

THE EFFECTS OF CHILDREN'S PERCEPTIONS OF ATTACHMENT SECURITY AND  
EMOTION REGULATION ON SCHOOL DISENGAGEMENT AMONG ELEMENTARY  
SCHOOL TRUANTS

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## **DEDICATION**

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## ABSTRACT

The major focus of this study was to examine how children's perceptions of attachment security and children's emotion regulation predict school disengagement among elementary school truants.

This study utilized an exploratory, cross-sectional survey design. Data collection was accomplished with four standardized survey instruments, completed by 74 truants (ages 7 to 12 years) and their parents and teachers, and secondary data collected by the East Baton Rouge (EBR) Truancy Assessment and Services Center (TASC), Louisiana during the 2006-2007 academic years. The school disengagement model was tested with three latent variables (children's perception of emotional bonds, emotion regulation, and school disengagement) using structural equation modeling (SEM). Also, this study tested a multiple indicators-multiple causes (MIMIC) model in the SEM to examine the relationship between three sample characteristic variables (age, grade, and resistant status) and three latent variables. Additionally, hierarchical regression analysis was utilized to support the school disengagement model.

The structural equation model had a good fit to the data ( $AGFI = .88$ ,  $NFI = .91$ ,  $RMSEA = .00$ ). The findings indicate that children's emotional regulatory capacity is a significant predictor of school disengagement. Contrary to expectations, the emotional bonds of children did not significantly predict emotion regulation or school disengagement in the model. However, bi-variate results indicated that two indicators of emotional bonds, children's perceptions of attachment security and trust, were associated with children's risk for aggressive behavior. The result of hierarchical regression also showed that children's emotional bonds was statistically significant predictor of children's externalizing behavior problems at .10 level. The MIMIC model showed that gender was a good predictor of children's perceptions of attachment

security, but age and resistant status were not predictors on all latent variables in the model.

This study extends the attachment and emotion regulation research with an examination of school disengagement in high-risk, middle-childhood, African American children. The findings are discussed with regard to the implications of the prediction of school disengagement from emotional bonds, emotion regulation, and gender differences. The findings concerning emotion regulation are also discussed in relation to their implications for truancy intervention programs to help high-risk elementary school children.

# CHAPTER 1

## INTRODUCTION

The purpose of this research study is to identify associations among the children's perceptions of attachment security, children's emotion regulation, and school disengagement among a sample of elementary school truants. School truancy is an early indicator of potential personal and social problems. Chronic non-attendant school children often miss opportunities to follow their school curricula, show low academic achievement, and lose interest in school. According to the delinquency literature, these children are likely to engage in delinquent behaviors including substance abuse, gang involvement, and criminal activities (Garry, 1996; Huizinga, Loeber, & Thornberry, Cothorn, 2000).

The literature identifies truancy as one of the top ten major problems in the nation's schools (DeKalb, 1999) and it has become a serious problem in many communities worldwide (Kagan & Gall, 1998). According to juvenile court reports, truancy accounted for 26 percent of all status offense cases in juvenile courts in the U.S. in 1998, which indicated an 85 percent increase in truancy cases since 1989 (Puzzanchera, Stahl, Finnegan, Snyder, & Tierney, 2003). The Census Bureau's biannual report indicated that there were 1,332 truants in juvenile detention in 1997, 913 in 1999, and 784 in 2001 (Sickmund, Mellissa, 2004). Although accurate nationwide data are not available because of the absence of statutory requirements for documentation on truancy in school systems, the following statistics from the two largest public school systems in the United States show the seriousness of the school truancy issue. In New York City's public system, about 150,000 of one million public school students are absent on a typical day, while the number of unexcused absences is unknown (Garry, 1996). The United School District in Los Angeles reports that, on average, 62,000 students are out of school each

day, and fewer than half of them come back with a written excuse (Garry, 1996). Further, 40 public school attendance officers investigated 66,440 chronic absenteeism complaints during the 1994-1995 school years in Detroit, MI (Richardson, 1996).

A consistent characteristic of the truancy literature is that most studies have been done with the adolescent population. Truancy is more prevalent between ages 14 and 16. During the last ten years, the number of petitioned truancy cases peaked at age 15 (Irving, Parker-Jenkins, 1995; Puzzanchera et al., 2003). While the adolescent population is represented as a high risk group in truancy, chronic non-attendance behavior does not begin in middle or high school but at a much younger age (Cullingford, 1999; Goldberg, 1999; Grooters & Faidely, 2002).

The truancy intervention literature indicates that involvement of parents has been found to improve a child's school adjustment for school truancy problems and for elementary school children, specifically. Research has established relationships between various family and environmental factors and school adjustment including truancy, but there remains a scarcity of research investigating the relationships between specific areas of parent-child relationships and a child's school truancy behavior.

In attempting to understand the development of delinquency and antisocial activities, researchers have investigated a number of potential contributing factors. According to the developmental perspective, parental factors involving discipline practices and the quality of the parent-child relationship have been identified as strong predictors in delinquency studies including truancy (Cullingford, 1999; McNeal & Ralph, 1999; Rosenfeld, Richmand, & Bowen, 2000). Child-parent attachment in particular has been identified as the developmental foundation of the child-parent relationship (Shaw and Bell, 1993). Although this issue has not been studied in relation to truancy, specifically, it is logical that attachment has a role to play in the

emergence of truancy.

Parent-child bonding begins when a child forms an attachment to his or her parent, and positive parent-child interaction influences secure child-parent attachment (Spoth & Redmond, 1996). Attachment security will have a profound influence on a child's behavior throughout the life course, influencing both the nature of the school experience as well as personal beliefs and values (Siegel & Senna, 2000). Research has studied the relationship between child-parent attachment and behavior problems in childhood, supporting the importance of early child-parent relationship qualities for these developmental issues (Dekovic, Janssens, & Van-As, 2003; Ingram & Ritter, 2000; Leifer, Kilbane, & Skolnick, 2002; Moss, Rousseau, Parent, St-Laurent, & Sintonge, 1998).

Generally, attachment is defined as one form of emotional bond to the caregiver. Based on Bowlby's theory, Greenberg (1999) indicates that attachment is a property of social relationships in which a weaker, less skilled individual relies on a more competent and powerful one for protection. Children who experience warm and responsive relations with caregivers tend to develop secure attachments, and are able to use the caregiver, the attachment figure, as "a safe haven" in times of distress. Further, securely attached children tend to demonstrate greater curiosity and confidence when working on challenging tasks and to have less difficulty in social interactions (Kerns, 1996).

Greenberg and colleagues (Greenberg & Speltz, 1988; Marvin & Greenberg, 1982) extended Bowlby's attachment model from early infancy through the early school years by linking it to antisocial behavior within a developmental perspective. Recently, researchers have begun to explore child-parent attachment in elementary school children (Kerns, Klepac & Cole, 1996). Kerns et al. (1996) have suggested that in middle childhood and adolescence, children

continue to rely on attachment figures as a secure base from which to explore and as a source of comfort in times of stress. However, the goal of the attachment system changes in older children and adults. According to Bowlby (1987), as children's physical and mental capacities increase, their coping mechanisms become more sophisticated. Therefore, the attachment system in older children still includes physical proximity seeking to an attachment figure as its central goal, but the maintenance of physical proximity to the attachment figure in older children becomes much less intense compared to young children. Psychological availability of the attachment figure becomes the important goal of the attachment system as children grow and develop. This psychological availability-the capacity to achieve comfort from the attachment figure by reliance on mental representations-is identified by a child's belief in the attachment figure's availability with respect to communication, physical accessibility, and responsiveness if called on for help. Thus, although the frequency and intensity of attachment behavior is acknowledged to decline with age, the quality of the attachment bond is hypothesized to remain stable (Bowlby, 1973).

A link between attachment and emotion regulation is proposed by attachment theory. As one of the functions of the attachment system, securely attached children are able to use the parent effectively to help them regulate their positive and negative emotions (Cassidy, 1994; Contreras & Kerns, 2000). Emotion regulation is a process and strategy of "emotion self-management" to accomplish one's goals, involving maintaining and enhancing emotional arousal as well as inhibiting it (Guttmann-Steinmetz & Crowell, 2006; Thompson, 1994). Contreras and Kerns (2000) proposed that parental availability and responsiveness to the child's distress signals are related to the development of adaptive emotion regulation skills in children. Children learn to regulate their distressing emotions through their experiences with the caregiver in the attachment system. For example, a caregiver's availability and responsiveness to the child's

distress signals give the assurance and expectation to the child that sharing/expressing both positive and negative emotions are acceptable. This expectation applied in the child's relationships with others leads to the ability to tolerate and regulate their emotion in socially acceptable ways (Guttman-Steinmetz & Crowell, 2006). On the other hand, the caregiver's inconsistent responses to the child's distress, such as lower tolerance of and effectiveness in managing child affect, fail to process the child's negative emotion and develop a strategy of heightening emotion to maintain the attention of the caregiver. When children generalize the negative emotionality of their parental relationships to relationships with others, they frequently encounter similar relational problems (Guttman-Steinmetz & Crowell, 2006).

In conclusion, research generally supports that a child's attachment quality is negatively associated with behavioral problems at school settings (Easterbrooks et al., 1993; Moss et al., 1996, 1998; Shaw et al., 1996; Speltz et al., 1990). These problem behaviors related to school are predicted by children's management of their emotions (Eisenberg, Guthrie, Fabes, Reiser, Guthrie, Murphy, Maszk, Holmgren, Suh, 1996; Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, Friedman, Poulin, & Maszk, 1997; Eisenberg, Fabes, Shepard, Murphy, Maszk, Smith, & Karbon, 1995). On the other hand, concerning school truancy as a subtype of conduct disordered behaviors (American Psychiatric Association, 1998), school-aged children's conduct problems are associated with family risk factors including the lack of parent availability and responsiveness, inconsistency in parenting, and lack of limit setting, monitoring and supervision (Morrison, Macdonald, & LeBlanc, 2000). Supportively, school-aged children with secure attachments tend to have closer parental monitoring and better cooperation in monitoring situations (Kerns, Aspelmeier, & Gentzler, 2001).

Using attachment theory to examine students' truancy risk and other school-behavior

problems, it is expected that children's emotion regulation capabilities would be an intervening factor between qualities associated with attachment bonds and school disengagement. Research has demonstrated that children with poor attachments to their caregivers tend to use inappropriate strategies to regulate their negative emotions, perhaps in an attempt to express their needs for security, whereas children with secure attachments to their caregivers tend to manage their negative emotions more favorably (Duchesne & Larose, 2007). Thus, children who have secure attachments with their caregivers may be better able to tolerate potentially stressful school situations and exhibit appropriate behavioral management skills in the school setting also. As a result, attachment security to caregivers may decrease the risk of the development of behavioral problems and truancy risk in school.

### **Research Hypotheses**

Hypothesis 1: Elementary school truants who report of high quality child-parent emotional bonds (an indicator of attachment security) will be likely to also have high levels of emotion regulation.

Hypothesis 2: Elementary school truants who report of high quality child-parent emotional bonds (an indicator of attachment security) will be less likely to also show school disengagement, indicated by fewer behavior problems and low continued truancy risk level.

Hypothesis 3: Elementary school truants with high levels of emotion regulation will be less likely to also show school disengagement, indicated by fewer behavior problems and low continued truancy risk level.

## **CHAPTER 2**

### **REVIEW OF RELATED LITERATURE**

#### **Definition of Truancy**

The definition of truancy varies according to each state. Most school systems categorize school absences in two forms. Excused absences are permissible absences when the school receives either a phone call or a note from the parents or guardians to the teacher upon the student's return to school. Absences from school without parental consent are considered unexcused and chronic unexcused absences are referred to as truancy. In a simplified way, Schultz (1987) defined truancy as excessive unexcused absences. Clinically, however, truancy has been categorized as a kind of conduct disordered behavior along the same lines as stealing, lying, destructiveness, and cheating (American Psychiatric Association, 1998).

#### **Truancy and Relevant Problems**

##### **Juvenile Crimes**

One of the main reasons to study truancy is the close relationship between truancy, delinquency, and antisocial activities (Cullingford, 1999; Lee & Miltenberger, 1996; Schultz, 1987; Waltzer, 1984; Ziesemer, 1984). Several studies have found that truancy and dropping out of school are common characteristics in the backgrounds of criminals (Alexander, Entwisle, & Horsey, 1997; Cullingford, 1999; Farrington, 1989, 1998; Hawkins, Catalano, & Miller, 1992; Lipsey, M., & Derzon, J., 1998; Loeber, 1996; Rumberger, 1995). The U.S. Department of Justice reports that 80 percent of those in prison were at one time truant (Kagan & Gall, 1998). Most experts believe that truancy is the initial step toward involvement in delinquency, criminality, substance abuse and other problematic behaviors (Huizinga, Loeber, Thornberry & Cothorn, 2000; Kelly, Loeber, Keenan & DeLamarte, 1997; Loeber & Farrington, 2000).

Chronic non-attendant school children often lose interest in school and show low academic achievement, and are likely to engage in delinquent behaviors, such as substance abuse, gang involvement, and criminal activities (Garry, 1996; Huizinga, Loeber, & Thornberry, 1995). The most recent Juvenile Court Statistics reports that petitioned status offense caseloads increased 39 % between 1995 and 2004 (Stahl, Puzancher, Livsey, Sladky, Finnegan, Tierney, & Snyder, 2007). Among total status offense cases, the largest portion of caseloads were involved in truancy, which indicates a 69 % increase in truancy cases between 1995 and 2004, the largest increase among the petitioned status offenses. Many police departments report that most of daytime crimes such as vandalism, shoplifting, and graffiti are committed by students who are out of school during regular school hours (Garry, 1996). Two police programs in New York City (Coles, 2000) and North Miami Beach (Berger & Wind, 2000) provide support for the relationship between truancy and daytime crimes. After implementation of police truancy interventions, such as picking up truants on the street during school hours, these two cities' crime rates decreased by 19 % to 30 % percent.

### **Substance Abuse**

Roebuck, French & Dennis's study (2004) used a very large sample of adolescents (N=15,168) from the 1997 and 1998 National Household Surveys on Drug Abuse to explore the relationship between adolescent marijuana use and school attendance. They found that chronic marijuana use was positively and significantly associated with dropout and truancy. Specifically, when non-chronic marijuana users were compared with chronic marijuana users, dropping out and truant behaviors were more than four times higher in chronic users. Harrith's study (1992) provides some support for Roebuck et al.'s findings. This self-reported survey from 953 adolescents identified truancy as one indicator of a possible drug user, and when combined with

one of the following variables (peer drug use, suspension at school, conflict with parents, law infringements, alcohol use, and cigarette smoking) was associated with a stronger probability of drug use.

Hallifors and colleagues' continued studies (2002, 2006) identified truancy as a strong risk indicator of adolescents' substance use and behavioral problems along with GPA and sexual activity. Particularly, truancy is a strong predictor of drug use for middle school students (Hallifors, Vevea, Iritani, Cho, Khatapoush, & Saxe, 2002). In their first study, GPA, truancy, and sexual activity were measured as risk factors of high-risk and low-risk children's drug use in grades 7 through 12 from the 28 communities who participate in the Safe and Drug-Free Schools program. Among 7<sup>th</sup> and 8<sup>th</sup> graders, truancy was twice as powerful as GPA in predicting use of alcohol, binge drinking, marijuana, other drugs, and smoking in the past 30 days. Their second study utilizing high school students who participated in Reconnecting Youth, a drug prevention program, measured truancy and GPA as risk indicators of substance use, suicide behaviors, and delinquency among 930 high-risk and 393 typical students in grades 9 to 11 in two separate sites, San Antonio (SA) and San Francisco (SF). Interestingly, high school truancy was a significant predictor of cigarette, alcohol, and marijuana use, as well as suicide risk and delinquency in only SF site students.

### **School Dropout**

Early identification of student school dropout has been shown to have a strong correlation with school attendance problems in many studies, indicating chronic truancy typically precedes dropping out (Alexander et al., 1997, Goldberg, 1999, & Ziesemer, 1984). McLaughlin and Vacha's (1992) proposal to assist school districts in dealing with at-risk students identified low and inconsistent attendance as one of the most common characteristics of at-risk students. A

longitudinal study of African American males in 1978 showed a strong association between truancy in early school age and high school truancy and dropping out (Robins and Ratcliff, 1978). In their study, occasional or frequent truants in elementary school showed poor school attendance in high school, approximately twice the rate for those not truant in elementary school. Furthermore, the majority of truants in elementary school continued poor school attendance in high school, and 75 percent of truants (n = 38) in elementary school failed to graduate high school.

Another longitudinal study was conducted by Fergusson and Horwood (1998) using a birth cohort of 1265 New Zealand children. The findings of this 18-year longitudinal study showed linkages between early conduct problems at age 8 and later risks of leaving school without qualifications and unemployment by age 18. In addition, children's early conduct problems were associated with their adolescent behavior patterns such as peer affiliations, cannabis use, suspension from school, and truancy at age 14 and 16 years, which increased the tendency of leaving school without qualifications.

The longitudinal Cambridge Study in Delinquent Development (Farrington, 1989) identified a significant relation between children's school truancy experience and violence-related convictions in adulthood. Farrington (1989) conducted on-going surveys with 411 males at ages 8 years old to 32 years old to measure predictors related to adolescent aggression, teenage violence, adult violence, and convictions for violence. The study found that high truancy rates at ages 12-14 and leaving school before the age of 15 significantly predicted all three measures of violence: teenage violence, adult violence, and convictions for violence.

Rumberger (1995) used the National Educational Longitudinal Survey data in 1990 to identify individual and school factors on dropouts from middle school. Eighth graders' school

behaviors were significant predictors of dropping out of school, and truancy was the strongest predictor among school behaviors, with an odds ratio about four times the rate of odds than the odds of the lowest predictor.

### **The Cost to Society**

Beyond the individual problem, chronic truancy that continues throughout the school age years leads to extreme community and social costs. Children, who fail to graduate as a result of chronic truancy exhibit more deviant behavior, make lower salaries, are more often unemployed, and have more psychological problems (Snyder & Sickmund, 1995). Particularly, school dropout has a major impact on earning potential. In the 2000 census report, comparing employment rates between high school dropouts and high school graduates, high school dropouts had only a 52 % employment rate, which was 19 % less than high school graduates and 31 % less than college graduates. Furthermore, high school dropouts' full-time gross income reached only 65% of the median earnings (<http://www.census.gov/hhes/income/earnings/callusboth.html/>). Consequently, our society loses income and tax revenue from potential employees, and has a burden to provide social services for the affected population. While the negative effects of truancy are well documented, very little research has been done to evaluate the cost of reducing truancy. The Colorado Foundation for Families and Children suggests that truancy reduction programs are inexpensive compared to the cost of high school dropout. A study of three truancy reduction programs and three truancy courts operating in Colorado showed that the truancy programs in Adams County and Denver cost about \$50,000 a year, which is four times less than the cost of one high school dropout (\$200,000; Heilbrunn, 2003). Particularly, Louisiana is identified as both the poorest state and very low high school graduation rate in the nation (Annie E. Casey Foundation, 2007). The expected cost of dropping out of high school in Louisiana is

estimated between \$366,107 and \$386,349 per a student. If a high school dropout student turns to a life of crime, the state cost \$1,686,816. Comparing to the year budget (\$4,464,402) of the Louisiana truancy intervention program, called Truancy Assessment and Services Center (TASC), preventing 13 children from dropping out of school out of 12,000 referrals justify its cost to the state of a dropout (Lewis & Terrell, 2007). Furthermore, one truancy center in North Miami Beach showed that the crime rate was reduced substantially in targeted neighborhoods (vehicle burglaries decreased by 22% and residential burglaries and criminal mischief both decreased by 19%) following the implementation of a program where street youth were picked up during school hours (Berger & Susan Wind, 2000).

### **Causes of Truancy**

Kinder, Wakefield, and Wilkin (1996) reported the result of interviews with 160 children in grade 7 and above about the causes of truancy. The study described causes of truancy in rank order as: The influence of friends and peers, relationships with teachers, the content and delivery of the curriculum, parental attitudes or family problems, bullying, and the classroom context.

Kinder, Harland, Wilkin & Wakefield (1995) categorized the causes of truancy in four factors:

1. Individual factors included lack of self-esteem/social skills/confidence; poor peer relations; lack of academic ability; special needs; and lack of concentration/self-management skills.
2. Family factors included parentally condoned absence; not valuing education; domestic problems; inconsistent or inadequate parenting; economic deprivation.
3. Community factors included socio-economic factors, location, local attitudes and lack of community self-esteem.
4. School related factors included poor management, the ease with which some pupils could

slip away unnoticed, poor relations with teachers and peers, and the perceived irrelevance of some aspects of the school curriculum.

Oysermand and Salts (1993) also found significant relationships among a child's self-confidence, truancy and delinquent behaviors. Comparing non-delinquent and delinquent youths, those who are not socially competent in matters relating to parents, peers, and other adults tend to be involved in aggressive delinquency, theft, and truancy. In addition, impulsive choices and lack of faith in one's ability to do well in school were other predictors of truancy.

Smith (1996) conducted a survey on school attendance, called the Hertfordshire School Attendance Project, among 12 secondary schools, and found self-related (individual) factors that affect truancy in the U.K. The survey concluded that the common causes of truancy were related to disaffection with school, lesson difficulty, bullying, boredom, and peer pressure (Goldberg, 1999). Lesson difficulty and disaffection with school were highly correlated with school truancy.

Recent research has stressed the link between the family economic situation and a student's attendance (Zhang, 2003). Truancy is likely to relate to a student's social disadvantage (poverty) as a main associated factor, which includes parental unemployment or employment in unskilled or semi-skilled work (Reid, 2005). Teasley's review of the literature (2004) identified family dynamics related to socio-economic status that play a key role in absenteeism and truancy.

The following family characteristics can affect absenteeism and truancy:

1. Parental involvement in children's education, which is positively related to SES.
2. Parents' involvement with children in activities that improve cognitive development.
3. Parental values and aspirations to succeed in school.
4. Parenting styles that foster beneficial communication between parents and children.
5. Characteristics associated with low income, such as crowded living conditions, weak

Parent-child relationships, and frequent relocation.

6. Parenting skills (authoritative parenting vs. abuse/neglect)

### **Parental Contributors to Truancy**

Research literature identifies that parents are an important influence on children's school adjustment (Courville-Smith, Ryan, Adams & Dalicandro, 1996). When parents participate in their child's education such as monitoring homework, reading ability, grades, achievement scores and courses, and attend PTA, the probability of truancy decreases (Epstein & Sheldon, 2002). A series of studies by Bowen and his colleagues explored the significant influence of parental support in adolescents' school success. Their studies examined the relationships between a student's social support providers and school behaviors, affect, and grades among at-risk and low-risk adolescents (Richman, Rosenfeld, & Bowen, 1998; Rosenfeld, Richman, & Bown, 2000). Results indicate that parents are major sources of social support for both middle school and high school students in at-risk and not at-risk circumstances. Students who perceived no or very little parental support attended school less often, studied less, engaged in fewer prosocial helping behaviors, felt less able to handle school problems, were more detached from classmates and teachers, were less apt to share their feelings with their families, and had lower self-esteem. On the other hand, students who perceived high parental support had better attendance, spent more hours studying, avoided problem behavior, had higher school satisfaction, engagement, and self-efficacy, and obtained better grades.

An additional interesting parental factor was found in Frank's (1990) secondary analysis of statewide survey data by the Texas Department of Human Resources. He suggests that parents' high school graduation is an important family variable in planning school attendance prevention programs. Findings of his study indicate that parent education level was a stronger

factor in predicting high school dropout rates than other socioeconomic environmental factors, including family income, single-parent, and number of family stressors.

### **Attachment and Social Competence**

According to Waters and Sroufe (1983), social competence is the foundation for a range of developmental outcomes. Children's social competence can be thought of as the utilization of environmental and interpersonal resources to further developmental goals (Weinfield, Sroufe, Egeland, & Carlson, 1999). Conceptually, Bowlby (1969) hypothesized that children's secure attachment relationship experiences in early life provide a foundation to build social competence. In the parent's sensitive and responsive behavior interactions, children develop an expectation that the same sensitive and responsive interactions will occur in other social relationships, they will receive positive responses from others, and feel worthy of self. On the other hand, insecure attachment experience develops expectations of lack of social reciprocity, inconsistency and rejection in other social relationships, and low self-confidence.

Attachment theory was proposed by Bowlby (1969) to refer to a framework for a child's emotional bonds to the caregiver, incorporating ideas from an ethological perspective.

According to Bowlby, attachment serves to maintain the child's proximity to the mother (the attachment figure) in situations of perceived distress or alarm, thus improving the child's chances of survival. The central theme of attachment theory is explained by two major behavioral systems, the attachment and the exploratory systems. In normal conditions, if the child is threatened or distressed, the attachment system is activated and the child will try to maintain a physical proximity to the mother. During this proximity seeking, the mother's sensitive and responsive interactions with the child's needs will establish the child's sense of security and create a secure base for the child to explore the environment with confidence and trust that the

mother is always available when needed.

Ainsworth and colleagues (1978) discovered individual differences in the security of the child-mother attachment using a laboratory procedure known as the “Strange Situation”, and identified the basic three patterns of attachment: Secure, Insecure-Avoidant, and Insecure-Resistant. During a brief, 20-minute procedure with eight episodes, the children’s behaviors during separations from and reunions with their mother in a strange place with an unfamiliar individual were distinguished which represent their underlying expectations about the mothers’ availability and responsiveness. Later, Main and Solomon (1986) added a fourth attachment pattern, termed “insecure-disorganized attachment”, which is a more extreme form of attachment insecurity which could not be categorized in either of Ainsworth’s insecure attachment behavior patterns.

According to Ainsworth’s classification, children classified with “secure” attachments to their parents use their mothers as a source of comfort and as a secure base for exploration. These children are actively engaged in exploration in the strange environment of the strange situation. While they are distressed from the separation, they are easily restored to tranquility by contact with the mother, after which they return to exploration. Two other insecure attachment patterns are related to the mother’s response to the child’s needs. Children classified as “insecure-avoidant” tend not to use their mothers as a “safe haven” to which to return in times of distress. These children tend to show little distress during separations and then to ignore their mothers during reunions. Children with “insecure-resistant” attachments show an inability to use their mothers as a secure base from which to explore, and cannot be comforted by their mothers in times of distress. Resistant children are often extremely clingy and exhibit little interest to explore their environments, are extremely distressed during separation, and then show

ambivalent behavior with anger and excessive contact-seeking to their mothers. Compared to the other three attachment patterns, the final pattern of attachment, “disorganized”, does not have a coherent strategy for the child’s attachment behavior (Main & Solomon, 1990). Because their parents serve as both the source of fear and stress and the source of reassurance, these children exhibit conflicting behaviors, sequential displays of contradictory behavior patterns with excessive anger and strong contact-seeking upon reunions with the parent following brief separations, such as freezing, stereotypical behavior, being frightened by the parent and acting confused (Lyons-Ruth & Jacobvitz, 1999).

### **Attachment in Middle Childhood**

According to Bowlby (1979), attachment is a lifespan construct which begins in infancy and tends to be maintained across childhood and into adulthood. The “set goal” of the attachment system in early childhood is physical proximity to the attachment figure, particularly parents, but there are some changes in attachment from early to middle childhood. As children get older and improve their cognitive abilities, attachment behavior becomes modified into a “goal-corrected partnership” with the attachment figure. Children can understand that parents have their own goals and feelings, and can demonstrate a high level of sophistication and integration taking into account parents’ view points in formulating plans to achieve their own attachment goals (Bowlby, 1982). Therefore, in middle childhood, children have more sophisticated strategies and abilities to regulate their own behaviors when distressed, thus, the frequency of activation of attachment behaviors decreases. In addition, the attachment behavioral system may be terminated with less intensive attachment behaviors and forms of contact such as letters, phone, and e-mail messages. Furthermore, the primary set goal of the attachment system in younger children, physical proximity to the parent, is shifted to the

psychological availability of the parent in the older children. According to Bowlby (1982), because of children's maturing representational capacities, the availability of the parent is increasingly achieved by belief that the parent is accessible and responsive whenever needed for help. Given these development changes in the attachment system, in middle childhood the quality of attachment is not easy to assess by the traditional behavioral measures, the observational 'Strange Situation' method (Bowlby, 1982). Therefore, there are limited methods and measures for assessing attachment for the middle childhood, and correspondingly, very limited research has been done to identify individual differences in attachment in middle childhood (Kerns, Schlegelmilch, Morgan, & Abraham, 2005).

### **The Quality of Child-Parent Attachments and Child's Social Functioning**

Research has studied the relationship between child-parent attachment and a child's behavior problems, and has supported the importance of a child's secure attachment to parents. In the perspective of attachment theory, secure attachments are associated with greater social competence and self-regulatory ability in school settings (Cole, Zahn-Waxler, Fox, Usher & Welsh, 1996; Granot & Mayseless, 2001; Moss, Rousseau, Parent, St-Laurent & Sintonge., 1998). Children with secure attachment tend to develop internal, cognitive representations characterized by positive perceptions of social events and expectations regarding relationships (Wilson, 2001). A child's early bonding experiences help to develop an internal representation of those experiences on which future relations are based. Bowlby (1969, 1973) termed these representations "internal working models". These models allow individuals to anticipate the future and make plans concerning future events or situations involving relational transactions. The child's experience of secure attachment helps to establish models of the self as valued and competent and the caregiver as available and responsive (Bretherton & Munholland, 1999).

These internal representations are carried forward as the child matures into new social circumstances involving teachers and peers. They are revised and expanded throughout the preschool period and beyond, influencing a child's cognitive, emotional, social, and behavioral development. A child's internal working models of self and others provide a framework for understanding new experiences and guiding social interactions, and define strategies and coping mechanisms for achieving a given social goal. Securely attached children tend to have models of significant others as available and trustworthy and models of themselves as able (Griffith, 2004). On the other hand, insecurely attached children develop representations characterized by mistrust, anger, anxiety, and fear, which may lead to hostile attributional biases and the potential for reactive aggression (Guttmann-Steinmetz & Crowell, 2006).

Numerous empirical findings indicate that a child's secure attachment to parents has profound effects on various developmental domains, including peer relationships (Kerns & Stevens, 1996), socialization (Richters & Waters, 1991), disruptive behavior (Greenberg, Speltz & DeKlyen, 1993), ODD (Speltz, DeKlyen, Greenberg, & Dryden, 1995), and teen pregnancy (Rogers & Lee, 1992). Conversely, insecure attachment has been identified as a risk factor in forming externalizing behavior problems (Coughlin & Vuchinich, 1996; Dekovic, Janssens & Van-As, 2003; Ingram & Ritter, 2000; Leifer, Kilbane & Skolnick, 2002; Moss et al., 1998).

Moss and her colleagues (1998) found that child attachment classification, maternal reported stress, and mother-child interaction qualities predicted teacher-reported behavior problems for 121 French-Canadian school-age children. Children's attachment classifications were assessed on the basis of reunion behavior with mother when the children were between 5 and 7 years of age. Children's school behaviors were evaluated by teachers' report both at ages 5 to 7 and 7 to 9 years. The study findings indicate that disorganized-controlling attachment in

5-7 year olds can be a significant risk factor for behavioral maladaptation in the classroom setting. Results of this study suggest that children's security of attachment significantly predicts teacher reported behavior problems two years later. When compared with the secure group, insecure attachment groups are more likely to exhibit behavior problems.

There are also two studies of attachment and behavior problems with elementary school-aged children involving seven-year-olds from low SES environments. Easterbrooks and her colleagues (1993) examined children's family environmental factors and potential protective factors (children's attachment relationships with their mothers and their verbal intelligence) in relation to their behavior problems. Forty-five children's attachment relationships were assessed by a 5-min observation of their reunion behavior following an hour-long separation from mothers, and children's behavior problems were reported by both mothers and teachers using the Child Behavior Checklist. The results showed that children's secure attachment relationships with their mothers function as a protective factor from behavior problems within their family and school environments. Lyons-Ruth, Easterbrooks, & Cibelli's prospective longitudinal study (1997) also found predictive relationships between attachment classification in infancy and behavior problems at age 7. Attachment security in fifty children was assessed by the Ainsworth Strange Situation procedure when children's age was 18 months old. Children's behavior problems were assessed by both their mothers and teachers when the children were age 7. The study findings indicate that disorganized infant attachment at 18 months was correlated with highly externalizing behavior symptoms, while avoidant attachment was associated with internalizing symptoms.

Dekovic, Janssens, and VanAs's (2003) study found that the quality of parent-child relationships contributes to the prediction of involvement in antisocial behaviors. They

attempted to compare how family factors influence adolescent antisocial behaviors according to the level of proximity to the child's everyday experience: proximal (parental childrearing behaviors and the quality of the parent-child relationship), distal (parental depression and confidence), contextual (the quality of other relationships in the family), and global factors (family SES and composition). The study findings concluded that the proximal factors pertaining to the quality of child-parent relationships remained significant predictors of antisocial behaviors after accounting for the influence of the others. Fonagy and colleagues also conclude that secure attachments are associated with lower rates of criminal behaviors, disruptive behaviors, and aggressive acts in adolescents (Fonagy, Target, Steel, Steele, Leigh, Levinson & Kennedy, 1997; Fonagy, Target, Steele, & Steele, 1997). They hypothesize that a secure attachment relationship with parents facilitated in these youth the capacity to empathize with others, which is among the most fundamental social skills.

Different attachment styles were tested to predict adolescent risky behaviors included delinquency, substance use, sexual behavior with very large sample size (N = 1,989) (Cooper, Shaver, & Collins (1998). Using self-report questionnaire of attachment, three different attachment styles had identified: avoidant, anxious-ambivalent, and secure attachment. The findings indicated that adolescents identified with anxious attachment style were significantly higher levels of property offenses than avoidant adolescents, and truancy level was the highest in anxiously attached adolescents. Both insecure attachment adolescents were identified with a higher level of drug involvement (frequency of heavy drinking, alcohol-related problems, and drug use count) and sexual behavior (having had sex with a stranger) than securely attached group.

Research focusing on relations between attachment and social functioning in school indicates that children with secure relationships with their parents are generally more competent

and show better adjustment in school settings (Al-Yagon, 2003; Cutrona, Cole, Colangelo, Assouline & Russell, 1994; Granot & Maysel, 2001). This better adjustment may be related to children's higher self-esteem, communication skills, emotional regulation capacities and more accurate social information processing (Granot & Maysel, 2001). These children are more likely to be perceived as pleasant and to be liked by others.

### **Emotion Regulation and Child's Social Functioning**

Thompson (1994) defined emotion regulation as the process of initiation, maintaining, and modulating the occurrence, intensity, or duration of internal feeling states and emotion-related physiological processes. In other words, emotion regulation is an adaptive strategy within the individual that redirects, controls, modulates, and modifies emotional arousal to enable an individual to function adaptively in emotionally challenging situations (Cassidy, 1994).

A child's first year of life is fundamental to developing the ability to regulate emotions (Eisenberg & Fabes, 1992). According to Fox (1994) and Saarni (1990), emotional regulatory capacities become more integrated and complex during the preschool and elementary school years. Therefore, school-aged children are more able to be aware of their emotional expressions and internal experiences.

Eisenberg and colleagues have studied emotion regulation and children's school behavior (Eisenberg, Guthrie, Fabes, Reiser, Guthrie, Murphy, Maszk, Holmgren, & Suh, 1996; Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, Friedman, Poulin, & Maszk, 1997; Eisenberg, Fabes, Shepard, Murphy, Maszk, Smith, & Karbon, 1995). Children's behavior in school is predicted by individual differences in managing their emotion (Eisenberg et al., 1997). Children who have low regulation of their emotion and are high in emotional intensity - particularly negative Emotion- are likely to engage in externalizing behaviors such as aggression and antisocial

behaviors (Eisenberg et al., 1997; Eisenberg, Fabes et al., 1997, 1995).

Eisenberg and Fabes (1992) predicted that externalizing behaviors were associated with low levels of emotion regulation. Eisenberg, Fabes, Guthrie et al. (1996) examined the concurrent prediction of externalizing problems in 199 school-aged children (K to 3<sup>rd</sup> grades) from negative emotionality and a composite score of behavioral and emotional regulation. They found that children prone to externalizing problems were high in negative emotionality and low in regulation and, according to the interaction effect, regulation was a stronger predictor of problem behaviors for children prone to negative emotionality. Also, individual differences in emotion regulation have predicted behavior problems and social competence, both concurrently and longitudinally (Eisenberg et al., 2000, 1996; Egeland, Yates, Appleyard & Dulmen, 2002; Murphy, Shepard, Eisenberg & Fabes, 2004; Rothbaum & Weisz, 1994; Stansbury, 1999). Caspi and colleagues (1995) examined the relations of lack of control, defined as emotional lability, restlessness, distractibility, and negativity, to parents' and teachers' reports of externalizing and internalizing problems and social competence longitudinally. The study found that children's lack of control at age 3 and 5 predicted externalizing behavior problems (inattention, hyperactivity, and antisocial behavior) at ages 9, 11, and 13 years, and fewer adolescent competencies at age 13 and 15. Another longitudinal study examined the social functioning (social competence and problem behavior) of 64 children and young adolescents in relation to negative emotionality and regulation with measures of attentional control, inhibitory control, impulsivity, and global self-control across four three-year periods (Murphy et al., 2004). In this study, negative emotionality and regulation at ages 4 through 6, 6 through 8, 8 through 10, and 10 through 12 were examined in relation to social functioning at age 10 through 12, specifically whether emotionality and regulation predict social functioning through children's

transition into early adolescence. The concurrent and longitudinal findings of this study indicated that negative emotionality and regulation were unique predictors of social functioning concurrently as well as over time. Shields, Cicchetti, & Ryan (1994) investigated the relationship between behavioral and emotional regulation and social competence among maltreated school-aged children, using a low SES non-maltreated comparison group. Children's social competence was associated with lack of behavioral and emotional regulation in both maltreated and non-maltreated groups.

### **Emotion Regulation and Attachment**

Children's development of emotion regulation is hypothesized within the parent-child relationship. Children learn how to regulate their emotion within the parents' socialization styles of their children's emotions (Thompson & Meyer, 2007). According to Cassidy (1994), well-organized emotion regulation, as an important component of attachment, is developed by parents' flexible and consistent responses toward children's emotional expression, both positive and negative, which helps the child regulate his/her emotions (Cassidy, 1994). Cassidy proposed individual differences in emotion regulation related to child-parent attachment types. For example, securely attached children often develop the flexible ability to manage both positive and negative emotions appropriate to circumstances. Insecurely attached children are less likely to regulate their emotions in stressful circumstance, by displaying either heightened emotional expression or suppressing the expression of their negative arousal.

Kerns and her colleagues (2000, 2007) provided empirical evidence of the link between child's emotion regulation and attachment relationships in middle childhood. In her first study, 62 fifth graders' attachment and emotion regulation were examined in relation to parents' reports of peer relationships during a single laboratory visit. Child's attachment relationships were

measured by children's self-reports of attachment security (the Security Scale; Kerns et al., 1996) and a semi-structured projective interview (the Automated Separation Anxiety Test; Resnick, 1993). Child's emotion regulation was measured by mother's reports of children's coping strategies (the Children's Coping Strategies Checklist; Eisenberg, Fabes, Karborn, et al., 1996), children's negative emotionality (the Emotionality, Activity, and Sociability Survey; Buss & Plomin, 1984), and emotional intensity (Affective, Intensity Scale; Eisenberg et al., 1993). The findings indicated that the composite scores of attachment measures and emotion regulation (Constructive Coping) were significantly related to peer competence, and attachment was also significantly related to one of emotion regulation measures (Constructive Coping), providing partial support for the study hypotheses.

In the second study, 52 fourth and fifth grade children and their mothers were utilized to examine the relationship between attachment with their mother and children's mood and emotion regulation. Attachment was assessed with multiple measures including children's self-report, a story stem interview technique, and parent questionnaires. Emotion regulation was assessed with mothers' report of constructive coping and teachers' report of frustration tolerance. Children' positive and negative mood was self-reported during four consecutive days. The results of regression analyses indicated that children's negative emotionality and attachment relationships were significant predictors of mood and emotion regulation, and the effect of attachment was stronger on emotion regulation than mood. Securely attached children used more constructive coping strategies and were better able to tolerate frustration in school settings, and significant associations were found between attachment measures (mother's willingness to serve as secure base and reunion scriptedness) and both emotion regulation measures. Children's self-report of attachment security and average secure scriptedness score were marginally

associated with emotion regulation measures ( $p < .07$ ). This study thus provided some support for the prediction emotion regulation constructs by attachment in middle childhood.

Three longitudinal studies have examined associations between children's attachment relationships and emotion regulation (Kerns and colleagues, 2000). Associations among child and parent attachment-based assessments, avoidant coping and preoccupied strategies, and child's school adaptation were examined with 176 third and sixth graders separately. Different types of attachment related assessments were utilized in the study, including self-report of attachment security, a semi-structured projective interview, mothers' self-report of willingness to serve as an attachment figure, and observational ratings of parents' responsiveness. Children's self-reports of mother-child and father-child attachment security were significantly negatively associated with avoidant coping strategy in third grade children, and both avoidant and preoccupied coping strategies were significantly associated with self-report of attachment security in sixth grade children. This significant association among attachment-based measures and coping strategies showed two-year stability with third grade children except for child reports of security with mother. In addition to the self-report, all three scales of The Separation Anxiety Test (emotional openness, dismissing/devaluing attachment, and coherence of discourse) showed significant associations with children's avoidant coping strategy.

In a conceptually related study in London, also, attachment quality at one year predicted their understanding of mixed emotions at six years (Steele, Steele, Croft, & Fonagy, 1999). Attachment quality in 63 children was assessed with the Strange Situation with mother at 12-months, and children's understandings of emotions were video-taped and audio-recorded while completing basic and complex line-drawn facial expressions, as well as responding to 12 cartoon sequences describing relationship dilemmas (i.e., a child dropped the ice cream). The results

indicated that secure infant-mother attachment was a significant predictor of children's well-developed understanding of mixed-emotions.

In contrast, Berlin and Cassidy's (2003) study did not find attachment group differences in children's emotion regulation, identified by emotional expression, sharing, and suppression of their emotions during a competitive game. This study examined the association among infant-parent attachment styles, mothers' self-reported control of children's emotional expressiveness, and children's emotion regulation with 76 preschool-aged children. Infant-mother attachment styles were identified from the standard Strange Situation procedure at 15-18 month olds. Mothers' attitudes toward children's negative expressiveness and three characteristics of children's observed emotion were assessed during the laboratory visit when children aged at 42 and 48 months. Although, parental support was found for linkages between parents' emotion socialization and children's attachment, the study failed to find a connection between child's attachment quality and the development of the child's emotion regulation.

### **Summary**

The review of literature tends to support the likelihood of connections between a truant's school adjustment behavior, child-parent attachment formation, and emotion regulation, though these variables have never been studied simultaneously in one study. Research consistently shows that early intervention appears to be effective in reducing the consequences of truancy. Correlations among child attachment, emotion regulation, and social functioning in the school setting are clearly established in both early childhood and adolescence. Given the evidence that parental factors are influential on a child's school disengagement, investigating relationships between these two variables, child-parent emotional bonds and child emotion regulation among elementary school truants will help expand knowledge of the nature of school truancy

and intervention involving parents. The potential benefits of the present study include:

1. Increased understanding of the relationship between parent-child attachment bonds and a child's emotion regulation among elementary school truants.
2. Increased knowledge of how a child's perception of attachment security is related to school disengagement in elementary school student behaviors.
3. Increased knowledge of how a child's emotion regulation capacities are related to elementary school truants' behaviors.
4. Preliminary ideas on how a child's perception of attachment security might contribute to the development of elementary school truants' behaviors.

## **CHAPTER 3**

### **METHODOLOGY**

This study utilizes a cross-sectional design with non-probability purposive sampling to examine relationships among children's perceptions of attachment security, emotion regulation, and school disengagement of elementary school truants. Data collection was accomplished with standardized survey instruments, completed by elementary students, their parents and teachers, and secondary data collected by the East Baton Rouge (EBR) Truancy Assessment and Services Center (TASC).

#### **Definitions of Key Terms**

The present study will explain relationships between school disengagement and two variables- child's perceptions of child-parent attachment security and a child's emotion regulation- among elementary school truants.

#### **Elementary School Truants**

Elementary school truants are defined as students (ages 7 to 12 years) referred to the East Baton Rouge Truancy Assessment and Service Center (TASC) site during the 2005-2006 and 2006-2007 academic years, because of problems with school absences. TASC staff screen all referrals to determine the student's continuing truancy risk level. TASC staff use two types of information to make this determination. First, they have information included as part of the referral, including demographic and academic information indicating whether the child has a history of failure due to truancy or academic problems, a history of suspensions due to behavior problems, and special education status. Secondly, a teacher or school official completes a truancy risk indicators survey which was developed by TASC. Based on these sources of information, students who are unlikely to continue having truancy problems are placed in the

low-risk (“Function I”) group, and students who are likely to continue having truancy problems are placed in the high-risk (“Function II”) group. A subset of the Function II group is identified as the “Function III” group. These students are considered to be the very highest-risk group, exhibiting a large number of risk factors and showing resistance to the TASC process and having to be petitioned to court.

### **School Disengagement**

In this study, this term is defined as students’ truancy risk level and their school behavior. Students’ truancy risk level is measured by the Truancy Risk Indicator I survey completed by a school teacher. A child’s school behavior is measured by scores of Social Problem, Rule Breaking Behavior, and Aggressive Behavior items from the Child Behavior Checklist-Teacher Ratings (Achenbach, 1991).

### **Child-Parent Attachment Security**

Children’s self-report perceptions of emotional bonds in relationship to his/her caregiver will be measured by The Security Scale (SS; Kerns, Klepac, & Cole, 1996) and The Inventory of Parent and Peer Attachment-Revised (IPPA-R; Armsden & Greenburg, 1987; Gullone, & Robinson, 2005).

### **Emotion Regulation**

In this study, emotion regulation is conceptualized as the ability to adjust one’s emotional arousal such that an optimal level of engagement with the environment is fostered (Cicchetti, Ganiban, & Barnett, 1991; Shields & Cicchetti, 1997; Thompson, 1994). The Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) will be used by parents and teachers to measure how frequently a child displays affective behaviors including socially appropriate emotional displays and empathy.

## **Sample**

TASC was authorized as the pilot program of truancy early intervention under the Louisiana Children's Code in 1998. This program is designed to provide early identification and assessment of truants and to provide interventions to prevent continued unauthorized school absences of children in grades K through five. The majority of children referred to TASC are from lower socioeconomic households and racial or ethnic minority groups. Teachers and principals refer these children at the fifth unexcused absence to TASC. Not all referred children have the same level of need in services. Therefore, TASC staff screen referred children for risk factors for continuing truancy problems using demographic and academic information and a checklist of truancy risk indicators completed by teachers. Children who are likely to continue having truancy problems are placed in a high-risk group, and children who are unlikely to continue having truancy problems are placed in a low-risk group. For the low-risk group of children, TASC staff send an official letter which explains the Louisiana state school attendance law and sanctions, and continue to monitor the children's attendance to ensure that truancy does not continue. For the high-risk group of children, TASC staff hold parent conferences called the Informal Family Service Plan Agreement (IFSPA), and provide case management and monitoring for compliance. In addition to IFSPA meetings, a truancy court is held every other week for children and their families who show resistance to the TASC process. This meeting at the juvenile court is called the Mandatory Conference (a pre-adjudication conference). Through this mandatory meeting, parents and children are challenged to ensure parental cooperation as well as children's behavioral change to improve truancy problem. Normally, TASC staff does not meet the low risk group of children and their parents face to face.

A total of 969 students were referred to the EBR TASC during the 2006 and 2007

academic school year. Little more than half of these children (n = 457) were identified as high-risk. For the convenience of data collection for this study, the study sample was selected from the high-risk group of children, ages 7 to 12 years. The researcher had chances to meet parents of 95 children from the high-risk group, and two parents refused to participate in this study. Therefore, a total of 93 children were contacted for this study. Of the 93 students who were contacted, 74 students completed all of the measurements of interest. Because all participants were recruited during one academic year (2006-2007) and resource was limited, additional recruitment was prohibited that year, and any additional recruitment would have had to take place in a subsequent academic year. Due to time and budgetary constraints, this was not feasible, so the decision was made to conduct the study with these 74 participants. Therefore, the total sample included 74 students, ages 7 to 12 years, who were referred to the EBR TASC during the fall 2006 and the spring 2007 academic year.

### **Research Design**

The research design is a correlational descriptive design utilizing cross-sectional survey methodology and includes four survey instruments to examine the proposed hypotheses.

### **Procedures**

The researcher for the proposed study is currently employed in the agency that holds the state contract to evaluate the effectiveness of TASC, the Office of Social Service Research and Development (OSSRD) in the School of Social Work at Louisiana State University. As an employee of this agency, the investigator had access to all TASC data required of this study proposal. To collect additional information for the purpose of this study, informed consents were obtained from parents of students who participated in this study.

The researcher trained TASC staff members and a graduate assistant to conduct the data

collection. Data collection from the high-risk group was administered in two settings, IFSPA meeting at school and a truancy court. TASC staff referred cases with high-risk children to the current researcher on a weekly basis. Referrals continued from the fall 2006 semester to the spring semester of the 2007 school year. High-risk children have informal parent conferences with TASC staff at their schools. Children and their parents are required to attend these meetings together. Therefore, the current researcher had an opportunity to meet students and their parents individually either before or after their conference to conduct surveys. In addition to IFSPA, truancy court is opened to children and their families who show resistance to the TASC process every other week. During this court hearing, the current researcher met students and their parents individually to conduct surveys. The teacher survey, the CBCL-TRF, was placed in teachers' mailboxes at school, and the researcher collected the completed forms the week after the survey distribution. As a token of appreciation teachers who completed the survey were sent a gift of ten dollar check.

### **Human Subjects Review**

This study was approved by the Louisiana State University Institutional Review Board (#2264). The protection of human subjects is a very important issue in conducting social work research. According to Rubin and Babbie (1997), the protection of the participants in a research study primarily involves the protection of their identities, and minimization of any risks. Confidentiality was assured in this study in the following ways: (1) all participants were required to sign consent forms and assured that all data provided were held in strict confidentiality; (2) all participants' identifying case numbers were removed and replaced by numbers into computer data files to protect confidentiality. Only the researcher has access to connect participants with their file data.

## Measurement

Measures for this study included: (1) TASC official student records including race, gender, age, grade, resistant status, and truancy risk level; (2) two surveys evaluating students' perceptions of child-parent emotional bonds; (3) a survey measure of children's emotion regulation; and (4) a survey measure of children's school behavior problems.

### **Latent Dependent Variable: School Disengagement**

In structural equation modeling, the method of analysis used in this study, there are two types of variables: observed variables and latent variables. Latent variables are not directly observable, rather they are measured indirectly by observed variables. A latent variable that is predicted by other latent variables is known as a latent dependent variable. In this study, the latent dependent variable, School Disengagement, is measured by the observable variable, Child Behavior Checklist – Teacher Rated Form (CBCL-TRF; Achenback, 1991) and Risk Indicator Survey I (RIS I). A variance-covariance matrix with these observed variables is created in SPSS which will generate the School Disengagement construct.

*Child Behavior Checklist-Teacher's Report Form (CBCL-TRF)*. The CBCL-TRF is one of the most widely used and well-validated other-reported measures of children's behavioral and emotional difficulties as well as competencies in children of ages 6-18 years. The CBCL-TRF includes 118 items, and broadly assesses two categories of behaviors, internalizing and externalizing behaviors, as well as eight problem subscales (withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behavior, and aggressive behavior), and three competence scales (activities, social, and school). Teachers respond using a 3-point scale from 0 (not true), 1 (somewhat or sometimes true), and 2 (very true).

The manual for the Achenbach System of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001) provides extensive reporting on reliability and validity measures of the CBCL-TRF. For instance, the test-retest reliability of item scores with 72 non-referred children at a one week interval was supported by mean test-retest *rs* of .90 for the CBCL-TRF Adaptive and Problem scales. Internal consistency showed Cronbach alpha scores of .90 on the Adaptive scale, .97 for Total Problems, .90 and .95 on the Internalizing and Externalizing scales, and a range of .72 to .95 on the Problem Scales. Furthermore, CBCL-TRF scores by teachers of special education children for behavioral/emotional problems indicated considerable stability over 2 and 4 month periods, with mean *rs* of .73 and .62 ( $p < .05$ ) on the Problem scales. Internal consistency of the CBCL-TRF ranged from Cronbach alpha scores of .72 to .95 on the Problem Scales.

The CBCL-TRF has been validated along multiple dimensions (Achenbach & Rescorla, 2001). The discriminant validity of the CBCL-TRF has been supported by findings that the competence, adaptive, and problem items significantly ( $p < .01$ ) discriminated between demographically similar referred and non-referred children. Additionally, the construct validity of the CBCL-TRF scales has been supported by cross-cultural replications, correlations of the CBCL-TRF with scores from the Conners Scales (Conners, 1997), the Behavior Assessment System for Children Scales (BASC; Reynolds & Kamphaus, 1992), and with DSM criteria; by genetic and biochemical findings; and by predictions of long-term outcomes.

***Risk Indicators Survey I (RIS I)***. The RIS I was developed by the Office of Social Service Research and Development (OSSRD) in the School of Social Work of Louisiana State University, and has been used in TASC centers in Louisiana. The RIS I was designed to assess the referred children's level of risk for continued truancy and to determine whether a student is

“low risk” or “at risk” by teacher ratings. The RIS I consists of 12 dimensions (defiant, aggressive, parental attitudes, emotional response, risk taking behaviors, developmental issues, manipulative, isolated, attention seeker, unmotivated, unstable home life, and hyperactivity), and each dimension is measured by the sum of sub-items. Each sub-item is answered by yes-no response (rated on 1 or 0). For example, two sub-items, “argues with authority figures” and “uses obscene language or gestures” measure the first dimension, “Defiant”. If a teacher agrees with both of the sub-items, the first item, “Defiant” receives a score of two points. This survey is intended to measure truancy risk as a unidimensional construct with the total composite scores of each dimension item. Total scores can range from 0 to 55, with higher scores indicating higher levels of continuing truancy risk.

Although, the RIS I has been used for several years in all of the TASC centers in Louisiana, the validation of this instrument has never been studied before. In this current study, RIS I had an internal consistency of .84 using Chronbach’s alpha. Convergent validity of the RIS I has been supported by findings of the current study and discussed in detail below. The RIS I demonstrated significant correlations with the teacher ratings of social problems,  $r(74) = .30$ ; rule breaking behaviors,  $r(74) = .44$ ; and aggressive behavior,  $r(74) = .44$ , in the CBCL-TRF.

### **Latent Independent Variables: Child-Parent Emotional Bonds and Child Emotion Regulation**

*The Security Scales (SS)*. The Security Scales (Kerns, A., Klepac, L., & Cole, A., 1996) is a child’s self-report measure of parent-child relationships that is based on attachment theory. The purpose of this scale is to assess children’s perceptions of a particular attachment relationship—attachments to mother and father are assessed separately—for children eight to fourteen years of age. It contains 15 items that measure a child’s belief that a parent is responsive and available, open to communication and a reliable source of help and comfort when

needed. Students respond using 4-point scales (from least true to most true). Items are structured using a “some kids...other kids...” format. For example, for the statement ‘some kids find it easy to trust their mom (dad) BUT Other kids are not sure if they can trust their mom (dad).’, children indicate which statement is more true of them. Then, they choose whether the statement is really true or sort of true. Ratings (on the 4-point scales) are summed across the 15 items to form a perceived attachment security score ranging from 15 to 60, with higher scores indicating a more secure relationship.

Several studies have now evaluated the reliability and validity of the Security Scale. The Security Scale has demonstrated adequate internal consistency, around .74 or higher (Kerns et al., 1996; Kerns et al., 2000; Lieberman, Doyle, & Markiewicz, 1999; Verschueren & Marcoen, 2002). However, a low alpha coefficient (.64) was reported for third graders (range = 7.8 to 10.5 years) (Kerns et al., 2001). All of the studies with the SS have been done with normative samples of children aged eight through twelve years, predominantly white and middle class, including three samples outside of the United States: Canada, Israel, and Belgium (Granot & Mayseless, 2001; Lieberman et al., 1999; Verschueren & Marcoen, 2002). Also, short-term stability (14 days interval) in children’s perceptions of security has been found with a test-retest correlation coefficient of .75 ( $n = 25$ ) (Kerns et al., 1996).

Convergent validities of the SS have been conducted with other attachment-related measures: Block’s (1965) Q-sort, (Kerns et al., 1996, 2000); Doll Story Completion Task (Bretherton et al., 1990; Granot & Mayseless, 2001); and the Coping Strategies Questionnaire (Finnegan et al., 1996; Kerns et al., 2000). The SS demonstrated a significant correlation with parents’ reports of willingness to serve as a secure base using Block’s (1965) Q-sort ( $r(45) = .45$ ,  $p = .001$ ) (Kerns et al., 1996). In a separate study, parents’ reports of willingness to serve as an

attachment figure were significantly correlated with children's reports of felt security for father at third grade. ( $r[73] = .27$ ) and for mother at fifth grade ( $r [56] = .39$ ). On the other hand, sixth graders' felt security reports were significantly correlated for both the mother-child and father-child relationships,  $r (48) = .37$  and  $.34$ , respectively (Kerns et al., 2000). The link between the self-report SS and two of four attachment prototypes using the Doll Story Completion task has been demonstrated by showing a significant correlation with the secure prototype,  $r (113) = .38$  and a negative correlation with the avoidant prototype,  $r (113) = -.30$  (Granot & Mayseless, 2001). The SS has been shown to have a significant relationship with sixth-graders' preoccupied coping in their relationships with both their mothers and fathers ( $r [48] = .31$  and  $.34$ , respectively) (Kerns et al., 2000). Additionally, the SS demonstrated significant correlations with self-esteem( $r [69] = .40$ ); peer acceptance( $r [69] = .30$ ); behavioral conduct( $r [69] = .36$ ); scholastic competence ( $r [69] = .38$ ); and physical appearance ( $r [69] = .32$ ), measured by Harter's (1988) Perceived Social Support Scale (Kerns et al., 1996). The same participants of the preliminary study in Kerns and colleagues (2000) also rated the mother-child relationship on five scales from the Network of Relationships Inventory (NRI; Furman & Buhrmester, 1985). Security scores were significantly correlated with child ratings of companionship ( $r [73] = .65$ ); intimacy ( $r [73] = .54$ ); affection ( $r [73] = .46$ ); conflict ( $r [73] = -.35$ ); and antagonism ( $r [73] = -.26$ ), in the child-mother relationship. However, the SS has been found to be unrelated to grade point average ( $r [69] = .12$ ) or perceptions of athletic competence ( $r [69] = .19$ ), providing some evidence of discriminate validity.

***The Inventory of Parent and Peer Attachment-Revised (IPPA-R)***. The IPPA-R (Gullone, & Robinson, 2005) is a revised child-report form of the Inventory of Parent and Peer Attachment, which was originally developed to measure the quality of attachment in late

adolescents (IPPA; Armsden & Greenberg, 1987). The IPPA was designed to assess three aspects of attachment-related constructs including trust, communication and alienation sub-scales. The Trust scale measures the degree of an attachment figure's availability and responsiveness to children's needs (e.g., 'my parents respect my feelings.'). The Communication scale measures the extent of open communication with attachment figures (e.g., 'my parents support me to talk about my worries'). The Alienation scale assesses the extent of emotional reaction to unresponsive or inconsistently responsive attachment figures (e.g., 'no one understands me'). Items have three response categories, "never true" (1), "sometimes true" (2), and "always true" (3) to rate each of the 28 items assessing perceptions of attachment to parents and the 25 items assessing emotional bonds with peers. The average time required by children to complete the questionnaires varies between 20 and 30 minutes depending on the age of participants.

Gullone and Robinson (2005) reported good internal consistency for the IPPA-R with Cronbach's alpha coefficients ranging between 0.66 and 0.86 for the Parent and Peer scales, using two samples of middle childhood (ranging in age from 9 to 11 years) and early adolescence (ranging in age from 14 to 15 years). Convergent validity has been reported on the basis of moderate correlations between the IPPA-R and other measures, including the Self-Esteem Inventory-school form (SEI; Coopersmith, 1981) and the Parental Bonding Instrument (PBI; Parker et al., 1979). The SEI is a self-esteem measure for children between 8 and 15 years. The total 58 items contain Global self-esteem and lie or defensiveness scales. The PBI is a measure of adult perceptions of their parenting experience with their parents in their first 16 years of life. The overall attachment-related scores of the IPPA-R for parent and peer have been shown to correlate positively with the Care dimension of the PBI ( $r = .73$  with parent bonds;  $r = .36$  with peer bonds) and correlate negatively with the Overprotection dimension of the PBI (Parker et al.,

1979;  $r = -.51$  with parent bonds; no correlation of Overprotection and Peer Bonds). Also, significant positive correlations between Parent Bonds of the IPPA-R and the SEI have been reported ( $r = .33$  and  $r = .65$  for children and adolescents, respectively) and with Peer Attachment of the IPPA-R and the SEI ( $r = .50$  and  $r = .33$  for children and adolescents, respectively). However, no convergent validity of the IPPA-R has been reported in relation to other measures of attachment security.

***Emotion Regulation Checklist (ERC).*** The Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997) is a scale examining children's self-regulation as perceived by either their parents or teachers. It requires approximately 10 minutes for completion by adults. It contains 24 items that assess parents' perceptions of their children's typical methods of managing emotional experiences, both positive and negative aspects of emotion regulation. The ERC is composed of two subscales: Lability/Negativity and Emotion Regulation. Lability/Negativity includes 15 items assessing a lack of flexibility, mood lability, and dysregulated negative affect (e.g., "is prone to angry outbursts."). Emotion Regulation consists of 8 items measuring emotional expression, empathy, and emotional self-awareness (e.g., "can say when s/he is feeling sad, angry or mad, fearful or afraid."). Parents respond to items using a 4-point Likert-type scale ranging from 1 (almost always) to 4 (never). ERC has been utilized with various types of children, including maltreated and normative children with low socioeconomic background (Shields & Cicchetti, 1997), children with language impairment (Fujiki, Spackman, Brinton, & Hall, 2002), children with anxiety disorders (Suveg & Zeman, 2004), and normative children with higher socioeconomic status (Batum & Yagmurlu, 2007).

In the Shields and Cicchetti study (1997), the results of factor analysis on the ERC data from 223 maltreated and impoverished children (6-12 years old) were reported. Internal

consistency coefficients for Lability/Negativity were .96 and .83 for Emotion Regulation. In addition, a composite ERC score also was generated as a single emotion regulation criterion measure for confirmatory factor analyses and the reliability coefficient was .89 for the overall scale of the ERC. The validity of ERC has been established in the Shields and Cicchetti study (1997) in relation to the Positive and Negative Moods of the Minnesota Behavior Ratings (MBR; Sroufe, 1983), which measures children's adaptive functioning in a number of domains including Positive (a tendency toward warmth and equanimity) and Negative (a tendency toward chronic anger and hostility) Moods. Significant correlations were found with independent observers' ratings of children's regulatory abilities ( $r = -.49$ ,  $p < .001$  for Lability/ Negativity,  $r = .23$ ,  $p < .001$  for Emotion Regulation) and Positive and Negative Moods of the MBR ( $r = -.58$  and  $.74$ ,  $p < .001$  for Lability/Negativity,  $r = .77$  and  $-.55$ ,  $p < .001$  for Emotion Regulation, respectively).

### **Data Analysis**

A statistical power analysis is used to test the probability of committing a Type II error where significant differences cannot be detected (Rubin and Babbie, 1997). Power analysis is preferred for the purpose of estimating required sample size before conducting a research study and for the estimate of power after collecting data. For this study purpose, two statistical power analyses were considered: Cohen's power table (1988) and MacCalum and his colleagues' power table (1996). Statistical power varies with sample size and effect size. First, Cohen's statistical power table (Cohen, 1988 in Rubin & Babbie, 1997) was used to identify an adequate sample size and statistical power prior to this study. According to Cohen (1988), a sample size of 84 is required to achieve a recommended power of .83 with medium effect size ( $r = .30$ ), using a .05 significance level. The researcher was unable to recruit 84 dyads (child and mother) because incomplete data from teachers and/or parents. Consulting Cohen's power table (1988), in this

study, the researcher found that for a medium effect size ( $r = .30$ ) with a sample size of 70 cases, using a .05 significance level, statistical power would be .72 (probability of correctly rejecting the null hypothesis which is false). Second, Tabachnick & Fidell (2001) recommend using 10 participants per parameter in structural equation modeling (SEM; Joreskog & Sorbom, 1984, 1996) to have enough power. Due to recruitment problems, only 74 participants with complete data were recruited. Referring to MacCallum et al. (1996) power estimates table, the statistical power of this study's school disengagement model is .307 with 31 degree of freedom, and the school disengagement model with gender has the power of .368 with 39 degree of freedom. Because of concerns about low power using SEM, the main hypotheses of this study were also run using hierarchical multiple regression. All results with multiple regression were identical to those obtained with SEM. It was decided to use the SEM analyses for the potential advantage this provided in terms of error reduction in the measurement of study constructs.

The goal of this study was to test a theoretical causal model on the order of the one shown in Figure 1 below. To test the hypothesized causal model, structural equation modeling (SEM; Joreskog & Sorbom, 1984, 1996) was used to explore the interrelationship among latent (construct) variables simultaneously: the quality of child-parent emotional bonds, child emotion regulation, and school disengagement in elementary school children. SEM is a multivariate statistical technique combining aspects of factor analysis and multiple regressions that has been used for both developing and testing theories in the social and behavioral sciences (Joreskog & Sorbom, 1996; StatSoft, 2004). Within SEM, the hypothesized causal relationships between variables are derived from either theory or previous research findings; therefore, it is important to note that it is very unlikely that any structural model will perfectly fit the data being analyzed, in view of the fact that a hypothesized model is only an approximation of social reality (StatSoft,

2004).

SEM is considered to be a more powerful statistical technique compared to other multivariate statistical techniques because it allows estimation of both the measurement and

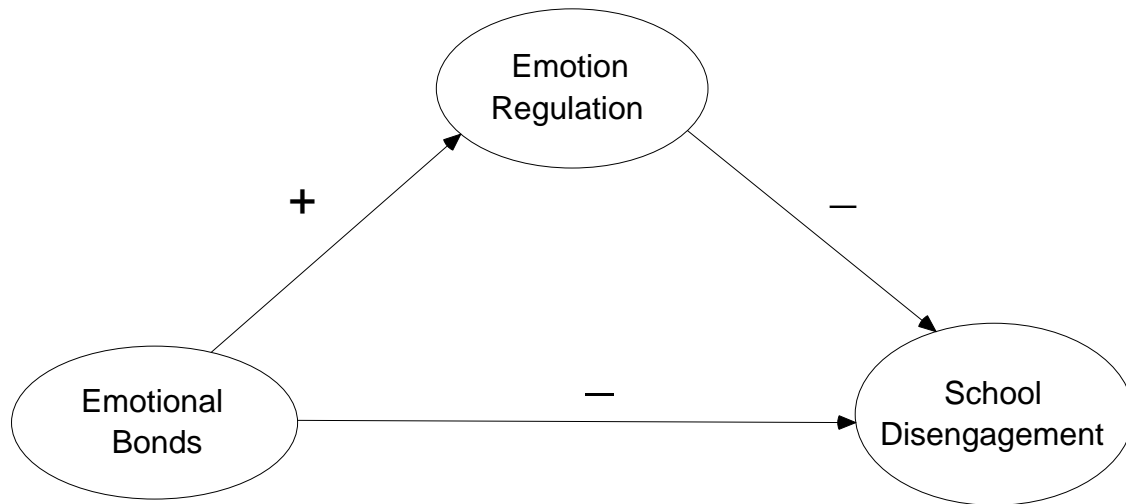


Figure 1. The Hypothesis of the Study

structural models to examine the direction of the relationships among multiple latent variables simultaneously without the confounding effects of measurement error (Joreskog & Sorbom, 1996; StatSoft, 2004). Each latent construct is represented by multiple measures (at least three measures are recommended) without the unbiased estimates for the relations between latent constructs. It also allows testing of the mean differences of observed exogenous variables on the latent constructs and the associations between the exogenous causal variables (e.g., gender, function, and age in this study) and the endogenous indicators after controlling for their association through the latent factors (e.g., emotional bonds, emotion regulation, and school disengagement). This approach is called a multiple indicators-multiple causes (MIMIC) structural equation model (Joreskog & Goldberger, 1975).

The analysis was conducted by the use of AMOS 7 statistical analysis program, which is a package that assists the researcher in creating and testing theoretical models, to explain the

relationships between children's perceptions of emotional bonds, emotion regulation, and school disengagement among truant elementary children. Before performing data analyses, the adequacy of the input data and the statistical assumptions were assessed through SPSS Frequencies and PRELIS Univariate Distributions (means and standard deviations). Structural equation modeling analyses were performed using data from 74 children. Each variable was assessed for skewness and kurtosis, and the entire data set was assessed for multivariate normality.

The assessments of measurement model fit include two steps: overall model fit (the goodness of fit between the hypothesized model and the observed data) and the quality of the measurement model (which indicates the statistical significance of individual parameter estimates to the latent construct). In determining the overall model fit, a number of indexes were used: discrepancy chi-square, Goodness of Fit (GFI), Adjusted Goodness of Fit (AGFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Standardized Root Mean Square Residual (SRMA), Adjusted Goodness-of-Fit Index (AGFI), and Root Mean Square of Error Approximation (RMSEA). The quality of the measurement model is assessed by examining the error variances, correlations, individual factor loading, and standard errors to describe how strongly each latent construct variable is measured as one measurement instrument by the indicators.

The chi-square goodness-of-fit is one of the most commonly used measures to examine how close the implied covariance matrix is to the observed data. Therefore, a non-significant chi-square is desired, and any statistically significant chi-square value is considered a poor fit. Since the chi-square is sensitive to the sample size, additional fit indexes have been reported along with the chi-square value. First, the following three fit indices were utilized in this study

due to their lack of sensitivity to sample size: CFI, NFI, and RMSEA. The CFI is based on the non-central chi-square distribution. CFI values have ranges of 0 to 1 and scores .90 and above are desirable for an indication of an acceptable fit to the data. The NFI is the chi-square differences between the proposed model to that of the null model, indicating a value between 0 and 1, with values above .90 for a good fit. The RMSEA is the difference (lack of fit) between the model and the data per degree of freedom for the model and less than or equal to .05 is considered as a good model (.05 to .08 = acceptable fit; .09 to .10 = marginal fit; > .10 = poor fit). Additionally, the GFI and AGFI were supplemented to reflect diverse criteria in the current study. The GFI and the AGFI assess the squared residuals from prediction compared to the sample data. The GFI and AGFI statistics range from 0 to 1, and greater than .90 is considered a good fit, values ranging from .08 to .10 indicate acceptable fit.

## **CHAPTER 4**

### **RESULTS**

The purpose of this study was to examine the relationship between child-parent emotional bonds, children's emotion regulation, and school disengagement among 74 elementary public school truants who were referred to the East Baton Rouge Truancy Assessment and Service Center (TASC) in Louisiana. First, this chapter presents the demographic characteristics of the sample and a description of the variables of interest in this study. Following this, the process of estimating the measurement model and the hypothesized structural equation model (SEM) are discussed, with the presentation of the results. Finally, results are also presented for multiple regressions.

#### **Sample Characteristics**

The following characteristics of elementary school truants in Louisiana public schools were collected from the official records of the East Baton Rouge TASC center. All but one of these 74 children was African American ( $n = 73, 98.6\%$ ). There were 46 (62.2%) males and 28 (37.8%) females with a mean age of 9.11 years ( $SD = 1.67$ , range 7 to 13 years). The modal age was eight ( $n = 24$ ) and the age with fewest children was thirteen ( $n = 1$ ). Regarding grade, more than half of the children ( $n = 43, 58.1\%$ ) were in grades three to five. Sample characteristics of the 74 children are summarized in Table 1.

Truancy risk group is categorized low-risk and high-risk groups depending on children's truancy likelihood based on school information and a teacher's risk indicators survey. A low-risk group of children are unlikely to continue having truancy problems. For this group of children, TASC staff send a letter which explains about legal attendance requirements and possible consequences of truancy problems, and continue to monitor regularly until the end of

Table 1  
Demographic Characteristics of Elementary School Truant Children (N=74)

Variable	N	%
Gender		
Female	28	37.8
Male	46	62.2
Race		
African American	73	98.6
Caucasian	1	1.4
Age		
7	12	16.2
8	24	32.4
9	10	13.5
10	9	12.2
11	11	14.9
12	7	9.5
13	1	1.4
Grade		
First Grade	18	24.3
Second Grade	13	17.6
Third Grade	15	20.3
Fourth Grade	18	24.3
Fifth Grade	10	13.5

The Mean Age was 9.11 years (SD = 1.67).

school year. The high-risk group of children is likely to continue having truancy problems. These children are exhibiting a large number of risk factors and showing resistance to the TASC process. All of high-risk children are referred to the Informal Family Service Plan agreement (IFSPA) conference. Families who show resistance to comply with the IFSP are typically petitioned to court. For the convenience of data collection for this study, high-risk children were sampled through regular IFSPA and truancy court meetings. Table 2 shows children’s resistant status between informal and mandatory conference among high-risk children in this study. The majority of these 74 children were identified in an informal conference high-risk group (n = 51, 68.9%), and 23 children (31.1%) were in a mandatory conference high-risk group.

Table 2  
Resistant Status of Elementary School Truants (N=74)

Group	N	%
Informal Conference	51	68.9
Mandatory Conference	23	31.1
Total	74	100

### Reliability of Measures

Three major study variables were used in this data analysis. These variables are child-parent bonds, children’s emotion regulation, and school engagement. Child-parent emotional bonds were measured by two children’s self-reported survey instruments, the Security Scale (SS: Kerns et al., 1999) and the Inventory of Parent and Peer Attachment-Revised (IPPA-R: Armsden & Greenburg, 1987; Gullone & Robinson, 2005). Children’s emotion regulation was measured by the parent report of the Emotion Regulation Checklist (ERC: Shields & Cicchetti, 1997). Children’s school disengagement was measured by the Child Behavior Checklist-Teacher’s

Report Form (CBL-TRF: Achenbach & Edelbrock, 1991) and the teacher report of Risk Indicators Survey I (RIS I). All 74 school truants, their mothers, and teachers completed these four instruments; thus, there were no missing data on these variables. The internal consistency estimates (Cronbach's alpha) of these instruments are reported in Table 3.

### ***The Security Scale (SS)***

Children's emotional bonds with parents were measured by the 14-item SS. Originally the SS consists of 15-items, however, one item was miswritten in our transcription of the instrument and more than half of respondents gave inappropriate answers in this data collection procedure. Therefore, the mistaken item was excluded in this data analysis. Ratings were summed across the 14 items to form an attachment security score ranging from 14 to 56, with higher scores indicating a more secure relationship. Following Park and Water (1989), a cut-off score of 42 was used to distinguish secure child-parent attachment (more than 42 for secure attachment and less than 42 for insecure attachment). The SS scores ranged from 28 to 54 ( $M = 44.16$ , Median = 45,  $SD = 6.50$ ). Most children reported scores a little above the cut-off score for a secure relationship. The internal consistency coefficient (Cronbach's alpha) of the SS was .64, which is lower than values in previous studies (above .70). In these studies, the SS was used with children eight to fourteen years of age, who were predominantly Caucasians and of middle class family background. The relatively lower alpha value obtained for it in this study is nevertheless considered acceptable because of its exploratory nature and given the fact that this is the first reported use of the scale with a high-risk sample of children who were predominantly African American and of low socio-economic status, and as young as seven years.

### ***Inventory of Parent and Peer Attachment-Revised (IPPA-R)***

Another measure for child-parent emotional bonds was the 28-item Parent Attachment

from the IPPA-R. Three subscales of Parent Attachment were used in this analysis: Trust, Communication, and Alienation. The possible range for Trust and Communication scales is 10 to 30, with higher scores indicating higher levels of trust and communication. The possible range for the Alienation scale is 8 to 24, with higher scores reflecting more alienation. The observed scale scores ranged from 15 to 30, 15 to 30, and 8 to 21 for Trust, Communication, and Alienation, respectively ( $M = 25.77, 23.72, \text{ and } 14.72, SD = 3.53, 3.49, \text{ and } 3.40, \text{ respectively}$ ). Most children reported a moderate level of trust, communication, and alienation. The internal consistency coefficients of the subscales were .75, .63, and .66 for Trust, Communication, and Alienation, respectively. The first validating study with the IPPA-R had good internal consistency coefficients for each subscale (above .75) with children age nine to eleven, who were a voluntary, non-risk group (Gullone & Robinson, 2005). The relatively lower alpha values found for it in this study is considered acceptable because of its exploratory nature with a previously under-studied population.

### ***Emotion Regulation Checklist (ERC)***

Children's emotion regulation was measured by the 24-item Emotion Regulation Checklist (ERC), using two subscales of the ERC, Lability/Negativity and Emotion Regulation in this data analysis. The possible range for the Lability/Negativity and Emotion Regulation scales are 15 to 60 and 8 to 32, with higher scores reflecting more dysregulation and better emotion regulation, respectively. Observed Lability/Negativity and Emotion Regulation scores ranged from 18 to 48 and 13 to 32 ( $M = 32.43, 24.07, SD = 8.02, 4.21, \text{ respectively}$ ). Most children reported a high level of dysregulation and a moderate level of emotion regulation. The internal consistency coefficient (Cronbach's alpha) of the 15-item Lability/Negativity was .81 and .58 for the 8-item Emotion Regulation. The internal consistency coefficient (Cronbach's

alpha) of the composite ERC was .61 for Emotion Regulation. The reliability values of ERC were lower than the previous validation study of ERC with the sample of maltreated and non-maltreated children (ranged in .96 for Liability/Negativity, .83 for Emotion Regulation, and .89 for the composite score).

### ***Child Behavior Checklist-Teacher's Report Form (CBCL-TRF)***

Children's school disengagement was measured by three subscales from the CBCL-TRF: Social Problems, Rule-Breaking Behavior, and Aggressive Behavior. The possible ranges for these scales are 0 to 22, 0 to 20, and 0 to 40, with higher scores reflecting more problem behaviors. Observed values ranged from 0 to 14, 0 to 18, and 0 to 37 (m/sd = 3.67/3.30, 6.54/5.18, and 13.28/10.75 for male children, m/sd = 3.32/3.63, 4.57/4.25, and 11.47/11.90 for female children) for Social Problems, Rule-Breaking Behavior, and Aggressive Behavior, respectively. The range of borderline clinical T scores is 65 to 69 for both females and males. The mean T scores for Rule-Breaking Behavior and Aggressive Behavior were in the range of the clinical cut-off scores (T = 68 and 65 for male children, T = 68 and 67 for female children, respectively), and the mean T scores for Social Problem were slightly lower than the cut-off scores (T = 62 for male children and T = 61 for female children). Internal consistencies of Social Problems and Rule-Breaking Behaviors showed Cronbach's alpha values of .76, .82, and .96 for the Aggressive Behavior scale.

### ***Risk Indicators Survey I (RIS I)***

An additional measure for children's school disengagement was the 47-item RIS I. None of children had problems in the following eight items of the survey, and had, therefore, zero variance. Therefore, the following component variables were removed from the scale: harms self intentionally, suspected substance use/experimentation, other, enuresis, other, regularly

complains of hunger, suspected substance abuse by adult in home, other. The possible range for this scale is 0 to 47, with higher scores reflecting higher truancy risk level. The observed RIS I scores ranged from 0 to 21 ( $M = 6.53$ ,  $SD = 5.28$ ). The internal consistency coefficient (Cronbach's alpha) of the RIS I was .84. No normative data exist for the RIS I because it is not a standardized instrument. The correlations found with the Lability/Negativity Subscale of the ERC and the CBCL provide the first validity data that this instrument does capture problem behavior (See Table 4).

Table 3  
Reliability Coefficient Alphas for Scales Administrated

Scales	# of Items	Alpha
Security Scale (SS)	14	.64
Inventory of Parent and Peer Attachment-Revised (IIPPA-R)	28	.62
Trust	10	.75
Communication	10	.63
Alienation	8	.66
Emotion Regulation Checklist (ERC)	24	.61
Lability/Negativity	15	.81
Emotion Regulation	8	.58
Child Behavior Checklist-Teacher's Report Form (CBCL-TRF)		
Social Problem	11	.76
Rule-Breaking Behavior	10	.82
Aggressive Behavior	20	.96
Risk Indicators Survey I (RIS I)	47	.84

According to Nunnally (1978), a value of Cronbach's alpha of .70 or above indicates an

acceptable level of internal consistency, and a moderate cut-off of .60 is acceptable in exploratory research. In sum, six out of ten scales used had values of Cronbach's alpha in excess of .70 and three scales had values of Cronbach's alpha in excess of .60, indicating that, with the exception of one sub-scale, the four instruments had acceptable or good internal consistency. The reliability analysis values ranged from a low of .58 for Emotion Regulation to a high of .96 for Aggressive Behavior.

### **Relationships among Study Variables**

Zero-order correlations (See Table 4) and chi-square analyses were conducted in order to examine relations among the observed variables and socio-demographic characteristics. In addition to the ten major study variables, four socio-demographic variables were used in this study: children's gender, age, grade, risk level function.

### **Bi-Variate Relationships among Observed Variables**

The Security Scale was significantly related to the IPPA-R subscales, Trust ( $r = .50, p < .01$ ), Communication ( $r = .44, p < .01$ ), and Communication, and was negatively correlated with Alienation ( $r = -.37, p < .01$ ). Both the Security Scale and the Trust subscale were negatively associated with Aggressive Behavior ( $r = -.27, -.28, p < .05$ , respectively). As expected, the two sub-scales of the ERC were correlated: Emotion Regulation was negatively and significantly correlated with children's Lability/Negativity ( $r = -.39, p < .01$ ).

Lability/Negativity was positively and significantly related to the School Disengagement Indicators: Social Problems ( $r = .24, p < .01$ ), Rule Breaking Behavior ( $r = .40, p < .01$ ), Aggressive Behavior ( $r = .32, p < .01$ ), and Truancy Risk ( $r = .22, p < .01$ ). Children's truancy risk level was positively and significantly related to children's social problems ( $r = .30, p < .01$ ), rule breaking behavior ( $r = .44, p < .01$ ), and aggressive behavior ( $r = .44, p < .01$ ). Children's

social problems was positively and significantly correlated with children's rule breaking behavior ( $r = .65, p < .01$ ) and aggressive behavior ( $r = .80, p < .01$ ). Children's aggressive behavior was positively and significantly correlated with children's rule breaking behavior ( $r = .81, p < .01$ ).

### Relationship between Observed Variables and Socio-Demographic Characteristics

None of the socio-demographic variables was significantly related to Emotion Regulation or School Disengagement variables. Children's age was positively and significantly correlated

Table 4  
Intercorrelations between Observed Variables

Variable	1	2	3	4	5	6	7	8	9
1.SS	1.00								
2.Trust	.50**	1.00							
3.Communi	.44**	.55**	1.00						
4.Alienation	-.37**	-.33**	-.36**	1.00					
5.EmoRegul	-.10	.18	.05	-.09	1.00				
6.LaNegati	-.14	-.22	-.07	.10	-.39**	1.00			
7.SociProblems	-.12	-.23	-.07	.01	-.17	.24*	1.00		
8.RuBreaBeh	-.12	-.20	-.12	.16	-.17	.40**	.65**	1.00	
9.AggrBehav	-.27*	-.28*	-.14	.15	-.18	.32**	.80**	.81**	1.00
10.TruaRisk	-.19	-.19	-.09	.15	-.04	.22**	.30**	.44**	.44**

Notes: \*  $p < .05$ , \*\*  $p < .01$

Child-parent Emotional Bonds: Security Scale (SS), Trust, Communication (Communi), and Alienation.

Emotion Regulation: emotion regulation (EmoRegul) and Lability/Negativity (LaNegati).

School Disengagement: Social Problems (SociProblems), Rule Breaking Behavior (RuRreaBeh), Aggressive Behavior (AggreBehavior), and Truancy Risk. (TruaRisk)

with grade ( $r = .87, p < .01$ ) and negatively associated with alienation from the IPPA-R ( $r = -.26, p < .01$ ). Children's gender and their feeling of trust (IPPA-R sub-scale) were found to be significantly related, (Pearson  $\chi^2 [14, N = 74] = 26.61, p = .02$ ), indicating that boys were less likely to report trusting relationships with parents than girls.

The assumption of multivariate normality was evaluated through SPSS. Before performing multi-variate data analyses, the adequacy of the input data and the statistical assumptions were assessed through SPSS Frequencies and Univariate Distributions. Skewness and kurtosis values were computed to determine the distribution of scores for each variable. Values under 3.0 for skewness and 10.0 for kurtosis are within the acceptable range to determine a valid study result (Kline, 1008). As shown in Table 5, all of values for skewness and kurtosis were close to zero, which indicates the distributions of variables are normal. No violations of skewness and kurtosis are evident in this study.

### **Analysis of Measurement Models**

Measurement models test relationships between measures (indicator or observed variables) and the constructs that they represent (latent variables) as a first step in SEM (Anderson & Gerbing, 1988). Before examining the hypothesized models, each measurement model was examined to determine how well the indicator variables predicted the latent variables of emotional bonds, emotion regulation, and school disengagement. In this study, confirmatory factor analysis (CFA) was used to estimate the measurement model as the first step prior to conducting the SEM procedures to examine the validity of three measurement models. The 10 indicators (four for Emotional Bonds, two for Emotion Regulation, and four for School Disengagement) were submitted to the CFA. Emotional Bonds and Emotion Regulation are regarded as independent variables and School Disengagement as the dependent variable.

Table 5  
Descriptive Statistics of Observed Variables (N = 74)

Variable	Mean	SD	Range	Skewness	Kurtosis
Emotion Regulation	24.07	4.21	13-32	-.53	-.01
Lability/Negativity	32.43	8.02	18-48	.12	-.75
Security Scale	44.16	6.50	28-54	-.69	-.02
Trust	25.77	3.53	15-30	-1.00	.61
Communication	23.72	3.49	15-30	-.31	-.57
Alienation	14.72	3.40	8-21	-.19	-.82
Social Problems	3.47	3.41	0-14	.96	.33
Rule Breaking Behavior	6.03	4.48	0-18	.76	.01
Aggressive Behavior	12.32	11.62	0-37	.62	-.92
Truancy Risk Survey I	6.53	5.28	0-21	.58	-.47

To confirm the factor structure of the study constructs obtained by the Maximum Likelihood analyses, two models were tested to determine whether two predictor constructs, Emotional Bonds and Emotion Regulation, should be treated as part of a common factor (a single factor model) or better represented by separated factors (two factor model) as originally proposed in this study. Multiple criteria were used to evaluate model fit. The first model assumed a single-factor structure comprised of 6 indicators to reflect loadings on one factor only. The second model assumed a two factor structure with two latent factors (Emotional Bonds and Emotion Regulation) as proposed in this study. The chi-square value of the single factor model was significant ( $\chi^2 (9, N = 74) = 19.28, p = .02$ ). Because a significant chi-square value indicates a significant difference between observed and predicted models, a non-significant chi-square is

desired (Schumacker & Lomax, 1996). The two-factor model with a non-significant chi-square value ( $X^2(8, N = 74) = 8.60, p = .38$ ) is thus desired (See Table 6).

Table 6  
Goodness of Fit Indices for Measurement Model

Model	X <sup>2</sup>	df	p	CFI	GFI	NFI	AGFI	RMSEA	TLI
1 factor	19.28	9	.02	.86	.92	.78	.82	.13	.77
2 factor	8.60	8	.38	.99	.97	.90	.91	.03	.99
School Disengagement	2.14	2	.34	1.00	.99	.99	.93	.03	1.00

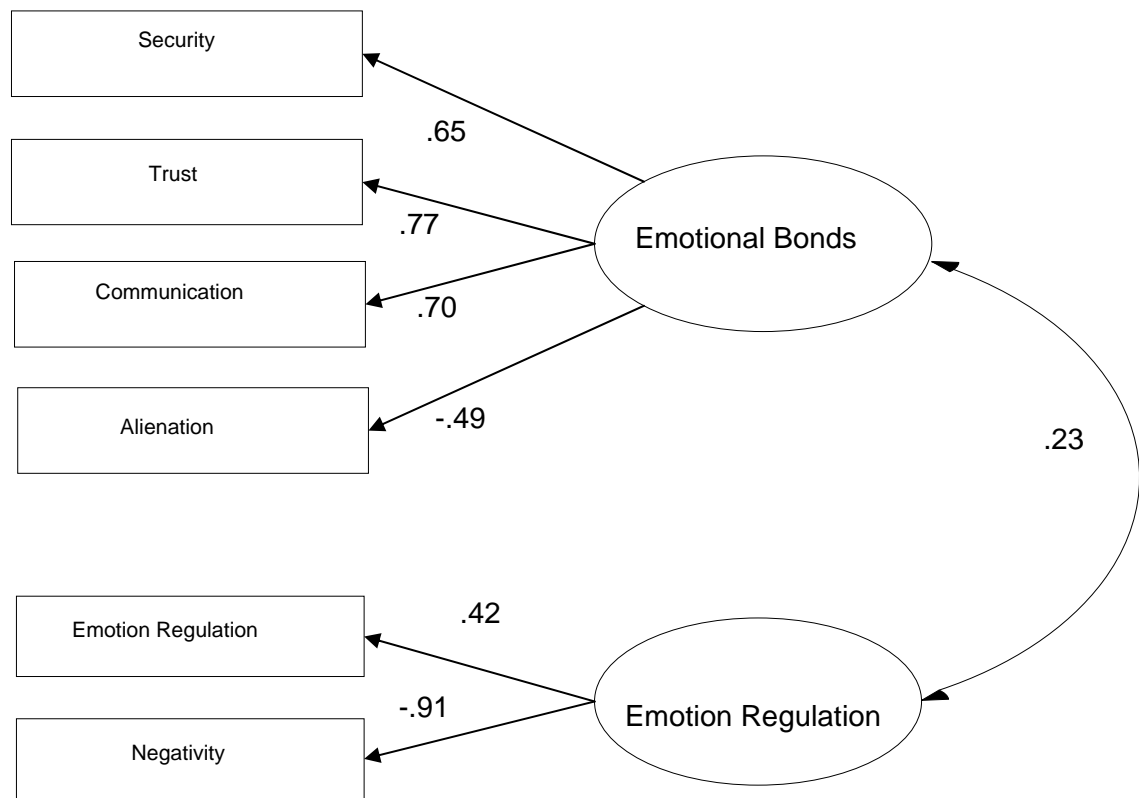


Figure 2. Two-factor measurement model comprised of emotional bonds and emotion regulation factors. (Values represent standardized coefficients.)

Other fits of the measurement model specifying a single factor model were less than acceptable, NFI = .78, RMSEA = .13, TLI = .77, and a poorer fit than the two factor model: CFI = .99; GFI = .97; NFI = .90; AGFI = .91; RMSEA = .06; TLI = .99 (See Table 6). In addition, Emotional Bonds and Emotion Regulation factors were correlated, but at a low magnitude ( $r = .23$ ), suggesting that these scales are likely to represent different constructs (See Figure 2). Given the better fit indices with the two factor model, as well as literature suggesting that these constructs may differentially impact school disengagement, the two factor model was retained in the full structural model. According to fit indices, the factor representing school disengagement provided an excellent fit to the data:  $\chi^2 (2, N = 74) = 2.14, p = .34$ ; CFI = 10.00; GFI = .99; NFI = .99; AGFI = .93; RMSEA = .03 (See Table 6 & Figure 3).

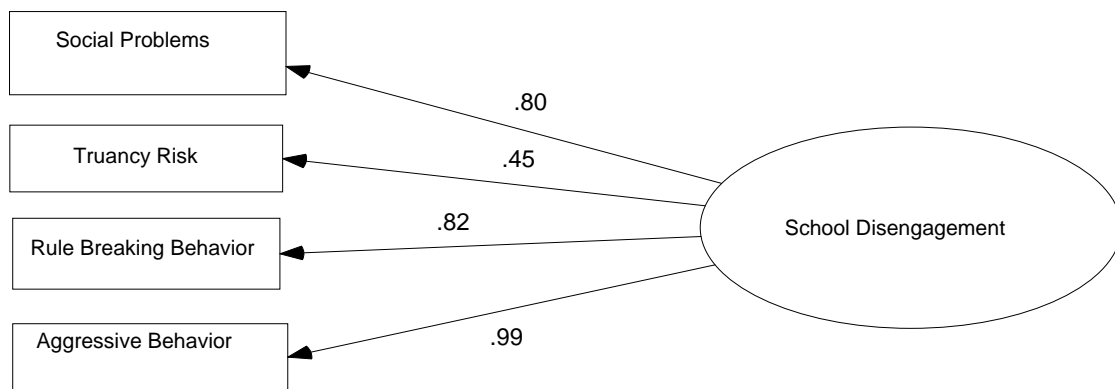


Figure 3. Single-factor measurement model representing the single construct school disengagement. (Values represent standardized coefficients.)

### Analyses of Structural Model

Finally, structural equation modeling analyses were conducted to test for the effects of emotional bonds and emotion regulation on the elementary school truants' school disengagement (See Figure 4). The fit indicators for the model are shown in Table 7.

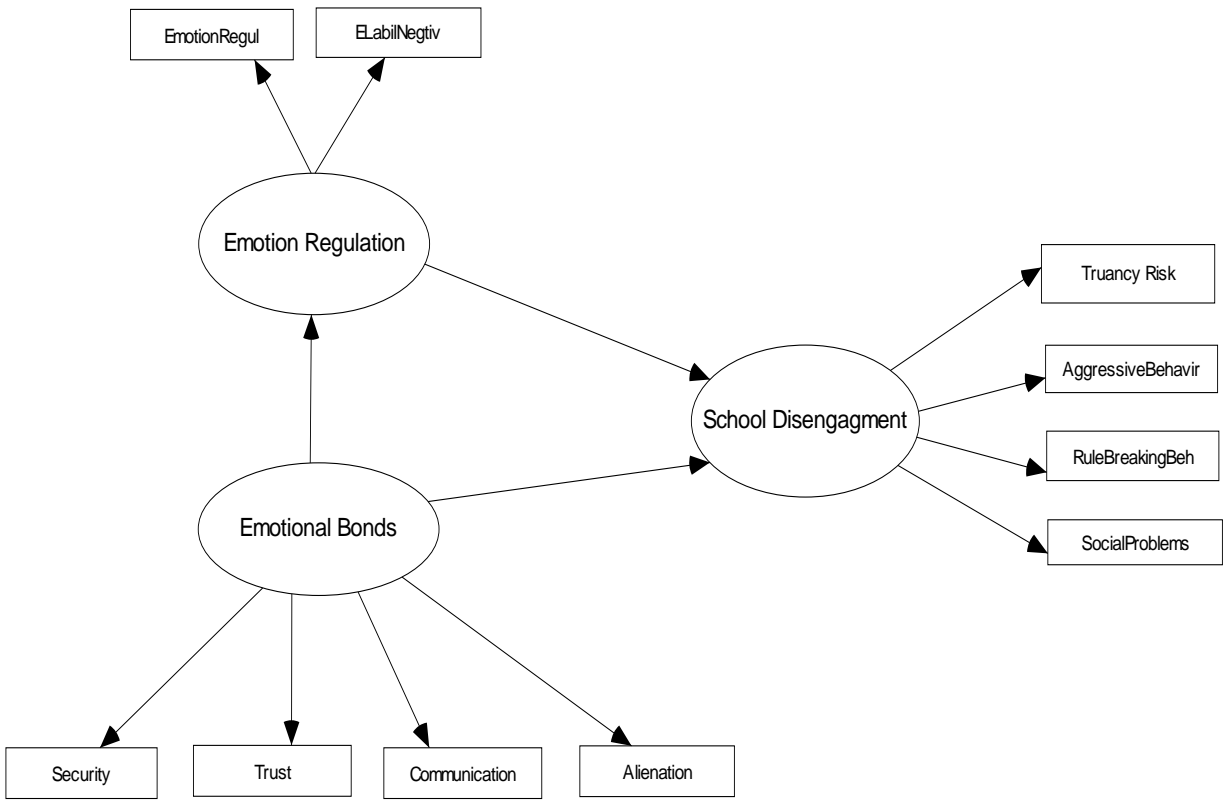


Figure 4. Full Structural Equation Model of School Disengagement among Elementary School Truants.

Table 7  
Goodness of Fit Indices for School Disengagement Model (N = 74)

Model	$\chi^2$	df	p	CFI	GFI	NFI	AGFI	RMSEA	TLI
School Disengagement	31.02	32	.52	1.00	.92	.89	.87	.00	1.01
Modified School Disengagement	25.64	31	.74	1.00	.94	.91	.88	.00	1.03

The hypothesized structural model had an acceptable fit generally. The CFI was 1.00 which indicated perfect fit to the model. The criterion value for the GFI and AGFI is .95 and the fit values for these indicators are somewhat less than acceptable, .89 and .87, respectively. The NFI had acceptable fit, .92. The RMSEA was .00, which was less than the criterion value .05.

The chi-square was not significant ( $\chi^2 (32, N = 74) = 31.02, p = .52$ ).

From the school disengagement model (Figure 5), a child's emotional bonds had a positive association with a child's emotion regulation ( $\beta = .25, t = 1.22, p = .222$ ) and a negative association with a child's school disengagement ( $\beta = -.24, t = -1.65, p = .099$ ); however, the effect was not statistically significant. A child's emotion regulation had a negative and significant association with a child's school disengagement ( $\beta = -.34, t = -2.06, p = .039$ ).

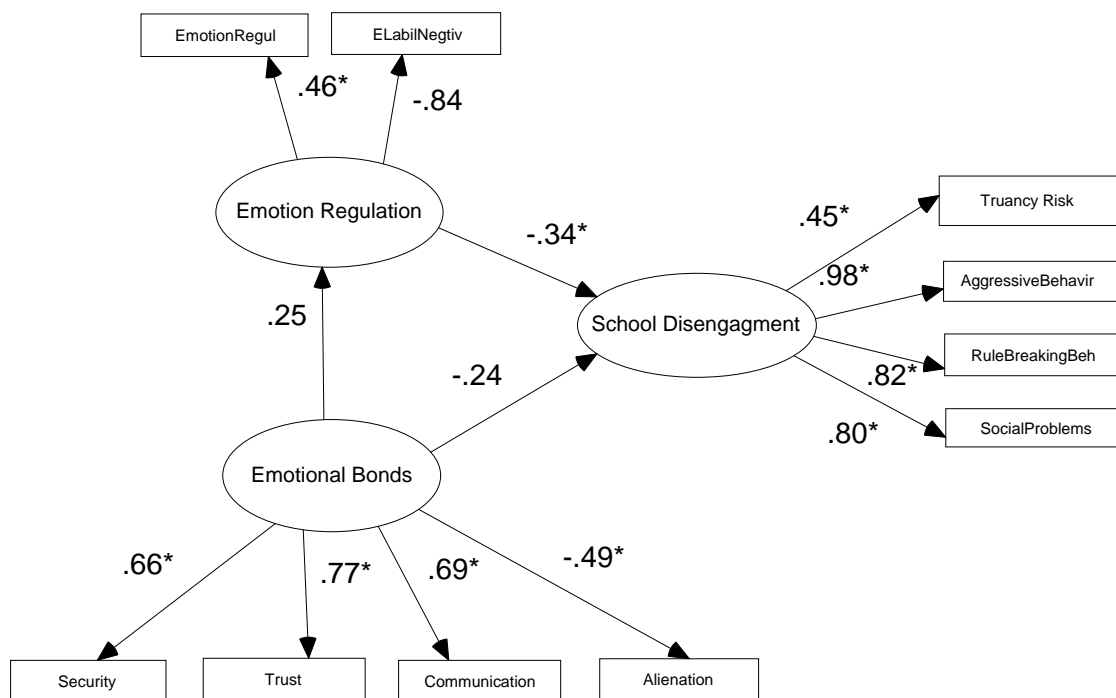


Figure 5  
Standardized Structure Coefficients of School Disengagement among Elementary School Truants (N =74)

The estimate weight on an arrow connecting an observed measure with its respective latent variable (see Figure 5) indicates the correlation of that observed measure with the latent variable. For example, the correlation between Aggressive Behavior and the School Disengagement construct was  $r = .98$ , indicating that Aggressive Behavior loaded heavily on the

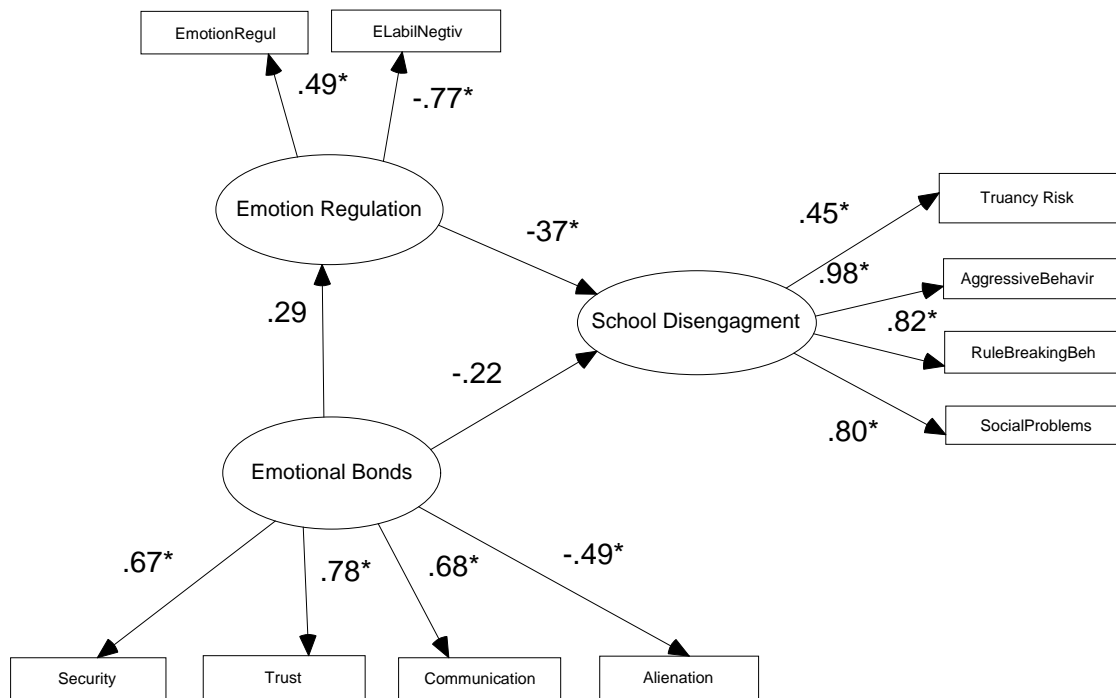


Figure 6  
 Modified Model: Standardized Structure Coefficients of School Disengagement among Elementary School Truants (N =74)

construct of School Disengagement. The correlation between Truancy Risk and School Disengagement was also significant ( $r = .45$ ), though noticeably smaller than that between School Disengagement and other observed measures. In other words, Aggressive Behavior overlapped a great deal with the School Disengagement construct, whereas Truancy Risk overlapped less with School Disengagement. For variables making up the construct of Emotional Bonds, all correlations of observed variables with Emotional Bonds were significant. Security, Trust, and Communication subscales loaded more heavily on the latent variable, with slightly smaller loadings found for the Alienation subscale ( $r = -.49$ ). The similar values of these correlations indicate their similar abilities to predict children’s emotional bonds in this model. The correlations between Emotion Regulation and its two indicators were also significant ( $r$

= .46,  $p < .001$ ). The Lability/Negativity subscale was loaded more heavily on the Emotion Regulation construct.

In order to obtain a good fit with the data it was necessary to correlate the error variance of Lability/Negativity and Truancy Risk. AMOS output also gives a modification index for additional paths that should have been included in the model to create a better model fit. Each modification index measures the amount chi-square is expected to decrease when a particular parameter is set free and the model is reestimated. When considering the addition of new parameters in the model the largest modification index is for the measurement error covariance between Emotion Regulation and Truancy Risk (MI = 7.95). However, the procedure of setting a parameter free is restricted only in the derivatives of each outcome construct and predictor construct (Schumacker & Lomax, 1999). Therefore, the third largest index of the measurement error covariance between Security and Emotion Regulation (MI = -5.37) was adapted and allowed to correlate. Theoretically and empirically, this correlation makes sense, as emotion regulation and a child's security (attachment) are related, indicating that something other than shared variance with the child emotional bonds construct is responsible for part of the association between these two variables. All of the parameters were statistically significantly different from zero ( $p < .05$ ), except for the paths between Emotional Bonds and Emotion Regulation and between Emotional Bonds and School Engagement (See Figure 6). All goodness-of-fit indices for the modified model also showed better fits than the original model (See Table 7).

In order to investigate the possibility that these results were influenced by instrument error (low reliabilities in measurement instruments), the analyses were re-run using only subscales with alpha reliability coefficients of  $> .70$ . This included only the Trust sub-scale for the Emotional Bonds construct, Lability/Negativity for the Emotion Regulation Construct, and

all the original sub-scales for the School Disengagement construct. The results for this analysis were essentially identical to the original findings, indicating that the findings were likely not influenced by the reliability values of the scales.

On the basis of the findings related to direct influences on the three latent variables (emotional bonds, emotion regulation, and school engagement), the proposed research hypotheses are discussed below regarding the standardized effects.

Hypothesis 1: Elementary school truants who report of high quality child-parent emotional bonds (an indicator of attachment security) will be likely to also have high levels of emotion regulation.

• Result: (SEM) There was no statistical significance between emotional bonds and emotion regulation ( $\beta = .29$ ,  $t = 1.36$ ,  $p = .17$ ).

Hypothesis 2: Elementary school truants who report of high quality child-parent emotional bonds (an indicator of attachment security) will be less likely to also show school disengagement, indicated by fewer behavior problems and low continued truancy risk level.

• Result: (SEM) There was no statistical significance between emotional bonds and school engagement ( $\beta = .22$ ,  $t = 1.52$ ,  $p = .13$ ). (Hierarchical Regression) There was negatively significant relationship between an indicator of emotional bonds and externalizing school behavior at statistical significance of .10 level ( $\beta = -.27$ ,  $t = -1.90$ ,  $p = .06$ ).

Hypothesis 3: Elementary school truants with high levels of emotion regulation will be less likely to also show school disengagement, indicated by fewer behavior problems and low continued truancy risk level.

• Result: (SEM) The finding indicates a positive association between emotion regulation and school disengagement, which means that the hypothesis was confirmed ( $\beta = .38$ ,  $t = 37$ ,  $p$

= .03). (Hierarchical Regression) There was a negatively significant relationship between an indicator of emotional bonds and externalizing school behavior ( $\beta = -.27$ ,  $t = -2.32$ ,  $p = .05$ ). This result indicates that children's emotion regulation ability was a significant predictor of children's positive school disengagement among elementary school truants.

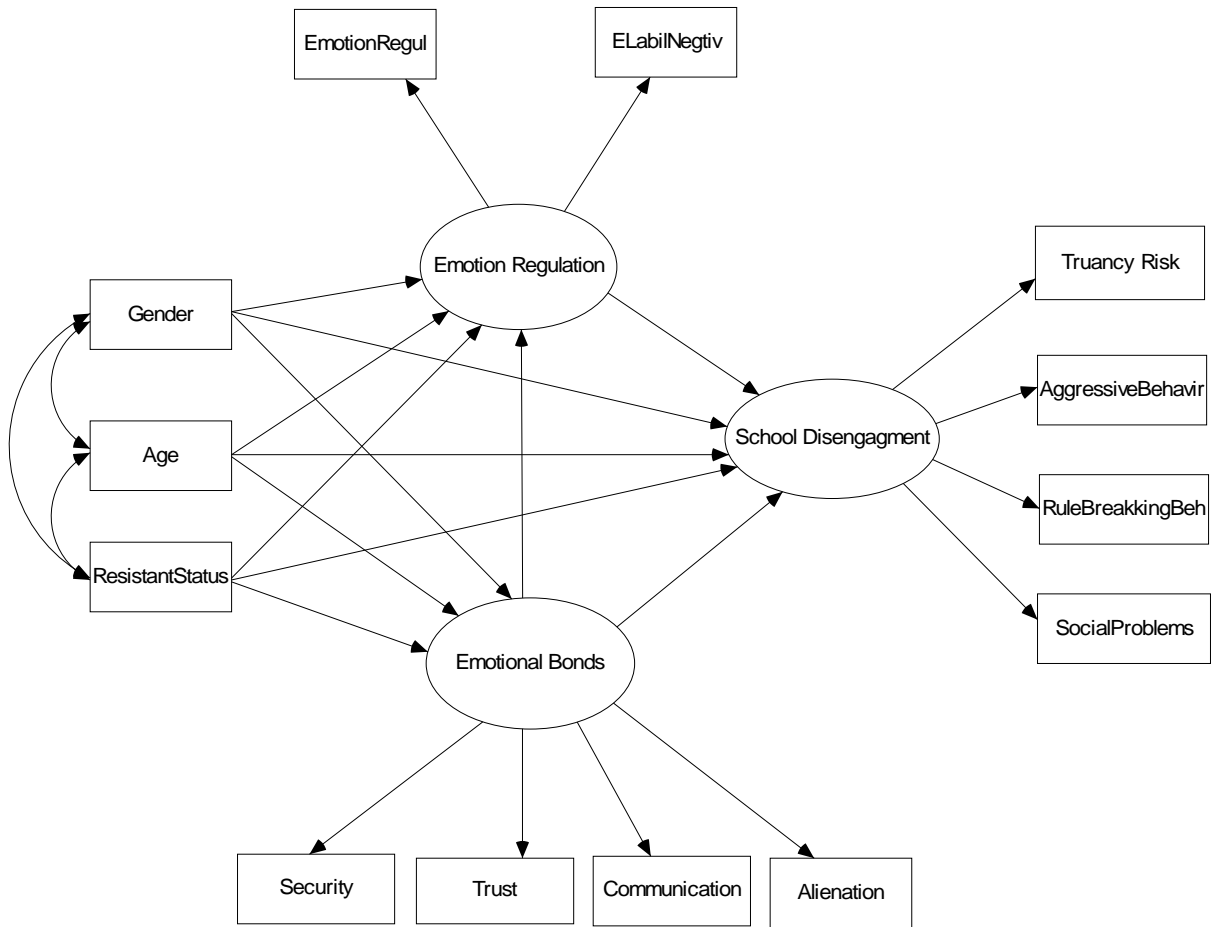


Figure 7  
MIMIC Model of School Disengagement

Table 8  
Goodness of Fit Indices for MIMIC Model (N = 74)

	X <sup>2</sup>	df	p	CFI	GFI	NFI	AGFI	TLI	RMSEA
MIMIC Model	73.89	53	.03	.92	.88	.79	.80	88	.07
Respecified MIMIC Model	35.20	39	.64	1.00	.92	.88	.87	1.02	.00

As part of this investigation, the relationships of socio-demographic variables (gender, age, and resistant status) to the three construct variables (emotional bonds, emotion regulation, and school engagement) were also examined with a multiple indicators-multiple causes (MIMIC) model (Joreskog & Goldberger, 1975). The complete MIMIC model (Figure 7) comprises three latent variables (emotional bonds, emotion regulation, and school disengagement) and three latent variables (emotional bonds, emotion regulation, and school engagement) and three exogenous variables (gender, age, and resistant status). The three latent variables have arrows pointed toward them from the three observed predictor variables, age, gender, and resistant status, which correlate. The hypothesized MIMIC model had poor fit of the data to the observed MIMIC model, generally:  $\chi^2$  (53, N =74)  $p = 73.89$ ,  $p = .03$ ; GFI = .88; CFI = .92; AFGI = .80; RMSEA = .07; TLI = .88; NFI = .79. The measurement model outcome indicates that Age and Function do not statistically significantly predict any of latent variables, Emotional Bonds, Emotion Regulation, and School Engagement (t values ranged -.76 to 1.73, less than  $t = 1.96$  at the .05 level of significance). Therefore, the model was respecified by dropping Age and Function and the analysis rerun. Figure 6 indicates the respecified MIMIC model. The model fit criteria were more acceptable:  $X^2$  (39, N = 74) = 35.20 ( $p = .64$ ); GFI = .92; AFGI = .87; RMSEA = .00; NFI = .88; TLI = .1.02; CFI = 1.00 (See Table 8). The finding showed that Gender had a significant relationship with Emotional Bonds ( $B = .31$ ,  $t = 2.27$ ,  $p = .02$ ). Specifically, school-aged girls were more likely to feel stronger emotional bonds to their parents than school-aged boys (See Figure 8).

The specific subscales that comprised the emotional bonds construct were examined to assess whether significant gender differences ( $\alpha = .05$ ) were present (See Table 9). Independent t tests comparing the mean scores of the male and female groups found significant

differences between the means of the two groups in communication ( $t = -2.23$ ,  $df = 72$ ,  $p = .03$ ) and alienation ( $t = 2.38$ ,  $df = 72$ ,  $p = .02$ ). The mean for girls in Communication was significantly higher ( $m = 24.82$ ) than the mean for boys ( $m = 23.00$ ). The mean for boys in Alienation was significantly higher ( $m = 15.46$ ) than the mean for girls ( $m = 13.57$ ).

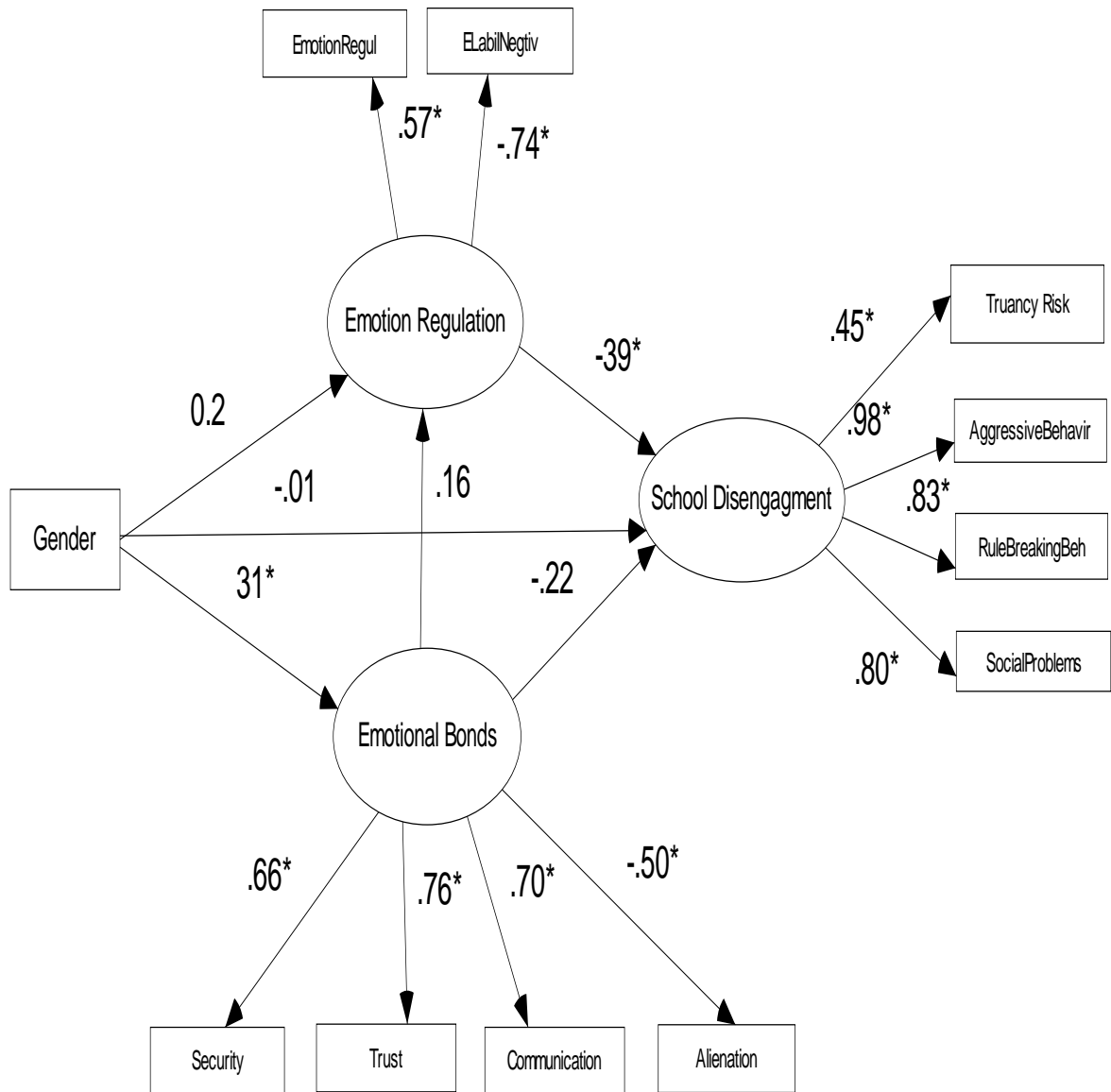


Figure 8  
Respecified MIMIC Model of School Disengagement

Table 9  
Gender Differences of Subscales of Three Constructs

Subscale	Male (n = 46)		Female (n = 28)		df	t	p
	M	SD	M	SD			
Security	43.39	5.89	45.39	7.30	72	-1.29	.20
Trust	25.20	3.23	26.71	3.85	72	-1.82	.07
Communication	23.00	3.26	24.82	3.64	72	-2.23	.03*
Alienation	15.46	3.32	13.57	3.28	72	2.38	.02*

### Summary of Hierarchical Multiple Regression Analysis

Due to concerns about low statistical power, hierarchical multiple regressions were also conducted to predict children's externalizing behavior problem scores on the CBCL-TRF from SS, the composite scores of IPPA-R for parents, and the composite scores of ERC. Results are presented in Table 10. Gender and age were included in block 1. Block 2 included SS and the composite scores of IPPA-R for parents. Block 3 included the composite scores of ERC, and interaction of SS\*ERC and IPPA-R\*ERC were included in block 4. None of the overall models was significant, except for the last model, block 4. Variables in block 4 explained 19% of the variance in children's externalizing behavior problems, with only one significant predictor, emotion regulation.

Different types of interaction effects were tested separately for the moderating effect of ERC on externalizing behavior problems: SS  $\times$  ERC and IPPA-R  $\times$  ERC (See Table 11). First, SS and IPPA-R were separately analyzed. None of the IPPA-R only models was significant. As shown in Table 11, even though interaction effect was not significant in the model 4 with SS, SS and ERC were significant predictors of children's externalizing behavior problems scores. When

both SS and IPPA-R were included in the models, none of the interactions with ERC were significant. However, SS and ERC showed statistically significant predictability on children's externalizing behavior problems scores at .10 and .05 level, respectively. In conclusion, the finding of a significant association of emotion regulation and children's externalizing problem behavior was identical with the finding of the school disengagement model with SEM. Moreover, the regression analysis provides weak evidence for an association of child's emotional bonds with parents and children's school disengagement as measured by problem behaviors.

Table 10  
Hierarchical Regression Analysis for Variables Predicting Externalizing Behavior Problems of CBCL-TRF (N = 74)

Variables	B	SE B	$\beta$
Block 1			
Gender	-3.99	3.76	-.13
Age	.15	1.10	.02
Block 2			
Gender	-3.03	3.83	-.10
Age	-.55	1.19	-.06
SS	-.66	.36	-.28+
Parental IPPA-R	.14	.26	.08
Block 3			
Gender	-2.55	3.72	-.08
Age	-.87	1.17	-.09
SS	-.65	.34	-.27+
IPPA-R for Parents	.24	.25	.14
ERC	-.39	.17	-.27*
Block 4			
Gender	-3.37	3.67	-.11
Age	-.82	1.15	-.09
SS	-3.27	1.92	-1.37+
IPPA-R for Parents	-.95	1.26	-.56
ERC	-3.49	1.47	-2.39*
SS× ERC	.04	.03	1.77

(Table cont'd.)

IPPA-R× ERC	.02	.02	1.28
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R<sup>2</sup> = .02 for Block 1; R<sup>2</sup> = .07 for Block 2; R<sup>2</sup> = .14 for Block 3; ERC: composite scores of Emotion Regulation Checklist

+ p < .10; \*p < 0.05

Table 11  
Hierarchical Regression Analysis for Child's Emotional Bonds Predicting Externalizing Behavior Problems of CBCL-TRF (N = 74)

Variables	B	SE B	β
Block 1			
Gender	-3.99	3.76	-.13
Age	.15	1.10	.02
Block 2			
Gender	-3.03	3.83	-.10
Age	-.55	1.19	-.06
SS	-.66	.36	-.28+
Parental IPPA-R	.14	.26	.08
Block 3			
Gender	-2.55	3.72	-.08
Age	-.87	1.17	-.09
SS	-.65	.34	-.27+
IPPA-R for Parents	.24	.25	.14
ERC	-3.39 (-.37)	.17 (.17)	-.27* (-.25*)
(Table cont'd)			
Block 4			
Gender	-3.16	3.67	-.10
Age	-.92	1.15	-.10
SS	-3.96 (-3.30)	1.80 (1.74)	-1.66* (-1.38+)
IPPA-R for Parents	.32	.25	.19
ERC	-2.59 (-2.28)	1.19 (1.17)	-1.78* (-1.56+)
SS× ERC	.05	.03	2.20+

+ p < .10; \* p < .05

(#) = Values without IPPA-R for Parents scores in each models

## CHAPTER 5

### DISCUSSION

The major focus of this study was to examine how children's perceptions of attachment security and children's emotion regulation predict school disengagement among elementary public school truant children. This study extends the attachment and emotion regulation research with an examination of school disengagement in high risk middle-childhood African American children. Correlational analyses were performed using all composite study variables. The findings of this preliminary analysis are mostly consistent with previous studies as follows: Children who reported higher levels of security were more likely to report trust and less likely to feel alienation with their caregivers, and less likely to be involved in aggressive behavior. Children who had more trust in their caregivers were more likely to show higher quality communication with their caregivers and less likely to engage in aggressive behavior. Children who had poorer emotion regulation (higher lability/negativity) were more likely to be involved in school disengagement behaviors (social problems, rule breaking behavior, aggressive behavior, and truancy risk behavior). Children's truancy risk was associated with social problems, rule breaking behaviors, and aggressive behaviors. Unexpectedly, children's age was inversely related to alienation; older children were less likely to feel alienation from their parents. This is actually an intriguing finding, which may contribute to the measurement problem in middle-childhood. Younger children who report relatively higher levels of alienation from parents may have a particular form of insecure attachment, either avoidant or disorganized. Further research with this measure and other high risk samples could shed light on this. The hypothesized model for this study was tested using Structural Equation Modeling, and the findings for this study sample indicate that children's emotional regulatory capacity is a significant predictor of school

disengagement. Contrary to expectations, the emotional bonds of children did not significantly predict emotion regulation or school disengagement in the current study. A discussion of the findings in Chapter 4 is guided in the order of the pertinent findings, methodological limitations, the strengths of the study, implication, and concluded by recommendations for future research in this chapter.

### **Emotion Regulation and School Disengagement**

In a number of Eisenberg and colleagues' studies (Eisenberg et al., 1995; Eisenberg, Fabes, et al., 1997; Eisenberg, Guthrie, et al., 1997), emotion regulation measures are related to children's socially appropriate behavior, indicating children who are high on negative emotionality showed less appropriate social behavior at school. In this study, we expected that emotion regulation and school disengagement would be negatively related to each other. The findings supported this prediction; analyses of structural models found that a child's emotion regulation was a significant predictor of the children's school disengagement. Children who were high on emotion regulation had lower levels of school disengagement. In this study, the school disengagement construct was measured by children's externalizing behavior problems, identified as social problems, rule breaking behavior, and aggressive behavior, in addition to truancy risk indicators/level. These findings are consistent with previous studies (Eisenberg, Losoya et al., 2001; Graziano, Reavis, Keane, & Calkins, 2006) which have indicated negative relationships between emotion regulation and externalizing behaviors. For instance, Eisenberg and colleagues (1999, 2000) showed that elementary school children who displayed low emotion regulation abilities were more likely to have behavior problems. Another study (Batum & Yagmurlu, 2007) revealed that children with low emotion and low behavior regulation showed externalizing behavior problems among elementary school children living in Istanbul. Results of

the current study support these early findings and indicate a negative relationship between emotion regulation and children's behavior problems.

### **Emotional Bonds (Attachment Security) Related to Emotion Regulation and School Disengagement**

Contrary to expectations, child-parent emotional bonds (attachment security) did not significantly predict either a child's emotion regulation or school disengagement in the current study. While previous studies examining children's attachment security have shown that secure children tend to have better adjustments at school (Granot & Mayseless, 2001) and better regulation of emotion (Contreras et al., 2000; Kerns, Abraham, Schlegelmilch, & Morgan, 2007; Kerns et al., 2000), results from the present study do not support this hypothesis directly. Although the results from this study appear to fail to support previous findings in the literature, these differences may be related to differences in methodology and population between the current study and other studies. First, structural equation modeling was used in the current study and allowed multiple predictors of school disengagement, including children's perception of attachment security, children's emotion regulation, truancy risk functions, age, and gender. To our knowledge, this is the first initiative that examines the influence of children's perception of attachment security and emotion regulation together on children's school disengagement in the middle childhood-aged group. Also the small sample size and corresponding limited statistical power used in this analysis needs to be considered and may be related to the lack of significant findings. A second consideration is the participation of an unstudied sample, African American high-risk children, with these instruments. Most attachment studies have been done with European American children in normative circumstances rather than high-risk African American children. A final plausible explanation for the insignificant findings may be the fact that the present study utilized self-report assessments for the measure of children's emotional bonds.

Previous attachment security studies have been done predominantly with observational measures for young children (i.e., the Strange Situation) and coded interviews for adults (i.e., the Adult Attachment Interview). Self-report measures for middle childhood children have only recently been developed. Even though this study did not find statistical significance with these, the findings do provide evidence that future study with these instruments is warranted.

### **Gender Considerations in Emotion Regulation and School Disengagement**

Some past research demonstrates that gender in middle childhood is significantly related to negative emotionality (Contreras, Kerns, Weimer, Gentzler, & Tomich, 2000) and externalizing problem behaviors, in that girls tend to be higher in reports of emotion regulation and lower in reports of externalizing problem behavior (Eisenberg, et. al., 1999, 2000). With respect to gender differences, it was expected that female children would display better emotion regulation and less school disengagement than male children. Interestingly, the present study showed instead no association between children's gender and their emotion regulation and school disengagement. Batum and Yagmurlu (2007) also reported similar results of non-significant gender differences on emotion regulation (Kerns, Abrahan, Schlegelmilch, & Morgan, 2007) and externalizing behaviors. Contrary to the current study sample, the Batum & Yagmurlu (2007) study consisted of a normative sample of second grade public and private school children of higher socioeconomic status. In contrast, the current study utilized elementary public school children with identified problems and in low socioeconomic families. This similar finding from different populations provides an opportunity to learn more about elementary children with externalizing problems.

### **Gender Considerations in Children's Perceptions of Emotional Bonds**

The findings of gender with respect to children's perceptions of emotional bonds in the current study are consistent with recent research findings by Contreras and colleagues (Contreras, Kerns,

Weimer, Gentzler, & Tomich, 2000), which showed that female children in middle childhood have significantly (greater attachment security) than male children. Even though the previous study findings were based on a sample of normative white children, the current study, which consists of a high-risk African American sample, found the same pattern of gender differences. Gender was a significant predictor of children's perceptions of emotional bonds in the current study. Female children in middle childhood were more likely to feel stronger emotional bonds toward caregivers than male children. The findings specifically revealed that female children had better communication with their parents and felt less alienation than male children. These findings are the opposite of the original study of the IPPA-R measure (Gullone & Robinson, 2005) which found male children showed generally stronger emotional bonds than female children, indicating that male children scored higher than female children on communication but lower on alienation.

### **Limitations of the Study**

The present study has several limitations related to research design, measurement issues, generalization of findings, and sample size.

#### **Research Design**

A cross-sectional, relational design was used in the current study. Even though a cross-sectional design is useful for exploring and describing relationships among phenomena, its use is typically limited in addressing causality of research findings. Because the current study only collected data at one time point, it is not possible to assess changes in variables over time and to make casual statements with the findings in this study.

#### **Generalizability**

With regard to using a non-probability, purposive sample, the current study is also limited in terms of the generalizability of its findings. The purposive sample of the study

consisted of 74 children referred from the Truancy Assessment and Service Center (TASC) of East Baton Rouge, Louisiana. More than 95% of all children who participate in TASC are African American students in public schools with low socio-economic backgrounds. Findings of this study may not support generalizations to populations beyond similar demographic characteristics of the current study sample. Therefore, generalizations are limited to only elementary school, African American, high risk children who are truant and of low socio-economic background living in a southern state. Also, the findings of this study may not be generalized to those elementary school children who enroll in private schools and in urban schools without a truancy problem.

### **Sample Size**

With regard to the sample size of 74, the current study sample was somewhat small for performing structural equation modeling. Kline (1998) indicated that at least ten cases are needed per indicator, suggesting for this study a sample size of at least 100 to obtain adequate statistical power and reliable results. Although this small sample size raises some concern in light of the lack of significant findings between constructs, relations between variables maintained significant factor loads consistently throughout the model testing. To corroborate the findings from this data analysis, the current study needs to be examined in a larger sample of children.

### **Measurement**

The measures used in the current study were a combination of self-report (SS and IPPA-R), parent report (ER), and teacher report (CBCL-TRF and RIS I). Regarding the self-report of children's perceptions of their emotional bonds with caregivers, children may have attempted to report more favorable relationships with their parents. The environment of the place of data

collection may have influenced children's and their parents' reports more favorably. Data collection took place in children's school buildings and the juvenile court building. Children's and parents' interviews were conducted either after an informal parent conference meeting with the truancy officer or before court hearings in the waiting area of juvenile court. Even though it was emphasized that these interviews and their answers were not related TASC services and court decisions and consequences, their environment may have inspired fear and thus influenced children' and parents' questionnaire responses more favorably.

Two self-report measures (SS and IPPA-R) were used for the children's perceptions of emotional bonds construct in this study. The reliability of both instruments, except one subscale of IPPA-R (Trust), were a little lower than the generally recommend value of .70, with Cronbach's alpha ranging between .62 and .64 which is likely to have diminished statistical power. There are three possible explanations for these low reliabilities. First, according to Kerns and her colleagues (2007) study findings, the child self-report measure of attachment was less sensitive than the other types of attachment assessments (mother report and coder scoring of interviews). Therefore, the study finding suggested that children's self-report measure would be less useful in small samples with low power. Second possibility is related to the ages of the children. Even though these two instruments are designed for middle childhood children, previous research has utilized these instruments with ages 8 to 14 years. The current study extended the age range including 7-year-old children because of lack of availability in older children among referred children in EBR TASC. Final possible sources of measurement error are race and social class. These instruments have not been used previously with non-white, poor samples of children. Therefore, the findings in the current study must be viewed with some caution with respect to these measures.

## **Strengths of the Study**

### **Sample**

This study had several strengths, beginning with the sample characteristics of children's age group, ethnicity, and children's functional characteristics. The sample consisted of predominantly African American children at high-risk. Children's perceptions of emotional bonds to their parents were one of the predictor constructs. The majority of previous studies related to children's attachment-related constructs have been done with normative samples of European-American children. The current study findings from African American children at high-risk may contribute to the existing body of research on attachment with respect to ethnic differences, and promises to inform other developmentally focused research with high risk children. In particular, the study of attachment security and emotion regulation in middle childhood (aged 7 to 12 years old) has been limited. The current study also contributes to this literature, substantively and methodologically. In addition, regarding the school truancy literature, the study of elementary school truants' character (emotion regulation) in relation to specific attachment-related constructs has not been done prior to the current study. Therefore, the current study findings on children's regulation of emotion and aspects of attachment relationship with parents contribute to our understanding of elementary school truants.

### **Measurement**

The strengths of the current study included extending validation of four instruments (SS, IPPA-R, ER, and RIS I) used for the measurement of emotional bonds, emotional regulation, and school disengagement in the hypothesized model. Even though the SS and some of subscales of the IPPA-R and ER had low reliability values, considering the exploratory nature of the current study, their reliability values were acceptable. The confirmatory factor analysis (CFA)

procedures used also supported the construct validity of the SS and IPPA-R (Chapter 4 reported the results of the CFA). As reported in chapter 4, convergent validity of these four measures was supported in the current study. First of all, both of the SS and IPPA-R are self-report measures of emotional bonds for middle childhood children. Convergent validity of the SS and IPPA-R was supported by the significant correlation between the SS and the IPPA-R subscales (trust, communication, and alienation). Also, no studies have been done using the RIS I instrument to explore convergent validity. The current study found the RIS I had convergent validity, demonstrated by a significant correlation with the CBCL-TRF subscales (social problem, aggressive behavior, and rule breaking behavior).

### **Statistical Methods**

Strength of the current analysis is the utilization of structural equation modeling (SEM) based on AMOS software to empirically validate the hypothesized model of children's emotional experience and school disengagement. SEM is a multivariate method combining factor analysis and multiple regressions in analyzing relationships among latent variables simultaneously. SEM has several advantages over other multivariate statistical methods (e.g., regression). First, SEM allows researchers to assess relationships involving both latent variables (theoretical variables not directly measured) and observed variables (directly measured), not only focusing on observed variables. Second, this method allows the researcher to examine multivariate relationships between one or more independent variables and one or more dependent variables simultaneously. In traditional analyses, multiple indicators of the same construct are not recommended due to potential problems of multicollinearity, and only a single relationship can be examined at a time. Third, this statistical approach takes into account measurement error in the model estimation process. Therefore, it was possible to determine the estimates of relationships

without measurement errors. Previous studies have been done with either the relationship between attachment security and emotion regulation or of attachment as an individual predictor of children's school behavior outcomes. To our knowledge, except for only one other similar study with an adolescent sample (Bennet, 2002), the current study was the first attempt to examine these three constructs simultaneously through SEM.

### **Implications**

This study addresses knowledge gaps in the theoretical and empirical literature on the inter-relationships among children's perceptions of emotional bonds, emotion regulation, and school disengagement of African American elementary school truant children. The findings of the current study supported parts of attachment theory by providing some support for the prediction of school disengagement (aggression) by children's perceptions of attachment-related security (security and trust). Bi-variate results indicate that child's perceptions of emotional bonds and trust (the degree of mutual understanding and respect in the attachment relationship) was associated with children's risk for aggressive behavior in the school (Multi-variate results were only marginally significant). This finding implies that positive parenting practices, which encourage children's trust and emotional bonds, should receive attention in interventions targeted at helping truant elementary children to learn appropriate behavioral interaction at school.

With respect to gender, there are two implications for the findings of the study. First, the results of this study suggest that gender is related to children's perceptions of emotional bonds as female children had better quality spoken communication and less feelings of anger and interpersonal alienation from their parents than boys. This finding implies that there may be different developmental paths in middle childhood with respect to these perceptions, and different types of intervention approaches are needed for male and female children. Considering

this difference, female children may have more potential to use social resources in their families than male children because of their relatively higher communication skills with others. Indeed, this study indicates that male and female child's school disengagement behaviors may be differentially affected by children's perceptions of emotional bonds with parents. Therefore, female children may more easily find social resources and use them than boys when they are in trouble. This finding raises a need for more research into gender differences in perceptions of emotional bonds with parents. Second, in the delinquency and conduct disorder-related research, gender is one key risk factor for future disruptive and delinquent behaviors (Kirby & Fraser, 1998). Male children tend to engage in more aggressive and disruptive externalizing behavior problems and delinquent behaviors than do female children; female children are more likely to show internalizing problems. However, this study did not find gender differences on the measures of emotion regulation and externalizing school behavior problems. This finding is consistent with other recent research that shows more externalizing behavior problems among girls, compared to studies done with cohorts in the past (Cummings, Pepler, & Timothy, 1999; Randolph, Koblinsky, Beemer, Roberts, & Letiecq, 2000; Schiff & McKay, 2003). More research is needed to explore the developmental pathways to disruptive behavior among high-risk children.

Children's lack of abilities in regulating their emotions in adaptive ways, according to parents' reports, were related to school disengagement, indicating more aggressive behavior, rule breaking behavior, social problems, and truancy continuance risk. In a developmental framework, children's adequate emotion regulation skills reflect their developing social competence and adaptation to situational demands and expectations (Thompson & Meyer, 2007). Therefore, deficiencies in socially acceptable emotion regulation skills, both underregulating (i.e.,

acting-out) or overregulating (e.i., inhibited) expression of emotions, appear to be an important contributing factors to children's school adjustment and problem behaviors (Thompson & Meyer, 2007). Middle childhood is an especially challenging period in academic and personal relationships: peer relationships become an increasingly important part of life and academic demands are greater than in early childhood. Consequently, lack of capability in managing emotion may lead to unsuccessful negotiation of peer relationships and/or academic achievement (Thompson & Meyer, 2007).

The most important influence in children's development of emotion regulation is their parents, particularly in early life (Thompson & Meyer, 2007). According to Cassidy (1994), the security of child-parent attachment is very closely linked to children's well-developed emotion regulation skills. Secure children are able to communicate both positive and negative emotions with their parents because these parents are sensitive to their children's distress signals and available to provide emotional support in flexible ways (flexibility in responding). Therefore, children are more likely to be self-aware and develop a capacity to manage their emotions in different social situations (Thompson & Meyer, 2007).

The current study findings with respect to emotion regulation suggest that school policies that focus exclusively on punishment of children's bad behavior are likely to be inadequate. These children need to be provided with opportunities to obtain services that can help them to learn to achieve emotion regulation skills. It is important to consider the implementations for programs that help children to regulate emotion in promoting school engagement. There are several considerations related to developing an intervention to promote children's emotion regulation capability for children who have externalizing behavior problems. First, cognitive-behavioral interventions have been widely used for children with externalizing problem

behaviors. Identifying the connection of thoughts and perceptions to emotion and behavior is the heart of cognitive-behavioral therapy. According to Gross's emotion regulation strategies model (2007), an intervention which focuses on 'cognitive change' related to emotion including better understanding of the link between specific social contexts and one's personal goals is one of the ways to teach children to manage their emotion. This 'cognitive change' is possible when children are able to understand reasons behind their emotion. An intervention program which helps children to understand the causes and consequences of their emotions will give children an opportunity to develop emotion regulation skills. In the United States, so far only one school-based prevention program focusing on preschool and elementary school children's emotion competence skills, the PATHS curriculum has been developed and evaluated with respect to effectiveness to prevent disruptive behavior problems (Greenberg, Kusche, Cook, & Quamma, 1995). Designing and providing an intervention program to encourage children's emotion regulation may be necessary for elementary school truant children to reduce truancy risk and other school related problem behaviors.

Second, as suggested by the research on parental influence on the development of children's emotion regulation, parental socialization with their children is not to be ignored in intervention process. Parents can influence their children's emotional regulatory capacity both directly and indirectly through modeling emotional behavior with encouragement, comforting, and expression of their emotion, and discussion of emotion-related topics (Zeman, Cassano, Perry, & Stegall, 2006). However, positive parental socialization effects are only possible when parents possess their own abilities to regulate emotion (Thompson & Meyer, 2007; Zeman et. al., 2006). An intervention program to encourage children's emotion regulation should foster parenting practices associated with parents' emotion regulation development which encourage

parents' self-awareness of own emotion and acknowledge the effect of parents' responses to their child's negative emotionality and the consequent disruptive behaviors (Zeman et. al., 2006).

The final implication is related to the assessment of the emotion regulation construct. Conceptualizing and assessing emotion regulation is very challenging work in developmental research (Thompson & Meyer, 2007). According to Thompson's definition, emotion regulation has multidimensional components and processes which include neurophysiological, attentional, cognitive, behavioral, and social dimensions (Zeman et. al., 2006). Even though most research on emotion regulation has been done with comprehensive assessments of emotionality and regulational behaviors, the identification of separate and detailed emotion regulation capacities could point the way to specific treatment needs and interventions.

Contrary to what the literature has indicated, the multi-variate findings of this study did not show significant relationships between children's perceptions of attachment security and emotion regulation. According to attachment theory, emotion regulation is one of the functions of the attachment system. In the attachment system, securely attached children are able to use the parent effectively to help them regulate their emotions. Even though the results of this study did not support this association, with these measures, the findings have implications for the future development and operationalization of attachment security in middle childhood. Since attachment security has been studied predominantly in young children and adults using observational and representational measures, the use of self-report, survey measures may not be an effective way to measure attachment security in middle childhood. To the extent that such measures are used in the future, it will be important to ensure that they are theoretically and practically validated and reliable scales. More effort to develop and validate adequate attachment measurement tools in middle childhood is desperately needed.

Finally, the findings of the current study may enhance TASC intervention strategies with working with elementary school truant children. Parental practices and child behavior problems are two major problem areas identified in high-risk children and families by the TASC staff, and various types of intervention services are provided for these children and families, including family support, mental health, basic necessities, medical, and educational services. Family support and mental health services are the most frequently demanded services with these children and their families. Based on evidence in this research, implementing/including specific parenting education services focusing on building trust and attachment security in children and a program to enhance children's ability to regulate their emotion may strengthen the effectiveness of the TASC service program.

### **Recommendations for Future Research**

As indicated earlier, no previous research has focused on emotional bonds (attachment security) and emotional regulation associated with school disengagement of high-risk, African-American, middle childhood children who are truant from school. Although the current study findings contribute to the existing knowledge, suggesting that lower emotion regulation is associated with school disengagement, the following recommendations for future studies are proposed to affirm the findings of the current study. First, with respect to the sample size, the 74 cases of this study might be too little to detect statistical significance. A future study should be conducted with a larger sample size to assure the current findings.

Second, replication of the current study using a comparison group of children is recommended. The current study only used the elementary school children who were identified as high-risk children with school truancy problems. A future study may need to include non-truant children to compare path differences in the likelihood of school disengagement.

Third, we believe that it is important to include multiple measures of attachment security to provide a broader assessment of the construct and to avoid an over reliance on a single method. Kerns and colleagues (2007) study utilized multiple attachment-based measures (mother report, coder scoring of interviews, and children's self-report) to assess associations with children's emotion regulation. Although all of the attachment measures from different sources were related to the emotion regulation construct, the child self-report measure of attachment was only marginally significant (at the .10 level). The findings suggest that the child self-report measure is less sensitive than the other assessments and therefore, less useful in small samples with low power.

Finally, there are potentially other variables that may contribute to children's school disengagement that this study was not able to include in the analyses. For example, Graziano and colleagues (2007) found that emotion regulation and the quality of the student-teacher relationship mediated children's academic success. In the current study, children's school disengagement was only represented with children's school behavior problems and truancy risk behavior, and did not include children's academic outcomes. Therefore, including academic outcomes such as standized test scores in major subjects (math, reading, etc.) may provide a more comprehensive construct of school disengagement.

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**APPENDIX A**  
**CONSENT FORM**

Dear TASC Parents.

My name is Hee-Young Kim and I am a doctoral student at the Louisiana State University, and currently working with TASC under the Office of Social Service and Research Department at the Louisiana State University. We are interested in learning more about the school and family experiences of TASC students to better understand how schools and families can improve students' school engagement. With your permission, we would like to invite your child to participate in this study.

Agreeing to participate means that your child would be asked to respond to two surveys that will take about 30 minutes to complete. The survey contains questions about students' perception on the quality of the child-parent relationship. Also, you as a parent will complete the Emotion Regulation Checklist questionnaires. Your child's school teacher will also be asked to complete the Child Behavior Checklists questionnaires. These questions are about your child's current behavior and attitudes in school and at home.

All these questionnaires would be collected once, during 2006-2007 school year. Students would complete the survey in the room where they normally meet with their TASC officer.

We hope you will be part of this study, but you do not have to. If you do, what you tell us will be kept strictly confidential and stored on a computer without your name and only a study number, where no one but the researchers can see it. No member of your family or anyone at your child's school will know your answers to our questions. If you want to participate but do not want to answer some of the questions, you may skip those questions. If you want to, you may drop out of the study later, too.

We hope you will decide to help us with our study, but if you decide not to, it won't affect the services you get from the East Baton Rouge Truancy Assessment and Service Center or your child's school, and we will collect no information about you. If you agree to participate and change your mind later, you may call the telephone number below and the information about you will be removed from our files and destroyed.

The only benefit to you is the chance to express your opinions and to help us learn things that could help children and lead to better services for Louisiana families.

If you have any questions or concerns regarding this study and would like to talk to someone, please contact myself, Hee-Young Kim, LSU School of Social Work, 311 Huey P. Long Field house, Baton Rouge, LA., 70803, (225) 578-4948.

\*\*\*\*\*

This study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about participants' rights or other concerns, I can contact Robert C. Mathews, Chairman, LSU Institutional Review Board, (225) 578-8692. I agree to participate in the study described above.

\_\_\_\_\_  
Parent Name

\_\_\_\_\_  
Student Name

\_\_\_\_\_  
Parent Signature

\_\_\_\_\_  
Date

This study participant has indicated to me that he/she is unable to read. I certify that I have read this consent form to the subject and explained that by completing the signature line above, the participant has agreed to participate.

\_\_\_\_\_  
Signature of Reader

\_\_\_\_\_  
Date

**APPENDIX B**  
**LETTER TO TEACHERS**

LOUISIANA STATE UNIVERSITY  
AND AGRICULTURAL AND MECHANICAL COLLEGE  
*School of Social Work • Office of Social Service Research and Development*

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Dear Elementary School Teacher,

Greetings! We hope your school year is going well.

Recently, one of your students was referred to the East Baton Rouge Truancy Assessment and Service Center (TASC). Hee-Young Kim, a doctoral student at Louisiana State University, is inviting this student to participate in a research study to improve the quality of services offered to students through the TASC. Your participation in this study will help us understand and provide services for students and their families who have attendance problems. We are asking you to fill out the enclosed Child Behavior Checklists questionnaire.

Your assistance in these efforts is greatly appreciated. When you complete your survey, please put the completed one with the enclosed information form back in your school teacher mail box. We will pick it up after 7 working days from your teacher mail box. When we pick up your completed survey, we will send a **\$10 check** directly to your address. Thank you for your time and help.

If you have any questions, please feel free to contact Hee-Young Kim at (225) 578-4948 or your child's TASC officer.

Sincerely,

Cecile Guin, Ph.D., LCSW  
Director  
The Office of Social Service Research and Development

\*\*\*\*\*  
Thank you!  
Fill out the enclosed  
information sheet, along  
with your survey, to  
receive a \$10.00 gift for  
completing the survey.  
\*\*\*\*\*

**APPENDIX C**  
**STUDY SUPPORT LETTER**

April 9, 2008

Hee-Young Kim, MSW, GSW  
A Graduate Assistant  
Office of Social Services and Development  
LSU School of Social Work  
311 Hey P. Long Fieldhouse  
Baton Rouge, LA 70803  
(225) 578-4948

Dear Hee-Young Kim:

I am writing on behalf of the East Baton Rouge Truancy Assessment and Service Center (TASC) to support the project title, the Effects of Parent-Child Relationship and a Child's Emotion Regulation on the School Engagement of the Elementary Students, which you are submitting to LSU Institutional Review Board (IRB). We understand this study includes four measures on children identified by the East Baton Rouge TASC for academic years 2004-2006, and the following survey instruments will be implemented to children, their parents, and teachers for measuring: the quality of parent-child relationship (The Security Scale & the Revised-Inventory of Parent and Peer Attachment), a child's emotional regulation level (the Emotion Regulation Checklist), and a child's school engagement (the Child Behavior Checklists-teacher reported form). We believe that this study will help to improve the quality of services offered by TASC to children and their family.

We are excited for the new opportunity to pledge our commitment to support to this study. We applaud your efforts to increase positive school engagement for children at risk. We look forward to working with you in this study that can make a difference in the life of the child and his/her family, and can improve the quality of our services in the East Baton Rouge TASC.

Sincerely,

Jennie Ponder  
East Baton Rouge TASC Coordinator

**APPENDIX D**  
**TEACHER INCENTIVE INFORMATION SLIP**

LSU School of Social Work  
311 Huey P. Long Fieldhouse  
Baton Rouge, LA 70803  
(225) 578-4838



LOUISIANA STATE UNIVERSITY

*School of Social Work • Office of Social Service Research and Development*

Thank you for completing the attached survey!

In order for LSU to process payment of your \$10 incentive check, you must provide the following information. A check from LSU will be mailed directly to your home, or the address you provide below, in approximately 4 weeks.



<p><b>Name</b> _____</p> <p><b>Address You Want the Check Mailed To:</b></p> <p>_____</p> <p>_____</p> <p>_____</p> <p><b>**SSN:</b> _____ (REQUIRED)</p>
---

\*\*\* Please, write your SSN for your \$10 check. LSU will not guarantee your check without your SSN in this form.

If you have any questions or concerns please contact Leah Courville, Assistant Director of the Office of Social Service Research and Development in the LSU School of Social Work. Her e-mail address is [lcourvi@lsu.edu](mailto:lcourvi@lsu.edu) and phone number is 578-4950.

**APPENDIX E**

**CHILD BEHAVIOR CHECKLIST-TEACHER'S REPORT FORM  
(CBCL-TRF)**

**Please print. Be sure to answer all items.**

Below is a list of items that describe pupils. For each item that describes the pupil **now or within the past 2 months**,

please circle the **2** if the item is **very true or often true** of the pupil. Circle the **1** if the item is **somewhat or sometimes true**

of the pupil. If the item is **not true** of the pupil, circle the **0**. Please answer all items as well as you can, even if some do not seem to apply to this pupil.

**0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True**

- 0 1 2 1. Acts too young for his/her age
- 0 1 2 2. Hums or makes other odd noises in class
- 0 1 2 3. Argues a lot
- 0 1 2 4. Fails to finish things he/she starts
- 0 1 2 5. There is very little he/she enjoys
- 0 1 2 6. Defiant, talks back to staff
- 0 1 2 7. Bragging, boasting
- 0 1 2 8. Can't concentrate, can't pay attention for long
- 0 1 2 9. Can't get his/her mind off certain thoughts;  
obsessions (describe): \_\_\_\_\_
- 0 1 2 10. Can't sit still, restless, or hyperactive
- 0 1 2 11. Clings to adults or too dependent
- 0 1 2 12. Complains of loneliness
- 0 1 2 13. Confused or seems to be in a fog
- 0 1 2 14. Cries a lot
- 0 1 2 15. Fidgets
- 0 1 2 16. Cruelty, bullying, or meanness to others
- 0 1 2 17. Daydreams or gets lost in his/her thoughts
- 0 1 2 18. Deliberately harms self or attempts suicide
- 0 1 2 19. Demands a lot of attention
- 0 1 2 20. Destroys his/her own things
- 0 1 2 21. Destroys property belonging to others
- 0 1 2 22. Difficulty following directions
- 0 1 2 23. Disobedient at school
- 0 1 2 24. Disturbs other pupils
- 0 1 2 25. Doesn't get along with other pupils
- 0 1 2 26. Doesn't seem to feel guilty after misbehaving
- 0 1 2 27. Easily jealous
- 0 1 2 28. Breaks school rules
- 0 1 2 29. Fears certain animals, situations, or places,  
other than school (describe): \_\_\_\_\_
- 0 1 2 30. Fears going to school
- 0 1 2 31. Fears he/she might think or do something bad
- 0 1 2 32. Feels he/she has to be perfect
- 0 1 2 33. Feels or complains that no one loves him/her
- 0 1 2 34. Feels others are out to get him/her
- 0 1 2 35. Feels worthless or inferior
- 0 1 2 36. Gets hurt a lot, accident-prone
- 0 1 2 37. Gets in many fights
- 0 1 2 38. Gets teased a lot
- 0 1 2 39. Hangs around with others who get in trouble
- 0 1 2 40. Hears sound or voices that aren't there  
(describe): \_\_\_\_\_
- 0 1 2 41. Impulsive or acts without thinking
- 0 1 2 42. Would rather be alone than with others
- 0 1 2 43. Lying or cheating

- 0 1 2 44. Bites fingernails
- 0 1 2 45. Nervous, highstrung, or tense
- 0 1 2 46. Nervous movements or twitching (describe):  
\_\_\_\_\_

- 0 1 2 47. Overconforms to rules
- 0 1 2 48. Not liked by other pupils
- 0 1 2 49. Has difficulty learning
- 0 1 2 50. Too fearful or anxious
- 0 1 2 51. Feels dizzy or lightheaded
- 0 1 2 52. Feels too guilty
- 0 1 2 53. Talks out of turn
- 0 1 2 54. Overtired without good reason
- 0 1 2 55. Overweight
- 56. Physical problems **without known medical cause:**
  - 0 1 2 a. Aches or pains (**not** stomach or headaches)
  - 0 1 2 b. Headaches
  - 0 1 2 c. Nausea, feels sick
  - 0 1 2 d. Eye problems (**not** if corrected by glasses)  
(describe): \_\_\_\_\_

- 0 1 2 e. Rashes or other skin problems
  - 0 1 2 f. Stomachaches
  - 0 1 2 g. Vomiting, throwing up
  - 0 1 2 h. Other (describe): \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

- 57. Physically attacks people
- 0 1 2 58. Picks nose, skin, or other parts of body  
(describe): \_\_\_\_\_

- 0 1 2 59. Sleeps in class
- 0 1 2 60. Apathetic or unmotivated
- 0 1 2 61. Poor school work
- 0 1 2 62. Poorly coordinated or clumsy
- 0 1 2 63. Prefers being with older children or youths
- 0 1 2 64. Prefers being with younger children
- 0 1 2 65. Refuses to talk
- 0 1 2 66. Repeats certain acts over and over;  
compulsions (describe): \_\_\_\_\_

- 0 1 2 67. Disrupts class discipline
- 0 1 2 68. Screams a lot
- 0 1 2 69. Secretive, keeps things to self
- 0 1 2 70. Sees things that aren't there (describe):  
\_\_\_\_\_

- 0 1 2 71. Self-conscious or easily embarrassed
  - 0 1 2 72. Messy work
  - 0 1 2 73. Behaves irresponsibly (describe): \_\_\_\_\_
- \_\_\_\_\_

- 0 1 2 74. Showing off or clowning
- 0 1 2 75. Too shy or timid
- 0 1 2 76. Explosive or unpredictable behavior
- 0 1 2 77. Demands must be met immediately, easily  
frustrated
- 0 1 2 78. Inattentive or easily distracted
- 0 1 2 79. Speech problem (describe): \_\_\_\_\_

- 
- 0 1 2 80. Stares blankly
- 0 1 2 81. Feels hurt when criticized
- 0 1 2 82. Steals
- 0 1 2 83. Stores up too many things he/she doesn't need (describe): \_\_\_\_\_
- 
- 0 1 2 84. Strange behavior (describe): \_\_\_\_\_
- 
- 0 1 2 85. Strange ideas (describe): \_\_\_\_\_
- 
- 0 1 2 86. Stubborn, sullen, or irritable
- 0 1 2 87. Sudden changes in mood or feelings
- 0 1 2 88. Sulks a lot
- 0 1 2 89. Suspicious
- 0 1 2 90. Swearing or obscene language
- 0 1 2 91. Talks about killing self
- 0 1 2 92. Underachieving, not working up to potential
- 0 1 2 93. Talks too much
- 0 1 2 94. Teases a lot
- 0 1 2 95. Temper tantrums or hot temper
- 0 1 2 96. Seems preoccupied with sex
- 0 1 2 97. Threatens people
- 0 1 2 98. Tardy to school or class
- 0 1 2 99. Smokes, chews, or sniffs tobacco
- 0 1 2 100. Fails to carry out assigned tasks
- 0 1 2 101. Truancy or unexplained absence
- 0 1 2 102. Underactive, slow moving, or lacks energy
- 0 1 2 103. Unhappy, sad, or depressed
- 0 1 2 104. Unusually loud
- 0 1 2 105. Uses drugs for nonmedical purposes (**don't** include tobacco) (describe): \_\_\_\_\_
- 
- 0 1 2 106. Overly anxious to please
- 0 1 2 107. Dislikes school
- 0 1 2 108. Is afraid of making mistakes
- 0 1 2 109. Whining
- 0 1 2 110. Unclean personal appearance
- 0 1 2 111. Withdrawn, doesn't get involved with others
- 0 1 2 112. Worries
113. Please write in any problems the pupil has that were not listed above:
- 0 1 2 \_\_\_\_\_
- 0 1 2 \_\_\_\_\_
- 0 1 2 \_\_\_\_\_
- (describe): \_\_\_\_\_
-

**APPENDIX F**  
**RISK INDICATOR SURVEY I (RIS I)**

## Risk Indicator Survey I

Compiled by: \_\_\_ School staff

\_\_\_ TASC staff

### Defiant

- \_\_\_ Argues with authority figures
- \_\_\_ Uses obscene language or gestures
- \_\_\_ Other \_\_\_\_\_

### Manipulative

- \_\_\_ Sneaky
- \_\_\_ Distorts truth
- \_\_\_ Blames others for mistakes
- \_\_\_ Other \_\_\_\_\_

### Aggressive

- \_\_\_ Bullies/threatens/intimidates others
- \_\_\_ Hits/Bites peers or teachers
- \_\_\_ Breaks or throws object
- \_\_\_ Other \_\_\_\_\_

### Isolated

- \_\_\_ Ignored by peers
- \_\_\_ Rejected by peers
- \_\_\_ Withdrawn
- \_\_\_ Other \_\_\_\_\_

### Parental Attitudes

- \_\_\_ Minimizes child's problems
- \_\_\_ Blames others for child's behavior/performance
- \_\_\_ Unresponsive to attempts to make contact
- \_\_\_ Other \_\_\_\_\_

### Attention Seeker

- \_\_\_ Wants teacher's undivided attention
- \_\_\_ Causes class disruptions
- \_\_\_ Talks at inappropriate times
- \_\_\_ Other \_\_\_\_\_

### Emotional Response

- \_\_\_ Inappropriate response to correction
- \_\_\_ Lack of empathy
- \_\_\_ Flat affect – just stares
- \_\_\_ Does not express joy
- \_\_\_ Other \_\_\_\_\_

### Unmotivated

- \_\_\_ No desire to learn
- \_\_\_ Not prepared daily
- \_\_\_ Frequently has no homework
- \_\_\_ Exhibits little curiosity
- \_\_\_ Other \_\_\_\_\_

### Risk Taking Behaviors

- \_\_\_ Harms self intentionally
- \_\_\_ Sexual acting out
- \_\_\_ Suspected substance use/experimentation
- \_\_\_ Risky physical behaviors
- \_\_\_ Steals
- \_\_\_ Other \_\_\_\_\_

### Unstable Home Life

- \_\_\_ Poor hygiene
- \_\_\_ Regularly complains of hunger
- \_\_\_ Inappropriate clothing for weather
- \_\_\_ Suspected substance abuse by adult in home
- \_\_\_ Chronic illness/ lack of medical care
- \_\_\_ Lack of school supplies
- \_\_\_ Other \_\_\_\_\_

### Developmental Issues

- \_\_\_ Sucks thumb
- \_\_\_ Enuresis
- \_\_\_ Sleeps at inappropriate times
- \_\_\_ Eating problems
- \_\_\_ Speech/language/hearing problems
- \_\_\_ Other \_\_\_\_\_

### Hyperactivity

- \_\_\_ Can't sit still
- \_\_\_ Short attention-span for age/grade
- \_\_\_ Other \_\_\_\_\_

**APPENDIX G**

**THE INVENTORY OF PARENT AND PEER ATTACHMENT-REVISED  
(IPPA-R)**

**IPPA (Armsden & Greenburg 1987)**  
**Child Version**

The following statements relate to your family and friends.  
For each statement please indicate whether it is **never true**, **sometimes true** or **always true** for you.

Section One: About My Parents

Circle the response that is most true for you

There is no right or wrong answers.

Please do not spend too much time on any one statement.

1. My parents respect my feelings.
2. My parents are good parents.
3. I wish I had different parents.
4. My parents accept me as I am.
5. I can't depend on my parents to help me solve a problem.
6. I like to get my parents' view on things I'm worried about.
7. It does not help to show my feelings when I am upset.
8. My parents can tell when I am upset about something.
9. I feel silly or ashamed when I talk about my problems with my parents.
10. My parents expect too much from me.
11. I easily get upset at home.
12. I get upset a lot more than my parents know about.
13. When I talk about things with my parents they listen to what I think.
14. My parents listen to my opinions.
15. My parents have their own problems, so I don't bother them with mine.
16. My parents help me to understand myself better.
17. I tell my parents about my problems and troubles.
18. I feel angry with my parents.
19. I don't get much attention at home.
20. My parents support me to talk about my worries.
21. My parents understand me.
22. I don't know who I can depend on.
23. When I am angry about something, my parents try to understand.
24. I trust my parents.
25. My parents don't understand my problems.
26. I can count on my parents.
27. No one understands me.
28. If my parents know that I am upset about something, they ask me about it.

**APPENDIX H**  
**EMOTION REGUALTION CHECKLIST (ERC)**

**Emotion Regulation Checklist**  
(ERC; Shields & Cicchetti, 1995, 1997)

The Emotion Regulation Checklist is a scale examining students' self-regulation by their parents and teachers.

For each question please indicate whether it is **never**, **sometimes**, **often**, and **almost always** for your child.

Circle the response that is most true for **your child**.

There are no right or wrong answers.

Please do not spend too much time on any one question.

1. Is a cheerful child	Never	Sometimes	Often	Almost Always
2. Exhibits wide mood swings (child's emotional state is difficult to anticipate because s/he moves quickly from positive to negative moods).	Never	Sometimes	Often	Almost Always
3. Responds positively to neutral or friendly overtures by adults.	Never	Sometimes	Often	Almost Always
4. Transitions well from one activity to another; does not become anxious, angry, distressed or overly excited when moving from one activity to another.	Never	Sometimes	Often	Almost Always
5. Can recover quickly from episodes of upset or distress (for example, does not pout or remain sullen, anxious or sad after emotionally distressing events)	Never	Sometimes	Often	Almost Always
6. Is easily frustrated.	Never	Sometimes	Often	Almost Always
7. Responds positively to neutral or friendly overtures by peers.	Never	Sometimes	Often	Almost Always
8. Is prone to angry outbursts/ tantrums easily.	Never	Sometimes	Often	Almost Always
9. Is able to delay gratification.	Never	Sometimes	Often	Almost Always

				ys
10. Takes pleasure in the distress of others (for example, laughs when another person gets hurt or punished; enjoys teasing others.)	Never	Sometimes	Often	Almost Always
11. Can modulate excitement in emotionally arousing situations (for example, does not get 'carried away' in high-energy play situations, or overly excited in inappropriate contexts).	Never	Sometimes	Often	Almost Always
12. Is whiny or clingy with adults.	Never	Sometimes	Often	Almost Always
13. Is prone to disruptive outbursts of energy and exuberance.	Never	Sometimes	Often	Almost Always
14. Responds angrily to limit-setting by adults.	Never	Sometimes	Often	Almost Always
15. Can say when s/he is feeling sad, angry or mad, fearful or afraid.	Never	Sometimes	Often	Almost Always
16. Seems sad or listless.	Never	Sometimes	Often	Almost Always
17. Is overly exuberant when attempting to engage others in play.	Never	Sometimes	Often	Almost Always
18. Displays flat affect (expression is vacant and inexpressive; child seems emotionally absent).	Never	Sometimes	Often	Almost Always
19. Responds negatively to neutral or friendly overtures by peers (for example, may speak in an angry tone of voice or respond fearfully).	Never	Sometimes	Often	Almost Always
20. Is impulsive.	Never	Sometimes	Often	Almost Always
21. Is empathic towards others; shows concern when others are upset or distressed.	Never	Sometimes	Often	Almost Always

22. Displays exuberance that others find intrusive or disruptive.	Never	Sometimes	Often	Almost Always
23. Displays appropriate negative emotions (anger, fear, frustration, distress) in response to hostile, aggressive or intrusive acts by peers.	Never	Sometimes	Often	Almost Always
24. Displays negative emotions when attempting to engage others in play.	Never	Sometimes	Often	Almost Always

**APPENDIX I**  
**THE SECURITY SCALE (SS)**

## The Security Scale Items (SS; Kerns et al., 1999)

Now we are going to ask you some questions about you and your mom (dad). We are interested in what each of you is like, what kind of person you are like. First let me explain how these questions work. Each question talks about two kinds of kids, and we want to know which kids are most like you.

Here is a sample question.

Really True For Me	Sort of True For Me	Some kids would rather play outdoors in their spare time <b>BUT</b> Other kids would rather watch T.V.	Sort of True For Me	Really True For Me
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What I want you to decide first is whether you are more like the kids on the left side who would rather play outdoors, or more like the kids on the right side who would rather watch TV. Don't mark anything yet, but decide which kid is most like you and go to that side of the sentence.

Now, decide whether that is **sort of true for you**, or **really true for you**, and check that box.

For each sentence you will only check **one** box, the one that goes with what is true for you, what you are most like.

Now we are going to ask you some questions about you and your mom (dad). If you have both a mom (dad) and a stepmom (stepdad), tell us about the one you live with.

Really True For Me	Sort of True For Me	1. Some kids find it easy to trust their mom (dad) <b>BUT</b> Other kids are not sure if they can trust their mom (dad).	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	2. Some kids feel like their mom (dad) butts in a lot when they are trying to do things <b>BUT</b> Other kids feel like their mom (dad) lets them do things on their own.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	3. Some kids find it easy to count on their mom (dad) for help <b>BUT</b> Other kids think it's hard to count on their mom (dad).	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	4. Some kids think their mom (dad) spends enough time with them <b>BUT</b> Other kids think their mom (dad) does not spend enough time with them.	Sort of True For Me	Really True For Me

Really True For Me	Sort of True For Me	5. Some kids do not really like telling their mom (dad) what they are thinking or feeling <b>BUT</b> Other kids do like telling their mom (dad) what they are thinking or feeling.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	6. Some kids do not really need their mom (dad) for much <b>BUT</b> Other kids need their mom (dad) for a lot of things.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	7. Some kids wish they were closer to their mom (dad) <b>BUT</b> Other kids are happy with how close they are to their mom (dad).	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	8. Some kids worry that their mom (dad) does not really love them <b>BUT</b> Other kids are really sure that their mom (dad) loves them.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	9. Some kids feel like their mom (dad) really understands them <b>BUT</b> Other kids feel like their mom (dad) does not really understand them.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	10. Some kids are really sure their mom (dad) would not leave them <b>BUT</b> Other kids sometimes wonder if their mom (dad) might leave them.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	11. Some kids worry that their mom (dad) might not be there when they need her (him) <b>BUT</b> Other kids are sure their mom (dad) will be there when they need her (him).	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	12. Some kids think their mom (dad) does not listen to them <b>BUT</b> Other kids do think their mom (dad) listens to them.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	13. Some kids go to their mom (dad) when they are upset <b>But</b> Other kids do not go to their mom (dad) when they are upset.	Sort of True For Me	Really True For Me
Really True For Me	Sort of True For Me	14. Some kids wish their mom (dad) would help them more with their problems <b>BUT</b> Other kids think their mom (dad) helps them enough.	Sort of True For Me	Really True For Me

Really True For Me	Sort of True For Me	15. Some kids feel better when their mom (dad) is around <b>BUT</b> Other kids do not feel better when their mom (dad) is around.	Sort of True For Me	Really True For Me
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## VITA

HeeYoung Kim was born in South Korea in May 1971. She received her Bachelor of Arts in social welfare from Wonkwang University in Iksan, Korea, in 1993. She decided to continue her study abroad, and received Master of Arts in Christian Education from New Orleans Theological Seminary in 1998. She then entered the School of Social Work at Louisiana State University and received a Master of Social Work degree in 2002.

HeeYoung began her work as a children's educational minister on a Korean American church in Baton Rouge, Louisiana, in 1998 and continued until her marriage. HeeYoung married Chang-Ho Chung in 2000, and has worked as a Korean language teacher in the Baton Rouge Korean Language School for two years. She is a Licensed Graduate Social Worker since 2002. In 2003 HeeYoung entered the doctoral program of Louisiana State University's School of Social Work, and has been working as a research assistant in the Office of Social Service and Research Development, School of Social Work. She is currently living with her husband, Chang-Ho and two children, Joanie and Kayleen.