Neighborhood types and externalizing behavior in urban school-aged children: Tests of direct, mediated, and moderated effects. *Journal of Child & Family Services*, 10(4), 419-438.
- Price, J., Telljohann, S., Dake, J., Marsico, L., & Zyla, C. (2002). Urban elementary school students' perceptions of fighting behavior and concerns for personal safety. *Journal of School Health*, 72, 184-191.
- Procter, B. & Dalaker, J. (2002). U.S. Census Bureau, Current Population Reports. *Poverty in the United States: 2001* (pp. 60-219). Washington D.C.: U.S. Government Printing Office.
- Puzzanchera, C., Stahl, A.L., Finnegan, T.A., Tierney, N., & Snyder, H.N. (2003). *Juvenile court statistics 1998*. Washington, D.C.: U. S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, National Center for Juvenile Justice.
- Rawal, P., Romansky, R., Jenuwine, M., & Lyons, J.S. (2004). Racial differences in the mental health needs and service utilization of youth in the juvenile justice system. *Journal of Behavioral Health Services & Research*, 31(3), 242-255.
- Reid, K. (2003). The search for solutions to truancy and other forms of school absenteeism. *Pastoral Care*, 3-9.
- Robins, L.N. & Ratcliff, K.S. (1980). The long-term outcome of truancy. In L. Hersov & I. Berg (Eds.), *Out of School: Modern Perspectives in Truancy and School Refusal* (pp. 65-83). New York: John Wiley.
- Roderick, M., Arney, M., Axelman, M., Dacosta, K., Steiger, C., Stone, S., et al. (1997). Habits hard to break: A new look at truancy in Chicago's public schools. Research Brief. University of Chicago, School of Social Service Administration. Available from: <http://www.consortium-chicago.org/publications/pdfs/p0a09.pdf>

- Roosa, M.W., & Beals, J. (1990a). Measurement issues in family assessment: The case of the Family Environment Scale. *Family Process*, 29, 191-198.
- Roosa, M.W., & Beals, J. (1990b). A final comment on the case of the Family Environment Scale. *Family Process*, 29, 209-211.
- Rumberger, R., Ghatak, R., Poulos, G., Ritter, P., & Dornbusch, S. (1990). Family influences on dropout behavior in one California high school. *Sociology of Education*, 63, 283-299.
- Ryan, A.M. (2000). Peer groups as a context for the socialization of adolescents' motivation, engagement, and achievement in school. *Educational Psychologist*, 35(2), 101-111.
- Ryan, A.M. (2001). The peer group as a context for the development of young adolescent motivation and achievement. *Child Development*, 72, 1135-1151.
- Sartor, C. E., & Youniss, J. (2002). The relationship between positive parental involvement and identity achievement during adolescence. *Adolescence*, 37(146), 221-234.
- Schultz, R.M. (1987). Truancy: Issues and Interventions. *Behavioral Disorders*, 12, 117-130.
- Sirin, S.R., & Rogers-Sirin, L. (2005). Components of school engagement among African American adolescents. *Applied Developmental Science*, 9, 5-13.
- Skinner, H.A., Steinhauer, P.D., & Santa-Barbara, J. (1983). The family assessment measure. *Canadian Journal of Community Mental Health*, 2, 91-105.
- Smith, A.M., & Rosenthal, D.A. (1995). Adolescents' perceptions of their risk environment. *Journal of Adolescence*, 18, 229-245
- Snowden, L.R. (1999). African American service use for mental health problems. *Journal of Community Psychology*, 27(2), 303-314.
- Spence, S.H., Donovan, C. & Breechman-Toussiant, M. (2000). The treatment of childhood social phobia: the effectiveness of a social skills training-based, cognitive behavioural intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry*, 41(6), 713-726.
- Staab, D.E. (1989). The relationship of family environment to school achievement in low income Mexican American and Anglo junior high school students. *Dissertation Abstracts International*, 49, 2827A.

- Stephenson, J. (2000). Children with mental problems not getting the care they need. *Journal of the American Medical Association*, 284, 2043-2044
- Stickney, M.I., & Miltenberger, R.G. (1998). School Refusal Behavior: Prevalence, Characteristics, and the Schools' Response. *Education and Treatment of Children*, 21, 160-170.
- Sue, S., Fujino, D.C., Hu, L., Takeuchi, D.T., & Zane, N. (1991). Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis. *Journal of Consulting & Clinical Psychology*, 59(4), 533-541.
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using Multivariate Statistics* (5th ed.). Boston, MA: Allyn and Bacon.
- Taylor, R. D. (1996). Adolescents' perceptions of kinship support and family management practices: Association with adolescent adjustment in African American families. *Developmental Psychology*, 32(4), 687-695.
- Taylor, M. J., Crowley, S. L., & White, K. R. (1993, April). *Measuring family support and resources: Psychometric investigation of the FSS and FRS*. Paper presented at the Annual Meeting of the National Council on Measurement in Education. Atlanta, GA.
- Tolan, T.F. & Wilson, M.N. (1990). The impact of two- and three-generational black family structure on perceived family climate. *Child Development*, 61, 416-428.
- Thurston, D. (2005). Leveling the home advantage: Assessing the effectiveness of parental involvement in elementary school. *Sociology of Education*, 78(3), 233-249.
- U.S. Bureau of the Census. *Statistical Abstract of the United States, 2004-2005, 124th Ed.* Washington, DC: U.S. Government Printing Office, 2005.
- U.S. Department of Health and Human Services. (1997). *Trends in the Well-Being of America's Children and Youth*. Available from the US Department of Health and Human Services Web Site: <http://aspe.os.dhhs.gov/hsp/97trends>.
- Weiner, B. (1993). On sin versus sickness. *American Psychologist*, 48(9), 957-965.
- Weisz, J.R., & Jensen, A.L. (2001). Child and adolescent psychotherapy research

and practice contexts: Review of the evidence and suggestions for improving the field. *European Child and Adolescent Psychiatry*, 10, 1-7.

Wentzel, K. R. (1991). Relations between social competence and academic achievement in early adolescence. *Child Development*, 62, 1066-1078.

Wetchler, J.L. (1986). Family therapy of school-focused problems: A macrosystemic perspective. *Contemporary Family Therapy*, 8, 224-240.

Williams, T.R., Davis, L.E., Miller Cribbs, J., Saunders, J., & Williams, J.H. (2002). Friends, family, and neighborhood: Understanding academic outcomes of African American youth. *Urban Educator*, 37(3), 408-432.

Wise, K. L., Bundy, K. A., Bundy, E. A., & Wise, L. A. (1991). Social skills training for young adolescents. *Adolescence*, 26, 233-241.

Zhang, M. (March 2003). Links between school absenteeism and child poverty. *Pastoral Care*, 10-17.

Appendix A: Classroom Introduction Script

Student Introduction

"My name is Aaron Lyon and I'm conducting a study on why some students miss school with the help of my assistant(s), _____ and _____. We're all students at DePaul University and are interested in all the different things that might cause someone to be absent from school.

We're asking all 5th and 6th graders to participate. Whether you've missed a lot of school, have a perfect attendance record, or are somewhere in-between, we'd like to ask you some questions in a survey. The survey will ask questions about things like neighborhood safety, family rules and activities, big changes in your life, your feelings about school, and how far people you know went in school. We will also ask your teacher and your school to answer a few questions about you including how often you come to school and what sort of grades you get.

If you want to be in the study, you will be asked to fill out a survey packet as we read the questions out loud that includes questions about these different parts of your life. It'll take about 1 and 1/2 hours to finish and, when you're done, you'll be given a \$10 gift certificate to _____. No one will find out how you answered any of the questions (including your teacher) and we won't use any names when we write our final report. Even if you decide you want to be in the study now, you can change your mind at any time. Does that sound like something you'd like to do? Do you have any questions at this time?

To be part of the study, you'll need to take a consent form home to your parents and return it to school or have them put it in the mail to us at DePaul. Since we'll be coming back in two weeks, it's important that you show this to your parents as soon as possible. If we don't have a consent form from you when we return, we can't let you take the survey. We got consent forms from some of your parents and guardians at Report Card Pickup Day, but we weren't able to talk to everyone's parent. So, if we didn't talk to your parent, we'll need to send a consent form home with you.

Raise your hand if you want to take the survey and I'll give you a consent form to take home. Remember, you can bring it back to your teacher or have your parent mail it back to us, but we need to have it before Monday, May 8th."

Appendix B**CONSENT/ASSENT FORMS**

1. Parental Consent
2. Child Assent
3. Teacher Consent

PARENTAL PERMISSION FOR PARTICIPATION IN RESEARCH STUDY
SCHOOL ATTENDANCE STUDY

(Date of letter)

Dear Parent or Guardian:

We need your permission for your child to participate in a very important study being conducted by DePaul University at your child's school (**Name of School**) on (**Date of Survey**). We will be assessing factors that affect children's school attendance.

What is the purpose of this research?

We are asking your child to be in a research study because we are trying to learn more about why students sometimes miss school. Your child is invited to participate in this study because s/he is in 5th or 6th grade and has classmates who have been absent from school this year or because s/he has been absent her/himself. This study is being conducted by Aaron Lyon at DePaul University.

How much time will this take?

This study will take about 1 to 1 ½ hours of your child's time.

What will my child be asked to do if I allow her/him to participate in this study?

If you allow your child to be in this study, s/he will be asked to fill out a survey. The survey will ask questions about things like neighborhood safety, family rules and activities, big changes in your child's life, the educational background of people your child knows well, and your child's feelings about school. We will also ask your child's teacher to answer some brief questions about what it's like to have your child in class and how often s/he talks to you about how your child is doing. We also want to ask your child's school for information about your child's grades and school attendance.

What are the risks involved in participating in this study?

Being in this study does not involve any risks other than what your child would encounter in daily life. For example, your child may feel uncomfortable or embarrassed about answering certain questions. Also, it is possible that someone may find out what you have said, but we will do everything we can to keep that from happening such as not writing names on any students' surveys. Furthermore, participation requires that your child's whole class miss approximately 1 to 1 ½ hours of total class time.

What are the benefits of my child's participation in this study?

Your child will not get any direct benefit from being in this study, but we hope we will learn things about school attendance that will help other students in the future.

Can I decide not to allow my child to participate? If so, are there other options?

Yes, you can choose not to allow your child to participate. Even if you allow your child to be in the study now, you can change your mind later, and your child can leave the study. There will be no negative consequences if you decide not to allow your child to participate or change your mind later. Also, even if you give your permission, your child may decide that s/he does not want to be in this study, and that is ok with us.

How will my child's privacy be protected?

The records of this study will be kept private. In any report we might publish, we will not include any information that will identify you or your child, like your name. Research records will be locked up, and only researchers will be able to look at the records. No one at (**Name of School**) will be able to find out any information about your child.

Will my child receive any kind of payment for being in this study?

For your child's participation, s/he will receive a \$10 gift certificate to a local store that has been identified by your school.

Whom can I contact for more information?

Under the Protection of Pupil Rights Act. 20 U.S.C. Section 1232(c)(1)(A), you have the right to review a copy of the questions that will be asked of your students. If you would like to review them or if you have any other questions about this study, please do not hesitate to contact Aaron Lyon at (773)325-7794 or by email at alyon3@depaul.edu. We will be happy to show you copies of the questionnaires and to share with you the results of our survey. If you have questions about your child's rights as a research subject, you may contact Shay-Ann Heiser-Singh, Coordinator of the DePaul University's Institutional Review Board at (312)362-7593 or by email at sheiser@depaul.edu.

Statement of Consent:

I have read the above information. I have all my questions answered. Please check one of the following...

- I permit my child to be in this study.
- I do NOT permit my child to be in this study.

Statement of Consent:

I have read the above information. I have all my questions answered. I permit my child to be in this study.

Child's Name: _____ Grade in School: _____

Parent/Guardian Signature: _____ Date: _____

Please return this form as soon as possible to (*Name of School*) or mail it in the envelope provided to...

School Attendance Study
 Aaron Lyon, Principal Investigator
 DePaul University Psychology Dept.
 2219 N Kenmore Ave.
 Chicago, IL 60613

Thank you,

 Aaron Lyon, M.A.
 Psychology Graduate Student
 DePaul University

 Sheldon Cotler, Ph.D.
 Professor of Psychology
 DePaul University

*Name and title of School
 Principal*

ASSENT TO PARTICIPATE IN RESEARCH STUDY
SCHOOL ATTENDANCE STUDY

What is the purpose of this research?

We are asking you to be in a research study because we are trying to learn more about why students sometimes miss school. Whether you've missed a lot of school, have a perfect attendance record, or are somewhere in-between, we'd like to ask you some questions about yourself, your school, your family, and your neighborhood. This study is being conducted by Aaron Lyon at DePaul University.

How much time will this take?

This study will take about 1 to 1 ½ hours of your time.

What will I be asked to do if I agree to participate in this study?

If you agree to be in this study, you will be asked to fill out a survey about different parts of your life. The survey will ask questions about things like neighborhood safety, family rules and activities, big changes in your life, your feelings about school, and how far people you know went in school. We will also ask your teacher and your school to answer a few questions about you including how often you come to school and what sort of grades you get.

What are the risks of being in this study?

This study does not involve any risks other than what you deal with in daily life. For example, you may feel uncomfortable or embarrassed about answering certain questions. Also, it is possible that someone may find out what you have said, but we will do everything we can to keep that from happening, like not writing your name on your survey.

What are the benefits of being in this study?

You will not get any direct benefit from being in this study, but we hope we will learn things about school attendance that will help other students in the future.

Can I decide not to participate? If so, are there other options?

Yes, you can decide not to participate. We have asked your parents to let you be in this study. But even if your parents have said "yes," you can still decide not to be in the study. Even if you decide to be in the study now, you can change your mind later and leave the study. Nothing bad will happen if you decide not to participate or change your mind later.

How will my privacy be protected?

The records of this study will be kept private. When we talk about our study in the future, we will not tell anyone your name or the names of other people in the study. Research records will be locked up, and only researchers will be able to look at the records.

Will I receive any kind of payment for being in this study?

For your participation, you will be given a \$10 gift certificate to a local store chosen for you by your school.

Whom can I contact if I have questions?

If you have questions about this study, please call Aaron Lyon at 773-325-7794. If you have questions about your rights as a participant in our project, you may contact Shay-Ann Heiser Singh, Coordinator of the DePaul University's Institutional Review Board at 312-362-7593 or by email at sheiser@depaul.edu.

You will be given a copy of this information to keep with you.

Statement of Assent:

I have read the above information. I have all my questions answered. I agree to be in this study.

Signature: _____

Date: _____

Grade in School: _____

Guardian/Parent's Name: _____

TEACHER CONSENT TO PARTICIPATE IN RESEARCH STUDY
SCHOOL ATTENDANCE STUDY

What is the purpose of this research?

We are asking you to be in a research study because we are trying to learn more about why students miss school. You are invited to participate in this study because some students in your classroom have been absent repeatedly. We have recruited these students as well as a comparison sample of children who do not display attendance problems. This study is being conducted by Aaron Lyon at DePaul University.

How much time will this take?

This study will take approximately 5 minutes of your time for each student in your classroom who is participating in our study and is identified for teacher reports. For example, if there are 2 identified students, this study will take about 10 minutes.

What will I be asked to do if I agree to participate in this study?

If you agree to be in this study, you will be asked to fill out a short survey packet that includes questionnaires about your interactions with each participating students' parents and how well those students get along with peers.

What are the risks of being in this study?

This study does not involve any risks other than what you deal with in daily life. For example, you may feel uncomfortable or embarrassed about answering certain questions. Also, it is always possible that someone may find out what you have said, but we will do everything we can to keep that from happening.

What are the benefits of being in this study?

You will not get any benefit from being in this study. However, we hope that what we learn will help kids who have trouble going to school regularly. We plan to provide a report to the school in which information will be presented in a combined, non-identifiable form.

Can I decide not to participate? If so, are there other options?

Yes, you can choose not to participate. We have asked you to help us with the study because children in your classroom are participating. But, even if your students and their parents have said "yes," you can still decide not to be in the study. Even if you agree to be in the study now, you can change your mind later and leave the study. There will be no negative consequences if you decide not to participate or change your mind later.

How will my privacy be protected?

The records of this study will be kept private. In any report we might make, we will not include any information that will identify you, like your name. Research records will be stored securely, and only researchers will be able to look at the records.

Will I receive any kind of payment for being in this study?

For your participation, you will receive a \$20 gift certificate regardless of the number of student participants in your classroom.

Whom can I contact if I have questions?

If you have questions about this study, please contact Aaron Lyon at 773-325-7794. If you have questions about your rights as a research subject, you may contact Shay-Ann Heiser Singh, Coordinator of the DePaul University's Institutional Review Board at 312-362-7593 or by email at sheiser@depaul.edu.

Statement of Consent:

I have read the above information. I have all my questions answered. I am willing to be in this study.

Signature: _____

Date: _____

Name: _____

Appendix C: Undergraduate RA Training Materials

Survey Administration Training – 5/1/2006

In each classroom...

- 1) Brief overview of the project (2-3 minutes)
 - a. We're from DePaul and we're doing a study on attendance
 - b. We're asking all 5th and 6th graders to participate
 - c. It will take between 1 and 1 ½ hours to complete
 - d. If you complete it, you will receive a \$10 gift certificate

- 2) Introduce the consent forms
 - a. "If you want to take part in the survey, raise your hand and we'll give you a consent form to sign. This is just like what your parents' signed, but we need you to sign it."
 - b. Those not wishing to participate should be asked why (nicely – they don't have to participate if they don't want to!) and then gathered in one corner of the room.

- 3) One team member gathers those who are not going to participate, while the other distributes consent forms to everyone

- 4) Read the consent forms out loud.
 - a. Not everything has to be read verbatim, but you should touch on every area of the consent form
 - b. Ask these three questions to assure student understanding:
 - i. "What is the purpose of the study?"
 - ii. "What are you being asked to do as a participant in this study?"
 - iii. "What are the risks associated with being in the study?"
 - ★ Ask each question approximately 2 times. Encourage different students to answer. Correct students who state something that is inaccurate.
 - ★ Make sure it is understood that no one will find out any of their answers!

- 5) Collect student consent forms and distribute survey packets with participant numbers written on them:
 - a. As you distribute each survey packet en o(t e m{participan)6(t n)6(u)-4(m)9(b))-6

 - b. Participant number guidelines:
 - i. First digit indicates the school; 1001
 1. Lawndale
 2. Morse Tech
 3. Jenner

- ii. Second through fourth digits indicate student number; 1045
(student 45 at Lawndale)
- 6) Read through the entire survey packet verbatim – including all instructions, etc.
 - a. Say: “OK, now we’re going to start the survey. I’ll be reading it out loud and I want you to follow along and mark your answers on your packet. _____ will be walking around to help anyone who has any questions. Be sure to ask questions about anything you don’t understand.”
 - b. Don’t lead the student’s responses. If they ask questions like “what kind of bad things” or “what kind of activities,” answer “Any kind.” – keep it general whenever possible!
 - c. Always state which item you’re on before you read the question/statement: e.g., “Number 30, There is one family member who makes most of the decisions”
 - d. Repeat the directions for responding (e.g., “mark if that is true or false for you,” “check the box if that’s true for you,” “circle if you agree or disagree with that statement” for the first 3-4 items in the set. Then, if they appear to understand, you can just say, “agree or disagree”
- 7) Debriefing
 - a. Ask the children if they have any questions about the survey they just completed. Answer any questions.
 - b. Make sure the students have turned to the debriefing sheet. Read through it and then ask the following questions to the class in an attempt to start a conversation about getting help if you need it...
 - i. “Who can you go to in your school when you’re having trouble with schoolwork?”
 - ii. “Who can you talk to in your school when you’re feeling bothered by something going on in your life?”
 - iii. “Who can you go to outside of school when you’re having trouble with schoolwork?”
 - iv. “Who can you talk to in your school when you’re feeling bothered by something going on in your life?”
 - ★ Even when a student has answered one of the questions, try to elicit other alternative responses from other children
 - c. If the school counselor is present, allow them an opportunity to say anything they want in response to student statements/questions
- 8) Collect student surveys, flipping though to make sure all items were completed. If all items were not completed, ask the student if they can fill in the missing items.
- 9) Distribute incentives as you collect the survey packets

10) Make sure you know which surveys came from which classroom!!!

Appendix E: School Refusal Assessment Scale – Revised (SRAS-R)

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

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

Never	Seldom	Half the Time	Usually	Always
0	1 2	3	4 5	6

Appendix F: Teacher-Child Rating Scale (T-CRS) – Peer Social Skills

Respondent: _____

Date: _____

Please rate the following items according to how well they describe the child:

	Not at All	A Little	Moderately Well	Well	Very Well
1. Has many friends	1	2	3	4	5
2. Is friendly toward peers	1	2	3	4	5
3. Makes friends easily	1	2	3	4	5
4. Classmates wish to sit near this child	1	2	3	4	5
5. Well-liked by classmates	1	2	3	4	5

Appendix G: Life Transitions Checklist

Please check all of the following that have happened to you in the **past year**.

In the **PAST YEAR**...

- I have moved to a new *house or apartment*.
- I have moved to a new *neighborhood*.
- I have moved to a new *city*.
- I have moved to a new *school*.
- I have moved to a new *classroom*.
- Someone close to me has died.
- Someone has moved out of my house or apartment.
- Someone new has moved into my house or apartment.
- I got a new brother or sister.
- I've started hanging out with a new group of friends.
- I've experienced another big change that is not listed above

Appendix H: School Success Profile

Neighborhood Support

INSTRUCTIONS: Decide whether you agree or disagree with the following statements about your neighborhood and circle the appropriate response.

- | | | |
|--|--------------|-----------------|
| 1. Adults in my neighborhood are interested in what young people in the neighborhood are doing. | AGREE | DISAGREE |
| 2. If I did something wrong, adults in my neighborhood who knew about it would probably tell the adults I live with. | AGREE | DISAGREE |
| 3. In my neighborhood, there are a lot of fun things for people my age to do. | AGREE | DISAGREE |
| 4. If I had a problem, there are neighbors who could help me. | AGREE | DISAGREE |
| 5. I feel safe in my neighborhood. | AGREE | DISAGREE |
| 6. I am happy with the neighborhood I live in. | AGREE | DISAGREE |
| 7. People in my neighborhood really help one another out. | AGREE | DISAGREE |
| 8. Adults in my neighborhood encourage young people to get an education. | AGREE | DISAGREE |
| 9. Adults in my neighborhood would say something to me if they saw me doing something that could get me in trouble. | AGREE | DISAGREE |
| 10. Young people in my neighborhood show respect to adults. | AGREE | DISAGREE |
| 11. Adults in my neighborhood seem to like young people. | AGREE | DISAGREE |
| 12. Adults in my neighborhood can be trusted. | AGREE | DISAGREE |

Neighborhood Youth Behavior

INSTRUCTIONS: Decide whether young people about your age in your neighborhood are likely or unlikely to do the following types of things.

- | | | |
|--|---------------|-----------------|
| 1. Make good grades in school. | LIKELY | UNLIKELY |
| 2. Get in trouble with the police. | LIKELY | UNLIKELY |
| 3. Use drugs. | LIKELY | UNLIKELY |
| 4. Join a gang. | LIKELY | UNLIKELY |
| 5. Graduate from high school. | LIKELY | UNLIKELY |
| 6. Carry a weapon such as gun knife, or club. | LIKELY | UNLIKELY |
| 7. Find a job or go to college after completing high school. | LIKELY | UNLIKELY |
| 8. Drink alcoholic beverages. | LIKELY | UNLIKELY |

Neighborhood Safety

INSTRUCTIONS: Decide whether, *during the past 30 days*, any of the following things happened in you neighborhood and circle the corresponding reponse.

- | | | |
|---|-----------|------------|
| 1. Someone you live with was robbed or mugged. | NO | YES |
| 2. Someone in your neighborhood was robbed or mugged. | NO | YES |
| 3. Someone broke into your home or a neighbor's home. | NO | YES |
| 4. You heard gunshots. | NO | YES |
| 5. You saw someone selling illegal drugs. | NO | YES |
| 6. Someone tried to sell you illegal drugs. | NO | YES |
| 7. Someone tried to get you to break the law. | NO | YES |
| 8. A person was murdered. | NO | YES |
| 9. A fight broke out between two gangs. | NO | YES |
| 10. Someone threatened you with a weapon such as a gun, knife, or club. | NO | YES |
| 11. You saw someone threatened with a weapon such as a gun, knife, or club. | NO | YES |
| 12. Someone offered you an alcoholic beverage. | NO | YES |

School Satisfaction

INSTRUCTIONS: Carefully read the following statements about your feelings about your school. If you think the statement is true or mostly true, answer *true*. If you think the statement is false or mostly false, answer *false*.

- | | | |
|---|-------------|--------------|
| 1. I enjoy going to this school. | TRUE | FALSE |
| 2. I am getting a good education at this school. | TRUE | FALSE |
| 3. I like the classes that I am taking. | TRUE | FALSE |
| 4. Student needs come first at this school. | TRUE | FALSE |
| 5. I get along well with other students at this school. | TRUE | FALSE |
| 6. Every student is important at this school. | TRUE | FALSE |
| 7. Teachers at this school seem to like young people. | TRUE | FALSE |
| 8. Teachers at this school can be trusted. | TRUE | FALSE |

Teacher Support

INSTRUCTIONS: Carefully read the following statements about you feelings about teachers at your school. If you think the statement is true or mostly true, answer *true*. If you think the statement is false or mostly false, answer *false*.

- | | | |
|--|-------------|--------------|
| 1. My teachers really care about me. | TRUE | FALSE |
| 2. I get along well with my teachers. | TRUE | FALSE |
| 3. My teachers really listen to what I have to say. | TRUE | FALSE |
| 4. My teachers care whether or not I come to school. | TRUE | FALSE |
| 5. My teachers are willing to work with me after school. | TRUE | FALSE |
| 6. I receive a lot of encouragement from my teachers. | TRUE | FALSE |
| 7. I am respected and appreciated by my teachers. | TRUE | FALSE |
| 8. My teachers encourage me to do extra work when I do not understand something. | TRUE | FALSE |
| 9. My teachers praise my efforts when I work hard. | TRUE | FALSE |
| 10. My teachers care about the grades I make. | TRUE | FALSE |
| 11. My teachers expect me to do my best all the time. | TRUE | FALSE |

School Safety

INSTRUCTIONS: Carefully read the statements below and decide how much each of the following is a problem for your school. Then, check the appropriate box.

	A big problem	A little problem	Not a problem
1. Fights among students.			
2. Destruction of school property.			
3. Student use of alcohol.			
4. Student use of illegal drugs.			
5. Student carrying weapons.			
6. Students physically abusing teachers (hitting, pushing).			
7. Students verbally abusing teachers (yelling, name calling).			
8. Racial tension.			
9. Gang fights.			

Friend Behavior

INSTRUCTIONS: Carefully read the statements below and decide how

Appendix I: Student Mesosystem Perception Scale

There are no right or wrong answers. Circle the answer that YOU think is true.

Think about which parent takes care of your school work (for example, asks you about homework, calls your teacher) and think about that parent when you answer the questions.

Parent is: _____ Mother _____ Father _____ Other

1. My parent and my teacher agree on what I should learn in school.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----
2. My parent and my teacher agree on how I should act in school.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----
3. My teacher and my parent work together to help me do well in school.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----
4. My parent makes me do what my teacher wants.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----
5. My teacher says nice things about my parent.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----
6. My parent says nice things about my teacher.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----
7. I feel caught in the middle between my teacher and my parent.

YES	mostly yes	mostly no	NO
-----	------------	-----------	----

Appendix J: Parent-School Interaction Questionnaire – Teacher Report

Respondent: _____

Date: _____

Please circle the response that best represents, to best of your knowledge, the amount this student's parents or guardians are involved with the school...

- 1) His/her parents/guardians attend parent-teacher conferences.

Never				Regularly
1	2	3	4	5

- 2) His/her parents/guardians attend open house/open school night.

Never				Regularly
1	2	3	4	5

- 3) His/her parents/guardians volunteer to help out in the classroom or school.

Never				Regularly
1	2	3	4	5

- 4) His/her parents/guardians attend school activities and events (e.g., book fairs).

Never				Regularly
1	2	3	4	5

- 5) His/her parents/guardians inquire about his/her progress or what we are doing in class.

Never				Regularly
1	2	3	4	5

- 6) His/her parents/guardians talk informally with me before or after school.

Never				Regularly
1	2	3	4	5

Appendix K: Models of Academic Achievement

Please think about the adults (including parents and other family members) that you are closest to and that you have seen in the past two weeks. Without using their names, please write what your relationship is to that person and how far that person went in school.

Person	Relationship to you (for example: your mom, uncle, teacher, minister, mom's friend)	To the best of your knowledge, how far did they get in school?
Adult #1	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #2	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #3	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #4	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #5	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #6	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #7	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #8	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.
Adult #9	_____	<input type="checkbox"/> Did not graduate high school. <input type="checkbox"/> Graduated high school. <input type="checkbox"/> Went to college. <input type="checkbox"/> Graduated from College.

Appendix L: Demographics Sheet

Participant #: _____

Date: _____

Background Information

- 1) I am a: Boy
 Girl
- 2) My birthday is: ____/____/19____. I am _____ years old
- 3) I am in _____ grade.
- 4) The group that describes me best is (please check one)...
- Black or African American
 White/Caucasian
 Hispanic or Latino
 American Indian or Alaska Native
 Asian
 Native Hawaiian or Other Pacific Islander
- 5) How many people live at home with you? _____ people

Now, I need you to tell me a little more about the people who live in your household right now. I need to know the person's age, sex, and relationship to you. Please include all adults and children who live with you.

Person #	Age (yrs)	Sex (M/F)	Relationship to you (for example, mother, uncle, brother, sister, cousin)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Appendix M

DEBRIEFING SHEET

Thank you very much for taking the time to participate in our study!

This study was designed to learn more about why students miss school in order to help students go to school more regularly. You were invited to participate in this study because you are in 5th or 6th grade. Some students were picked because they sometimes miss more school than their classmates while others were picked because of their good attendance records.



We realize that discussing personal information about your family, school, and community can sometimes be a difficult experience. Often, when kids are bothered by things going on in their lives, it helps to talk to someone about it. If you think you might want to talk to someone about something that's bothering you, let one of the members of our project or tell your teacher.



We also know that sometimes kids have trouble doing as well in school as they would like to and that they don't always know what to do about it. If you think you might want extra help with schoolwork, please tell one of one of the members of our project or your teacher.

Thank you again for taking the time to help us with our study!