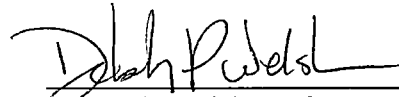
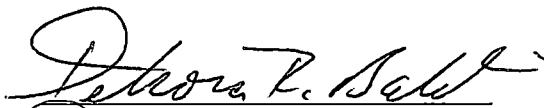
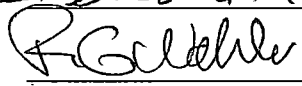
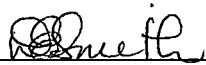


To the Graduate Council:

I am submitting herewith a dissertation written by Kelvin Marcelli entitled "Correlates of Adolescents' aggression" I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.


Deborah Welsh, Major Professor

We have read this dissertation
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Interim Vice Provost and Dean of
the Graduate School

CORRELATES OF ADOLESCENTS' AGGRESSION

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Kevin Donald Marcelli
August, 2001

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DEDICATION

This dissertation is dedicated to my wife

Mrs. Diane Marcelli

and my grandmother

Ms. Maria Marcelli

who have inspired me in my educational pursuits

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ABSTRACT

This study focused on exploring the attitudes of adolescents in the Caribbean and the United States toward aggression. The comparison of adolescents on the measure of aggression from these two diverse cultures could provide valuable information in understanding how culture and its effect on adolescents' aggression. There were 279 Black students from St. Thomas, United States Virgin Islands (U.S.V.I.) and Knoxville, Tennessee (TN) participated in this study. They completed measures of self-esteem, aggressive behavior in specific domains (school, peers, and home), problem solving (religious perspective), beliefs about aggression, and general information about themselves, such as church attendance and frequency of punishment. Subjects were recruited from a junior high school in St. Thomas, U.S.V.I. and the Boys and Girls Club in Knoxville, TN. All the measures in this study were self-reported instruments. Significant differences were found between Knoxville and St. Thomas adolescents on their use of aggression and their beliefs about aggression. Knoxville adolescents were found to be more likely to use aggression at home than the St. Thomas adolescents. They were also found to be more likely than the St. Thomas adolescents to legitimize their use of aggression and to use their aggression to avoid negative image. Gender differences were also found within groups on their use of aggression and beliefs about aggression. St. Thomas females were more likely than the St. Thomas males and the Knoxville females to use aggression at school. They were similar to the Knoxville males in their use of

aggression at school. Some support was found for a positive relationship between aggression and self-esteem. Additional support was also found for church attendance having a positive effect on lessening subjects' beliefs about aggression. A self-directing religious problem solving approach was positively related to the subjects' beliefs about aggression. Aggressive discipline by parents was found to be related to aggressive behavior. Suggestions were made regarding future directions that research should head, such as the need for more research among Black cultural groups, the need to investigate how religion can best be incorporated in violence prevention programs, and the need for more research on self-esteem and aggression.

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CHAPTER I

INTRODUCTION

There is no question that the level of juvenile violence in the United States is greater than that of other industrialized nations (Rosenberg, 1991). Violence has been on the increase over the last ten years. The age group most affected by violence is the 14 to 17-year olds with homicide being the leading cause of fatal injuries for this age group. The African-American population is where the increase has been most noticeable.

A report based on national health statistics revealed that over the 14-year period between 1970-1983, the Black homicide rate ranged from five to nine times more than that of Whites (Centers for Disease Control Homicide Surveillance, 1986). Similarly, an analysis of the Federal Bureau of Investigation (FBI) statistics indicates that over the period from 1977 to 1984, the risk of homicide victimization was six times greater for Blacks than Whites (O'Carroll & Mercy, 1986). Interestingly, the FBI's Supplementary Homicide Reports that covered the period from 1976-98 indicated that the size of this differential has not diminished in more recent years. Blacks were 6 times more likely than Whites to be murdered in 1998 (Fox & Zawitz, 1999). This points to the fact that Blacks continue to be the victims of lethal violence at a far greater rate than Whites. The substantial racial difference in homicide is a major cause of the lower life expectancy of Blacks in the U.S. (Potter, 1991).

How can this linkage between adolescents and aggression, which is destroying so many young lives and even resulting in death be understood? This chapter reviews the literature regarding adolescent aggression. The following sections will be covered: victimization rates for adolescence, assaultive rates for African-American adolescents, patterns of aggression, and risk factors for aggression. The review concludes with the purpose of the study, a discussion of the specific research questions, and hypotheses.

Victimization Rates for Adolescents

The impact of violence on children is enormous. In terms of injury related deaths, homicide is the second leading cause of mortality among children and adolescents across all ethnic groups and ages in the United States (Rodriguez, 1990). The nature and sources of risk from assaultive violence vary by age. Whereas infants and children are most frequently victims of fatal abuse by parent or caretaker, adolescents are more likely to be victimized by friends or acquaintances (Christoffel, 1990). Homicide risk increases dramatically at adolescence, with the most vulnerable group being older male adolescents and young adults, ages 15 to 24 (Rodriguez, 1990).

The 1991 National Crime Survey (NCS) indicated that all adolescents are vulnerable to assault injury. It shows that teenagers are approximately two and a half times more likely to be victims of violent crimes than are persons 20 years of age (U.S. Department of Justice, 1991). Other national surveys have reported high levels of fighting, expressions of fear for personal safety, and carrying of weapons. In one survey nearly one half of the boys and one fourth of the girls reported having being involved in

at least one fight during the past year. Of the boys surveyed, 23% reported carrying a knife to school, and 3% reported carrying a gun (American School Health Association, 1988). The Youth Risk Behavior Surveillance Survey reported that 1 in 5 high school students had carried a weapon of some type during the 30 days preceding the survey, with 1 in 20 specifically admitting they had carried a gun (Centers for Disease Control [CDC], 1991b).

These studies show males are more vulnerable to assaults than females. They tend to receive injuries from assaults more frequently than females, and their injuries are more likely to be serious (Harlow, 1989). Males between the ages of 12 to 19-years old experienced violent crime at the rate of 80 per 1,000, which nearly doubles that of female rates (Christoffel, 1990). Males are also much more likely to engage in risky behavior, such as carrying weapons. In the Youth Risk Behavior Surveillance Survey, the male rate was more than three times that of the female rate (CDC, 1991b).

The present study focuses on African-American adolescents and aggression. Its purpose is to assess factors related to aggressive behaviors in adolescents in the Caribbean and the United States. Within the general youth population, adolescents of specific ethnic groups, particularly African-Americans face greater risk than White youth of becoming assault violence victims (U.S. Department of Health and Human services [DHHS], 1990). A male African-American adolescent is more likely to die of injuries received from a gun wielded by a friend or acquaintance than from any other cause (Fingerhut, Ingram, & Feldman, 1992).

Assaultive Victimization Rates for African-American Adolescents

The risk of homicide victimization of African-American adolescents reflects a similar trend found in the general population in that in the U.S. African-American adolescents show a risk of becoming a homicide victim far exceeding that of both the white population and of other ethnic groups. Homicide was the leading cause of death for both male and female African-Americans aged 15-34 for the years 1978 through 1988. The murder of young African-Americans during these years accounted for 42% of all deaths for those between the ages of 15 and 24; making them at greatest risk for homicide. Rates for African-American males between the ages of 10 and 14 and for African-American females between 10 and 19 are estimated to be four times that of their White counterparts (NCHS, 1992).

Assaultive violence not resulting in death appears to follow similar patterns. Harlow (1989) analyzed NCS data from 1979 to 1986 and found that young African-American men had higher rates and a larger proportion of serious injury than did other groups. A survey conducted by Sheley, McGee, & Wright (1992) focusing on gun-related violence around inner-city schools reported that 20% of the students had been threatened and shot at, with male rates exceeding female victimization by a 3 to 1 ratio. Seventy-five percent of the students in this study were African-American.

Patterns of Assaultive Violence Among African-American Adolescents

An Examination of the patterns of assaultive violence might lead to a clearer understanding of the violence affecting the African American population. Assaults and

murders of all children over 12 years of age tend to be committed by same age peers, who have at least an acquaintance relationship with their victims (Christoffel, 1990). Both disputants tend to play a role in the initiation of a conflict. Assaultive violence among adolescents frequently erupts from an argument that escalates, and the victim-perpetrator outcome may rest in variations in physical strength or the availability of a weapon (Hawkins, 1986, Prothow-Stith, 1991). Several studies have shown that the incidence of primary relationships between victims and offenders is higher for African-Americans than for Whites (Humphrey & Palmer, 1986; O'Carroll & Mercy, 1986; Wilbanks, 1986). Wilbanks (1986) reported that African-American male adolescents had a rate of friend-acquaintance homicide that was six times higher than that of White male adolescents.

Both White and non-White young men and women are most likely to be assaulted or murdered by men (Harlow, 1991). Among African-American men, the relationship between victim and offender is most frequently that of a friend or acquaintance (Humphrey & Palmer, 1986; Wilbanks, 1986). On the other hand, African-American women are more likely to be murdered by a family member or an intimate partner. In the case of adolescents, the perpetrator is usually a boyfriend (Harlow, 1991; Humphrey & Palmer, 1986). Both male and female African-Americans are usually killed at home; for men, the most common weapon of death is the handgun (Mercy, Goodman, Rosenberg, Allen, Loya, Smith & Vargas, 1986).

Moreover, African-American victims and their assailants are likely to be of the same ethnicity. The Federal Bureau of Investigations statistics for 1987 and for 1989 showed that ethnic homicide patterns over a period of several years have indicated that

more than 90% of both male and female African-American murder victims of all age groups were slain by other African-Americans. Additionally, African-American men involved in assaultive violence are likely to have other characteristics in common, such as low socioeconomic status, residence in the same neighborhood, closeness in age, and histories of frequent fighting (Prothrow-Stith, 1991):

What happens before assaultive violence takes place is not well understood for youth in general and African-Americans in particular. FBI reports usually identify arguments as the most common precipitator of homicide (FBI, 1987, 1989). One study has made detailed distinctions as to the nature of arguments leading to homicide. Wilson and Daly (1985) find that the three situational correlates of fatal assaultive violence are the following: (1) retaliation for previous verbal or physical abuse (46%), escalated showing-off contests (16%), and jealousy conflicts (12%). However, neither the FBI (1987, 1989) nor Wilson and Daly (1985) distinguished differences among gender, age, and ethnic groups. In a national study on delinquent youth, Agnew (1990b) reported that 60% of youths in his study listed "retaliation-revenge" as their most common explanation for assaulting someone. The second most frequent explanation was "conflict-fight." Unfortunately, this study had too few African-Americans in the sample for separate analysis.

Risk Factors for Aggression

Understanding the causes of aggression is not a simple task of just looking for one causal factor, but looking for the intermix of several factors that may trigger someone to

aggress against someone else. Some of the factors that have been shown to have an influence on an individual's propensity toward aggression will be discussed. These factors are not independent of each other. They influence each other. Some of the studies reviewed did not always distinguish ethnic and gender effects. Where applicable references have been made to them.

Beliefs and Attitudes

An individual's beliefs and attitudes about aggression are factors that one must consider when it comes to understanding aggression. Beliefs and attitudes vary by geographic region, cultural and ethnic background. Depending on one's group affiliation, the slightest sign of disrespect from someone else could trigger an angry and possibly a violent response; whereas, in other groups, walking away would be the preferred approach rather than attacking someone.

Children's cognitive sense of self and worldview is closely linked to their acquisition of gender identity and the learning of sex-typed behavior. Both start around the time that the child is of age to attend day care. Additionally, it is this period in which gender differences in aggression occurs and continues through the middle childhood stage. For the child, physical fighting is seen as a masculine trait. Cairns and Cairns (1994) reported that females in middle childhood tend to experience a decline in their expression of aggressive behavior and create new less obvious ways of expressing anger. They suspected that the changes seen in females are partly due to the mental scripts that are formed as a result of the sex-typing process. For example, male aggressive play is not viewed in a negative manner, but a female behaving in a similar manner may be frowned

upon, because girls are not supposed to be aggressive.

Price, Desmond, and Smith (1991) conducted a study using adolescents from five inner-city high schools. The adolescents in the study included both African-Americans and Whites. The results of the study found that these adolescents believed many myths about guns and violence. They were more likely to believe that having a handgun in the house made them feel protected and that most African-American men were shot and killed by the police rather than by someone they knew. Additionally, they were likely to believe that banning ownership of guns targets the poor in an unfair manner. Moreover, Price, Desmond, and Smith (1991) found that about half of the adolescents in the study did not know that African-American men are more likely to be killed by firearms than any other ethnic males. This lack of factual knowledge by some African-American adolescents may increase their chances of being killed by firearms.

Children's attitude toward aggression ranges from those approving of its use in many circumstances to those having a less favorable attitude towards it in these same instances. Zhang, Loeber, and Stouthamer-Loeber (1997) examined three samples of middle school and high school students concerning their attitudes toward minor aggression and serious violent offenses and actual minor aggression and violent acts. They found that attitudes favorable to lesser offenses of aggression and violence rise with age. The association between both positive aggressive attitudes and violence and aggressive and violent behavior became stronger with age. Furthermore, they reported that the positive attitudes toward aggression and violence became more stable as age increased. This stability was shown to be even higher for positive attitudes toward

serious violent acts than for a positive attitude toward minor aggression. Lastly, their study showed a mutual predictability between attitudes and behavior.

Research has shown that children's exposure to media violence is correlated with their preference for aggressive responses (Van Evra, 1990; Josephson, 1987; & Liebert, Sprafkin, & Davidson, 1989). Those who view movies, videos, and television shows with violent contents, are more inclined to be violent. There is no question that the mass media is an important socializing agent for today's children. The types of outcomes influenced by long-term viewing of violence in the media include the development of norms, attitudes, and beliefs in favor of aggression and violence (Liebert, Sprafkin, & Davidson, 1989). Furthermore, children's exposure to media violence teaches them an aggressive way of responding to problems in their lives. It also lowers their threshold to violence, therefore making an aggressive response more likely. Media violence can change one's attitude to favor an aggressive response to situations. The media's influence through its use of visual imagery and powerful characterizations has a powerful influence on children (Van Evra, 1990).

Family

Insecure relationships with mothers or maternal caregivers during infancy predict future conduct problems. For males, these conduct problems are typically manifested as aggression and noncompliance as preschoolers. Females, however, may be either aggressive or they may become extremely compliant as preschoolers (Fagot & Kavanagh, 1990). Insecure attachment between children and mothers is sometimes associated with

maternal depression, which can promote externalizing problems and an aggressive stance toward interpersonal conflict, particularly in males (DeMulder & Radke-Yarrow, 1991; Sharp, Pawlby, Schmucker, Allen, & Kumar, 1995; Hay, Zahn-Waxler, Cummings, & Iannotti, 1992). Further, males' aggression scores can be related to their cognitive deficits associated with mother's illness (Sharp, et. al., 1995). In a sample of depressed mothers and their two-year-old children, "out of control" aggression reliably predicted mothers' ratings of externalizing problems and children's self-reported personal difficulties at five years old (Zahn-Waxler, et al., 1990).

Child-rearing practices by parents are associated with the child's later aggression and violence, including coercive interactions (Patterson, 1982), physical punishment or punitive discipline (Farrington, 1978), and child physical abuse (Manly, Cicchetti, and Barnett, 1994). Parental psychopathology, including depression and antisocial personality disorder, can disrupt child-rearing practices and thus directly affect the formation of deviant behavior in the offspring (Frick, Lahey, Loeber, Stouthamer-Loeber, Christ, and Hanson, 1992).

The consistency of parental discipline, as well as its harshness, and children's perceptions of favoritism toward other siblings may promote behavioral problems. Dunn, Stocker, and Plomin (1990) found that an excessive degree of control of older siblings by parents when compared with younger siblings accounted for 27% of the variance in the older siblings' acting out behavior. Dilalla, Mitchell, Arthur, and Pagliocca (1988) in their study of family and environmental factors in aggression and delinquency found that high environmental turmoil predicted high ratings by juvenile delinquents on the Revised

Behavior Problem Checklist. They also found that aggressiveness of the punishment predicted the aggressiveness of the referring offenses for these juvenile delinquents. Adolescents who were punished aggressively were likely to have been referred for less aggressive offenses, while those who received lax punishment were likely to have been brought in for the most aggressive offenses.

Dilalla et. al (1988) found support for a social learning approach to explain why adolescents who live in tumultuous environments demonstrate greater aggressive problem behaviors. Growing up in an aggressive environment is a long-term process that may affect current and later behavior. Adolescents, who are surrounded by parents and siblings who argue frequently and who fight each other in order to get what they want, may learn that arguing and acting aggressively are effective ways of getting rewards.

In a discriminant analysis examining family variables and their relationship to aggression in African-American males, Boone (1991) found that nonaggressive group membership was associated with subjects recollections of consistent use of physical punitive responses by mothers. Additionally, subjects' membership in the nonaggressive group was found to be related to their mothers' consistent use of forceful verbal reprimands and discipline, such as loss of privileges for undesirable behavior. Subjects who defined their mothers' expressions of love in terms of nonmaterial emotional and psychological support were more likely to be nonaggressive. On the other hand, mothers of aggressive males were found to have been too lax and inconsistent in their disciplinary practices. Moreover, these mothers did not appear to provide sufficient emotional and psychological support for their sons.

There is empirical evidence that aggressive children are more likely to come from single parent households (Kupersmidt, et al., 1995; Tremblay, Masse, Kurtz, & Vitaro, 1997). For example, children who were depicted as stable fighters were more likely to come from single-parent households (75%), compared to children, who appeared to have a variable pattern of behavior (46%) and those fighters, who have over time stopped their physical fighting (17%). However, the number of parents in a household has also been found not to be useful predictors of aggressive behavior (Boone, 1991).

The best approach to predicting aggression does not involve focusing on one risk factor, but rather examining multiple factors in family life. Farrington (1989) reported that the best predictors of aggression from childhood up to age 32 were the following: parents having little or no interest in the male child's education, a parent convicted of a crime, authoritarian parents, and harsh parental discipline. These multiple risk factors can account for the long-term development of aggression and violence over childhood. Stattin and Klackenberglarsson (1990) found that the emotional state of mothers when their children were infants predicted their children's criminal behavior in later years. This behavior was evident, even after controlling for socioeconomic factors. However, a major question still remains about the family process associated with the short-term escalation of late-onset violence that can occur in adolescents who were previously not violent. Some researchers have focused more on peers and adult experiences in explaining late-onset aggression (see Moffitt, 1993).

Peer Influences

Children's peer relations change over time, as they become older. Their early relations consist of rough play, which is slowly replaced with more structured games and formal sports activities. Physical aggression decreases in occurrence, particularly for females (Cairns & Cairns, 1994). Both friends and acquaintances are as likely to have disputes (Hartup, Laursen, Stewart & Eastenson, 1988). Children that tend to be aggressive are usually rejected by their peers, partly because of social cognitive deficiencies and their aggressive behavior (Parker & Asher, 1987). Rejection could be seen as early as age 6 and this tends to be a predictor of future negative outcomes (Kupersmidt, 1990; Tremblay, et al., 1988). What leads to aggressive children being rejected by their peers? It is not just the aggressive behavior, but the lack of more positive features that leads to children's rejection by their peers. Aggressive children who are rejected, compared with those who are not, show more diverse and severe conduct problems (Bierman, Smoot, Aumiller, 1993).

Graham and Hudley (1992) found that African-American male adolescents who were judged as aggressive by peers were more likely than their nonaggressive classmates to believe that a peer's intent was malicious, to report higher degrees of anger, and to endorse aggressive responses to a perceived provocation. Moreover, a study done by Coie, Dodge, Terry, and Wright (1991) on peer influences on aggressive preadolescent African-American males found that those males who were judged as being socially rejected by peers were involved in more frequent cases of violence, than the non-rejected males. Kupersmidt and Coie (1990) followed aggressive 5th graders until they

graduated from high school. They found that peer aggression was the only significant predictor of a police record or school drop out. In another longitudinal study, Coie, Dodge, Terry, and Wright (1991) concluded that both children and adolescents, who were rejected by peers tended to affiliate with deviant peer groups. This increased their risk for involvement in delinquent behaviors, thereby, exposing them to situations that had the potential to contribute to physical harm.

However, Kupersmidt and Coie (1990) found that aggression and not peer rejection predicted later police contacts for delinquency. Thus, it remains to be seen whether aggressive forms of delinquency can best be explained by peer rejection, beyond the association with children's own preexisting levels of aggression that got them rejected in the first place. On the other hand, peer rejection at age 10 promotes association with antisocial peers two years later (Dishion, et al., 1991); and association with antisocial peers promotes overt as well as covert forms of delinquency (Keenan, et al., 1995). By the onset of adolescence, most aggressive children have formed social networks with other deviant peers (Cairns et al., 1988). These networks often prove attractive to other adolescents who are not aggressive nor rejected earlier in childhood, and the glamour associated with groups of delinquent peers may contribute to the late onset of aggression in adolescents with no prior history of serious problems (Moffitt, 1993). This process, however, may be heightened in some communities more than others.

Neighborhood

Neighborhoods differ in the amount of aggression and violence exhibited by their

inhabitants. These differences tend to remain stable over time (Sampson & Lauritsen, 1994). The research shows that neighborhoods not only have an influence on adult violence, but also children's aggression (Kupersmidt, Griesler, DeRosier, Patterson, & Davis, 1995). Tremblay, et al., (1997) reported that for both boys and girls, physical aggression tends to be concentrated in large metropolitan cities.

Furthermore, increased aggression in children is related to stressful life events. It is no mystery that children residing in the most depressed neighborhoods encounter greater stressful life events than those residing in other neighborhoods. Attar, Guerra and Tolan, (1994) found that stressful life events predicted increases in a teacher-rated aggression factor over one-year period.

There is also some evidence from studies indicating that learning of violence outside of family relationship occurs. In a study of chronic exposure of young urban African-American children to episodes of violence, Richters and Martinez (1993) found high levels of exposure to knife attacks and incidents of shooting. They also found that these children were exposed to family violence among adults. These high levels of exposure were found to be significantly associated to symptoms, such as anxiety, intrusive thoughts, and impulsivity. All of which point to signs of distress. These symptoms were more evident for children whose mothers were less educated. Moreover, a study by Hill and Madhere (1996) found that the need to retaliate played a significant role in the lives of children exposed to community violence. These children had lower levels of state anxiety, which the authors noted might indicate that these children were engaging in some form of behavior that reduces their state anxiety. However, their

preoccupation with retaliation appears to be related to greater incidence of confrontational behavior. They also found significant correlations between social support, mother's education, and children's perception of community violence. They conclude that children who have more educated parents are less likely to be exposed to violence in the community, which may in turn reduce their later risk for engagement in interpersonal violence.

Temperament and Emotions

Early theories of aggression have long noted the associations between the emotional components (anger and frustration) and aggressive behavior. Differences in the temperament in children emerge very early in life. Some babies have been known to be more difficult to soothe than others and appear to have more difficulty adapting to the social life around them. The problems experienced by these babies have been termed "difficult temperament" by Thomas, Chess, and Birch (1968). This difficult temperament accounts for the increasing rates of maternal caregiver and baby conflict (Lee & Bates, 1985). Fox (1989) reported that babies over time tend to react to disappointment in a fixed manner. There is also some indication that a baby's ability to regulate emotions may be genetic. Emde, Plomin, Robinson, Corley, DeFries, et al., (1992) reported from their longitudinal study of infant twins that there were indications of marked hereditary influence on irritability. However, the authors found that the infant's reaction to frustration did not show similar hereditary influence. They noted that a child's early reactions to the social world might be impacted by the child's early social experiences.

Males tend to show more problems in childhood regulating their emotions than females (Weinberg & Tronick, 1997). An infant's ability to regulate its emotion influences to some extent the discipline techniques used by the caregiver. Therefore, some children may have a difficult time moving towards favorable socialization experiences (Kochanska, 1993). Difficult temperament is associated with a greater likelihood of behavioral problems and aggression. Uncontrolled, impulsive behavior later in childhood is associated with some aspects of conduct problems; impulsivity in childhood predicts delinquency (White, et al., 1994).

Cognitive Factors

As children mature, they attained the necessary mental ability and understanding of the social world to help them avoid disputes and resolve conflicts (Dunn, 1988). On the other hand, some children lack the necessary cognitive ability and social understanding that regulation of self and promotion of aggression occurs.

The relationship between aggression and low academic achievement has been noted in studies (Hinshaw, 1992; Marguin & Loeber, 1996). However, this relationship does not appear to apply for females. Sonuga-Barke, Lamparelli, Stevenson, Thompson, and Henry (1994) found that females with conduct problems were positively associated with intellectual functioning, whereas, Sharp, Hay, Pawlby, Schmucker, Allen and Kumar (1995) found that males' aggression scores were negatively associated with intellectual functioning. There is no clear understanding what these differences mean for relationships between intellectual functioning and violence in each gender.

Maguin and Loeber (1986) performed a meta-analysis that showed that low intellectual functioning and attention difficulties rather than poor academic performance predicts delinquency in the future for males. However, very few studies have examined the connection between low intellectual functioning and violence. One study, Farrington (1989) showed that low verbal intelligence scores in males between the ages of 8 and 10 predicted convictions for violence as far as age 32. On the other hand, Stattin and Magnusson (1989) reported that intellectual functioning and aggression occurring at an early age predicted aggression at a later age with intellectual functioning not being a factor. These results suggest that youngsters who are aggressive tend to become juvenile offenders independent of their cognitive functioning, but that low intellectual functioning predicts delinquency.

A few longitudinal studies have indicated that youngsters having attention problems are more likely to display high levels of hostile and aggressive behavior at a later age (Sanson, Smart, Prior, & Oberklaid, 1993; Satterfield, Hoppe, & Schell, 1982). Evidence to support the position that attention problems in childhood without aggression taking place simultaneously are associated to subsequent aggression is weak at best (Magnusson & Bergman, 1990). However, there are some studies indicating support for this notion (Gittelman, Mannuzza, Shenker & Bonagura, 1985; Mannuzza, Klein, Bessler, Malloy, & Lapadula, 1993). More importantly, there are studies showing that it is the aggression occurring at an early age rather than attention difficulties that appears to be associated with aggression occurring at a later age. Cadoret and Stewart (1991) indicated that having a history of attention-deficit hyperactivity disorder (ADHD) in

childhood was not immediately associated with having a diagnosis of antisocial personality disorder. They found that there was an indirect relationship between ADHD and particular aggressive behaviors. In a six-year longitudinal study of 177 clinic referred males, those with ADHD were found to have a 3.5 years earlier age for the start of antisocial behavior, while those that were physically aggressive and displayed oppositional behavior best predicted the beginning of antisocial behavior at all age (Loeber, Green, Keenan and Lahey, 1995).

Attention problems appear to be important aspects of juvenile aggression that may help to predict the onset and perhaps the persistence of later aggression. However, given that attention problems often include hyperactive and impulsive behaviors as well, it remains to be seen which of these components is most relevant to the etiology of aggression.

Social Cognitive Deficiencies

Besides attention problems, another cognitive factor that has been the focus of research on aggression is an individual's social cognitive deficiencies. Dodge and colleagues (Dodge, Bates, & Pettit, 1990; Dodge et. al., 1990; Dodge & Coie, 1987) have argued that aggression derives from basic social cognitive deficiencies that make it difficult for some children to find nonaggressive solutions to interpersonal dilemmas. According to Dodge and Coie (1987) aggressive children tend to think that their companions have aggressive intent, and react accordingly, which increases the likelihood

that the other child will be aggressive. Often the aggressive child misinterprets prosocial overtures as aggressive.

Graham and Hudley (1992) in their research on social cognitive processes of assaultive violence among African-American male adolescents found that those males who were identified as being aggressive by peers were more likely to find that a peer's motive was hateful. They also reported higher degrees of anger and an endorsement of aggressive responses to alleged provocation. This finding was similar to Dodge, Price, Bachorowski, and Newman (1990), who found that aggressive male adolescent juvenile offenders were more likely to attribute hostile intentions to another adolescent's behavior. However, in the latter study, no racial-ethnic differences were found in the adolescents' behaviors; in the Graham and Hudley (1992) study, the focus was on primarily African-American male adolescents. Dodge, Price, Bachorowski, and Newman (1990) also found a significant positive correlation between high hostile attributional bias scores and huge numbers of interpersonal crimes committed.

Other studies have not always focused specifically on racial-ethnic and gender factors, but have provided some clues about the cognitive processes associated with either ethnicity or gender. One such study is by Slaby and Guerra (1988), who examined the cognitive mediators of aggression in adolescent offenders. They found that male adolescent offenders were significantly more likely than female adolescent offenders to agree with beliefs that aggression increases self-esteem and that victims do not suffer. Astor (1991) investigated reasoning processes of ethnic minority children (Latino, Laotian, and females) in grades 2, 4, and 6. These children included both aggressive and

non-aggressive subjects. He examined their reasoning processes regarding provoked and unprovoked violence in their family and with peers. He found that both non-aggressive and aggressive subjects disapproved of unprovoked actions by moral justifications.

Self-Esteem

It has long been assumed that poor self-esteem is an important characteristic of aggressive individuals. Moreover, it is assumed that studying the self-esteem of aggressive individuals will provide insights into the etiology of aggression (see Anderson, 1994; Schoenfield, 1988). However, as Baumeister, Smart, and Boden (1996) indicated, the evidence for these assumptions is weak. The current view is not that aggressive individuals have poor self-esteem, but rather, they may have high self-esteem. They react aggressively to protect any potential threat to their ego. Examples of threats would be slights, disrespect, and negative feedback.

Self-esteem is widely acknowledged to be an important factor in adolescent development. It has been found to be positively associated with general psychological well being, and negatively correlated with depression and hopelessness among adolescents (Harter, 1993). Research for the most part has focused on individual competence and interpersonal experiences as the bases of self-esteem (Harter, 1993). Self-esteem can be understood in terms of separate domains, and research by Harter (1993) suggested that competence in domains considered important to the individual is the basis for global self-esteem, which she defines as “ the level of global regard that one has for the self as a person (p.88).” Much of the research has focused on domains such as

academic ability, athletic competence, social acceptance, or physical appearance.

Additionally, there is evidence that ethnicity is an important domain for ethnic minority youth (Phinney and Alipuria, 1990).

The theoretical basis for a link between group membership and self-esteem derives largely from social identity theory. According to Tajfel & Turner, (1986), social identity "consists of those aspects of an individual's self-image that derive from the social categories to which he perceives himself as belonging" (p.16). They suggest that group members differentiate their own group from other groups and evaluate their own group more favorably as a means of enhancing their self-image. Therefore, one's identity as a member of a group is seen as an important source of global self-esteem.

Research has provided some support for the link between group identity and self-esteem (Crocker, Luhtanen, Blaine, and Broadnax, 1994; Phinney, Cantu, & Kurtz, 1997). However, the implications of social identity theory are ambiguous for members of ethnic minority groups; according to Tajfel (1981), if their group is viewed negatively by society, they may view themselves negatively. This idea is in accord with early writings on self-esteem among ethnic minority group members, which assumed that membership in a disadvantaged or lower status group would result in lower self-esteem. Studies showing that African-American Children often preferred a white doll (Clark & Clark, 1947) were interpreted as evidence for lower self-esteem in a stigmatized group.

The assumption that lower social status or negative stereotypes would result in lower self-esteem for American ethnic groups has been consistently refuted in empirical research. There is strong evidence that African-American adolescents either do not differ

from, or score higher than White adolescents on measures of self-esteem (Crocker and Major, 1989; Porter and Washington, 1993; Tashakkori, 1992). These empirical findings demonstrate that membership in a lower status ethnic group does not account for group differences in self-esteem. Rather than membership per se, the importance of the group membership and feelings about the group appear to be the important factors. Group membership is not a categorical, "all-or-nothing" phenomenon (Turner, Oakes, Haslam & McGarty, 1994), and members of ethnic and racial groups vary widely in their sense of belonging to a group and in their evaluation of the group.

Research with adolescents has generally found that females have lower self-esteem than males (Harter, 1993). However, this finding varies across ethnic groups. One study using a very large sample of Hispanic, Black, Asian American, Native American, and White junior and senior high school students found that self-esteem differed by both ethnicity and gender (Duke & Martinez, 1994). When groups were created by ethnicity and gender, Black and Hispanic males had the highest self-esteem. Males from each group scored higher than their female counterparts. However, black females showed relatively high self-esteem. Two other studies also found no difference between Black males and females regarding self-esteem (Richman, Clark, and Brown, 1985; Phinney, et al, 1997).

A limitation in the existing research on group identity and global self-esteem is that because of historical and cultural differences among American ethnic groups, the relationship of group identity to self-esteem may differ across groups. The types of self-beliefs underlying self-esteem differ by ethnicity (Tashakkori, 1992). For example,

African-American adolescents may consider certain self-attributes more important than Whites do. Thus, self-beliefs, which reflect those attributes may affect the overall self-esteem of African-American adolescents more than White adolescents. This is reflected in the research findings of Wade, Thompson, Tashakkori and Valente (1989), who found that for inner-city adolescents from the South, self-beliefs about physical attractiveness was the best predictors of self-esteem between White adolescents. For African-American adolescents, the beliefs about the relationships to parents (e.g. how close one is to mother) were better predictors of self-esteem. Additionally, African-American adolescents' beliefs about their ability to produce effect and control events were better predictors of self-esteem.

Factors underlying self-esteem may also differ across cultures (Diener & Diener, 1995). For example, differences were found between individualistic cultures (e.g. U.S.) and collectivist cultures (e.g. Korea) regarding their life satisfactions as influenced by self-esteem. The individualists are socialized to attend to their own internal attributes. Thus, attitudes, emotions, and cognitions are important characteristics that stand out when individualists make judgments about their lives. Whereas, the collectivists are socialized to fit into the community and to do their duty. How they feel about themselves is less pertinent to life satisfaction than making sure that they behave in the expected manner of their society. In summary, life satisfaction for the individualist may be viewed as being internally based, whereas for the collectivist, it is more externally based.

Self-esteem and Aggression

A long tradition of psychological thought has regarded low self-esteem as a powerful correlate of violence. This view seems to be so widely and uncritically accepted that it is often casually asserted in the absence of evidence and even in the presence of apparently contrary evidence. One does not have to look far to find examples of the assertion that low self-esteem leads to violence. Anderson (1994) cited low self-esteem as a persistent cause of the violence among youth gangs. Similarly, Jankowski (1991) referred to "self-contempt" of gang members as a cause of violence. There are many more examples that could be mentioned, but are not relevant to the subject matter of this research.

Toch (1969) in his classic work on the psychology of violence, suggested "a compensatory relationship between low self-esteem and violence (pp.133-134)." He indicated that people with low self-esteem turn violent as a way of gaining esteem. However, no direct evidence of low self-esteem was provided. He inferred that the men in his sample suspected themselves of being weak, therefore, were concerned about refuting any impression of weakness. An alternative explanation could be that the men held favorable views of themselves and that any threat to their view may be seen as disrespectful.

Schoenfield (1988) proposed that the high crime rate among American Black people is due their low self-esteem. In his analysis, Blacks were reduced by slavery to a state of extremely low self-esteem. When slavery ended, Jim Crow laws and, more recently by the welfare system, which fosters helplessness and dependency, perpetuated this low self-regard. In Schoenfield's view, low self-esteem is responsible for the high crime rate that

is found among Blacks. However, his analysis does not take into account Crocker and Major's (1989) review of the literature which indicated that self-esteem levels among Blacks are equal to or higher than Whites. Likewise, his analysis does not fit the shift in crime rate among Blacks that is reaching its highest levels as slavery recedes farther and farther into the background, and a welfare system, which focuses on fostering independence among its clients.

The current review of the literature did not find any specific theory that low self-esteem causes violence. However, some possible versions of this theory have consistently been reported. One view that appears to be very popular is that people lacking in self-esteem gain it through violent means, aggressively dominating others. Violence is seen as a technique of self-enhancement, it increases one's self-esteem (Anderson, 1994). In this view, the assumption is that people with low self-esteem are strongly oriented toward self-enhancement, because they want to gain more of what they lack. Even though it is plausible, the research findings have not supported this view. The motivation to enhance one's esteem appears to be characteristic of people high in self-esteem, rather than low (Baumeister, Tice, & Hutton, 1989). Furthermore, people with low self-esteem appear to be ambivalent about raising their level of self-esteem. In fact, they tend to avoid situations that might raise their self-esteem (De la Ronde & Swan, 1993).

Another version of the low self-esteem theory is that all people desire to regard themselves favorably, and people with high self-esteem have satisfied this need and can ignore it, whereas it remains a point of concern of those with low self-esteem. In this

view, someone having high self-esteem is so secure in his or her appraisal that nothing can diminish it. However, researchers have not found this to be the case. People with high self-esteem have been found to be very sensitive to insults, criticism, and disrespect (Blaine & Crocker, 1993; Baumeister et al., 1989, 1993).

One other variation of low self-esteem theory is based on the notion of subculture of violence. This notion emerged in the 1960s as an explanation for the violence among stigmatized groups (Wolfgang & Ferracutti (1967). It held that members of minority groups lacked access to mainstream sources of self-esteem, so they formed communities in which aggressive behavior was an alternative source. Researchers have been unable to identify any community or subculture that places a positive value on violent acts (see Tedeschi & Felson, 1994).

The relationship between low self-esteem and aggression continues to be a commonly held view by many researchers, teachers, school administrators and mental health professionals. A poor self-concept and low evaluations of one's self are posited to be related to, and even cause aggression. Proponents of this belief hold that aggression is used as a means to increased one's self worth. Accordingly, many prevention and treatment efforts have been directed at enhancing the self-esteem of adolescents (Dielman, et al., 1987). However, a lesser-known view is slowly emerging in which aggression is used to prevent the lowering of self-esteem. Proponents of this belief hold that aggressive individuals have high self-esteem. They respond aggressively in situations to prevent a lowering of their self worth when a threat to it is experienced.

Strong proponents of this view include Baumeister and his colleagues (1996). In their review of the literature on aggression and its relations to self-esteem, they found that the most important situational factor that interacted with favorable self-appraisals to cause violence was an ego threat. This finding lends support to their view that violence is often caused by an encounter with an external, less favorable evaluation. When favorable views of someone are questioned, challenged, or jeopardized, he or she may aggress against the source of the threat. Violence comes from the people who refuse to lower their self-appraisals. They turn aggressive when they receive feedback that contradicts their favorable views of themselves and implies that they should adopt less favorable views. Self-esteem is not viewed as an independent and direct cause of violence. Rather, they propose that the major cause of violence is high self-esteem combined with an ego threat. As they stated "we do not wish to claim that threatened egotism is the sole cause of aggression,But in terms of the potent link between self-appraisals and violence, the discrepancy between favorable self-views and external threats is the most important cause (p. 26)."

This view that high self-esteem and ego threat are related to aggression is appealing in that it provides some explanatory means about why aggressive individuals are so responsive to threats to their self worth. However, the opposing view continues to be the popular one, possibly due to its "common sense" nature linking aggression and low self-esteem. However, the research literature still has not provided a clear understanding about the role of self-esteem and aggression. The current study hypothesizes a positive relationship between aggressive beliefs and self-esteem.

Drugs

Drugs and alcohol have long been associated with violence. Alcohol and other substance abuse and use have been examined in relation to assaults among African-American adolescents. Tardiff and Gross (1986) found that regular drug abuse is not characteristic of primary homicides, but secondary. A strong correlation between drinking and serious assaultive offenses was found for African-American delinquent adolescents (both males and females) than for a comparable group of Whites or Latino delinquents (Dawkins and Dawkins, 1983). However, Weis, Martin, Walter, and Fernandez (1991) found no ethnic differences in a follow-up study which showed that being arrested for violent assaults were strongly related to being involved with substance abuse at a young age. In a study of homicide patterns in a large West Coast metropolitan city, Mercy, et al., (1986) found that about half of the African-American and Latino males were drunk prior to dying.

One other aspect of the drug trade that must be mentioned is drug trafficking. This will be mentioned with association to gang activity. Both drug trafficking and gang activities have been hailed by the media as the cause for the increased level of violence occurring with African-Americans. Incidentally, these activities only account for a small portion of the violence taking place nationally with African-American adolescents (Prothrow-Stith, 1990; Roberts, 1990). Meehan and O'Carroll (1992) found that only 16% of killings in Los Angeles for a two-year period between 1986-1988 were gang-related. Drug-related homicides accounted for more than a third of killings involving males in New York City (Tardiff & Gross, (1986).

Gun Ownership among Adolescents

It is not surprising that in the United States, 60% of the homicides involve guns of which 75% are handguns (Sloan, et al, 1988). Moreover, adolescents' gun ownership reflects the America's obsession with guns. Sheley and Wright (1993) surveyed 835 male serious offenders incarcerated in 6 juvenile facilities and 758 male students in 10 inner-city high schools near the facilities. It should be noted that the authors indicated that both students and inmates came from environments marked by crime and violence. A total of 83% of the inmates owned at least one firearm just prior to confinement. Approximately 22% of the students possessed a gun at the time of the survey was completed.

Callahan and Rivara (1992) conducted a survey of 970 eleventh grade students from public high schools in Seattle, Washington. The purpose of the study was to determine the prevalence of handgun ownership among urban high school youths and investigate associations with socioeconomic status, ethnicity and deviant behaviors. Data were collected by means of anonymous questionnaire administered by one person during a required history course in each school.

According to Callahan and Rivara (1992), handgun ownership was reported by 6.4% of students. Of the 60 handgun owners, 51 (85%) reported personal ownership and 9 (15%) had shared ownership with friends. Male students were eight times as likely to report ownership as female students. Handgun ownership was more common in the lowest social class (3.1%). Additionally, students who did not plan to attend college reported a threefold greater occurrence of handgun ownership than students expecting to

attend college. Moreover, students who reported hearing gunfire in their neighborhoods reported a fourfold higher rate of handgun ownership compared with students from neighborhood where gunfire was never heard. Among the handgun owners, only 16 (27%) selected hunting or target shooting as the primary reason for owning any firearm.

Both of these studies targeted adolescents but the researchers could not generalize the findings to their subject populations because subjects were not randomly selected. Therefore, the studies lacked generalizability. Furthermore, most of the research involving adolescents is descriptive in nature and involves self-reporting instruments. Some of the problems that could occur with these types of instruments include miscoding, under reporting due to memory failure, lying and misinterpretation (Flowers, 1988).

Gun Accessibility among Adolescents

Sheley and Wright (1993) noted that 70% of the inmates felt that upon release they could obtain a gun with "no trouble at all;" a sentiment expressed by 41% of the students as well. Only 13% of the inmates and 35% of the students perceived access to a gun as a "lot of trouble" or "nearly impossible." An additional 17% of the inmates and 24% of the students said it would be "only a little trouble."

Callahan and Rivara (1992) found that in their study that 34% of high school students perceived handguns to be easily accessible. Their study revealed male students were twice as likely as female students to report easy access to handguns. They also reported that African-Americans male students reported the highest occurrence. Another

of their findings was that easy access to handguns was almost twice as common for African-Americans as for Asians/Pacific Islanders, with Whites falling between these two groups. African-American male students (59%) reported the highest prevalence of easy access. Easy access to handguns was most common in the lowest social class and least common in the highest social class. Handguns were perceived to be easily accessible by more than 50% of male youths in all social classes except the highest class, in which 36% reported easy access.

Gun carrying Behavior among Adolescents

In Sheley and Wright (1993), among the inmate sample, carrying a firearm was about as common as owning one; 55% carried a gun "all" or "most of the time" in the year or two before incarcerated, and 84% carried a gun at least "now and then." Among the student sample, carrying a gun at least occasionally was more common than gun ownership. A total of 12% of the students reported currently carrying a gun "all" or "most of the time" and another 23% did so at least "now and then."

The study also suggested that the reasons for carrying a gun were dominated by themes of self-protection and self-preservation. The most frequent circumstances in which inmates carried guns were when they were in a strange area (66%); and, when they thought they might need self-protection (69%). Likewise, for any of the types of guns acquired by either inmates or students, the desire for protection and the need to arm oneself against enemies were the primary reasons for obtaining a gun. Impressing peers or others was among the least important reasons in the decision to own or carry guns

among students and inmates alike. Similarly, obtaining guns to use in crime was not a significant factor for either students or inmates.

Webster, Gainer, and Champion (1993) conducted a study with junior high school students who were asked to complete anonymous questionnaires. The purpose of that study was to estimate associations between beliefs and experiences hypothesized to be related to weapon carrying among adolescents. Among males, 25% had carried guns. Gun carrying was associated with having been arrested, knowing more victims of violence, starting fights, and being willing to justify shooting someone. Gun carrying within this nonrandom sample appeared to be a component of a highly aggressive delinquent behavior rather than a purely defensive behavior.

The national school-based Youth Risk Behavior Survey (YRBS) (1991) of high school students in grade 9 through 12 in the United States revealed that male students (31.5%) were significantly more likely than female students (8.1%) to report having carried a weapon. Hispanic (41.1) and Black (39.4%) male students were significantly more likely to report carrying a weapon than were White (28.6%) male students. Most of the students who reported carrying firearms carried handguns. Similarly, male students were significantly more likely than female students to report having carried a handgun. Additionally, the YRBS (1990) indicated that firearms were the most frequently carried weapons among Black male students (54.2%).

Explanations for African-American Homicide Rates

As homicide rates among young Black Americans continue to increase, a number of explanations have been proposed to explain this continuing phenomena. Two of the major conceptual approaches are (a)cultural model and (b)structural model.

Cultural Model

A popular theory within this model is the "subculture of violence" theory. It assumes the existence of self-perpetuating community or regional norms that support the use of aggression as a legitimate means of resolving relationship problems (Wolfgang & Ferracuti, 1982). The theory holds that there is a gender-related sanctioning of assaultive behavior. An example of this is when a person's manhood is challenged. This conflict can easily end in death due to the easy availability of weapons (Lester, 1986).

The theory also emphasizes personal attributes, such as strengths, courage, and integrity. Individuals are to be highly sensitive and responsive to insults. Thus, personal attacks of equals are regarded as important and individuals are encouraged to be responsive to them. Situations for which violence is sanctioned are those in which important properties of self are attacked.

This theory has been used to account for the high homicide rate in Southern states versus Northern states and the high homicide rate among African-Americans. As the theory maintains, in the old South, a culture evolved that placed emphasis on honor, gentility, and individualism. Whites were quick to resort to violence through duels in defense against loss of self-esteem. Moreover, Whites also used violence to regulate slave

behavior. The fighting tradition among White Southerners was carried over to the slave population. Thus, the migration of Southerners to other areas of the nation allowed for the spread of these attitudes. Wolfgang and Ferracuti (1982) saw the elevation of violence among African-Americans as an example of the impact culture has on people to respond to particular circumstances in previously learned and sanctioned ways. They viewed the violence with African-Americans as acting out by those who are carriers of a ghetto tradition.

The "subculture of violence" theory has been criticized for its circular reasoning and failure to give weight to external factors, such as poverty and racial discrimination (Hawkins, 1990; Sampson, 1987). Moreover, the theory has been criticized for its over prediction of the number of African-Americans, who are likely to become involved in violent behavior (Bernard, 1990; Parker, 1989).

Structural Model

The next theory is the Structural model. Within this model, crime and violence are a product of social and economic conditions (Laub, 1983). Ramey (1980) described what he called "free floating anger," resulting from generalized feelings of frustration and helplessness related to a status of disenfranchisement. He indicated that the frustration comes from institutional factors that encouraged economic victimization of African-Americans. Furthermore, he noted that displaced aggression is common in numerous homicides of African-Americans. He speculated that young African-American men experiencing this constant tension are likely to strike out at the targets most convenient.

Their targets will most likely be peers and acquaintances within a shared socioeconomic and geographic community.

Rose and McClain (1990) reported that the use of violence may be determined from personal needs, impelled both by internal and external stimuli. They further stated that these needs are initiated from the individual inclination either to reinforce self-esteem or to protect one's reputation against possible doubt. Moreover, they indicated that individuals restricted to environments where social inequalities and blocked opportunities persist are likely to become hostile.

The "Dual Labor-Market" perspective also provides an explanation for the violence affecting young African-American adults as described by Bowman (1980). This perspective targets the harsh employment experiences of African-Americans as the reason for the high homicide rate. The harsh employment experience brings about frustration from the following: lack of desired material resources, stimulating feelings of resentment, hostility and aggressive impulses (Agnew, 1990a; Parker, 1989). Its basic premise is that two separate employment markets exist, primary and secondary sector jobs. Primary sector jobs have a future. They provide higher earnings, advancement, equity, good working conditions and employment stability. Secondary sector jobs can be considered dead ends. They have limited advancement and low salaries. These factors lead to high turnover rate in the labor market.

Institutionalized racism has kept African-Americans out of the labor market for primary sector jobs even when education levels are similar to those of Whites (Taylor, 1990). African-Americans with the same education cannot attain the same jobs as

Whites. One factor related to successful employment with whites is "connection" of family member to the job market, but this factor may also work against African-Americans many of whom may not be well connected. It comes as no surprise that African-Americans are over-represented in secondary jobs. According to Bowman (1980), African-Americans experience job discrimination, limited employment contacts, and other obstacles that prevent entry into primary sector jobs. These barriers can bring about feelings of hostility and resentment, which are expressed through aggressive impulses.

Harvey (1986) related that young adult males are drawn into life-styles in which violence becomes an accepted form of behavior among their peers. He associates the violence with their inability to participate in the main stream economy. The poor persons' sense of relative deprivation and their lack of opportunity to ameliorate their life circumstances facilitate higher rates of violence (APA Commission on Violence and Youth, 1993).

This model has many theories, which differ with respect to the source, diffusion, and structural location of a culture of violence. It fails to establish which causal factors are the most important. Furthermore, it does not explain why many African-Americans, who are poor do not engage in violent behavior (Agnew, 1990a; Roberts, 1990).

Manifestation of Aggression throughout Adolescence

Children from early childhood to middle childhood show a pattern in peer relations that involves a decrease in aggression and in interpersonal skills. This pattern is evident for most females and many males, except for small group of males, who fail to

control their aggressiveness. Conversely, sex difference in aggression become less apparent when siblings are involved than peers. Dunn (1993) noted that both males and females reported rates of aggression with their siblings which were greater than average. This does not necessarily mean that continuous arguments between siblings indicate some form of maladjustment. On the other hand, Storashak, Bellanti, and Bierman (1996) report that if children who are at risk for disruptive behavior are involved in a highly conflictual relationship with sibling, this could make more imminent the possibility of aggression at school.

Major changes take place in the degree and pattern of aggression during adolescence and early adulthood. First, aggression is sometimes expressed in such magnitude that the end result is someone being killed or injured. Some of the factors that have been cited to explain the deadly force that adolescents' aggression can have are the following: adolescents' increase physical strength due to their maturation, weapons usage and increased lethality of weapons (Berkowitz, 1994; Reiss & Roth, 1993; Arria, Wood, & Anthony, 1995).

Second, adolescents' peer groups tend to engage in forms of violence that involves groups. Cairns and Cairns (1994) reported that participants of social networks at the high school level are more similar to each other than different. This includes their levels of aggression and other antisocial tendencies. Adolescents' participation in a group, particularly one that appears to promote aggression and delinquency may view their behavior as normal during this phase of development (DiLalla & Gottesman, 1989). Early adolescence is that stage of life where the allure of organized groups, such as gangs

is appealing. The gang's dress, insignia and reputation are appealing to the adolescent. These groups are known to engage in violence (Howell, 1995). Synder, Sickmund, and Poe-Yamagata (1996) report that gangs presence in schools are related to a two-fold increase of weapons found in schools. Moreover, adolescents, who do not join a gang are less involved in violent crime than those who join a gang (Fagin, 1990). Gangs' presence in communities is associated with increased violence and easy accessibility to firearms (Bjerregard & Lizotte, 1995; Howell, 1995). Third, as adolescents mature, there is an increase physical strength and some tend to strike out at a parent (usually mother) or a teacher (Callahan & Rivara, 1992). During adolescent years, incidents of parent-child disagreements tend increase (Smetana, 1989).

Fourth, cross-gender aggression tends to increase. In middle childhood continuing on to early adolescence, most conflicts involving peers are between members of the same sex. Direct physical conflict occurs between females with females and is also seen between males with males. As adolescents begin to date, the potential for violence between the sexes become more evident. Lastly, with adolescents becoming sexually mature, the possibility that they may become parents increases, but also the potential that they may abuse their children exist.

Pathways of Aggression from Childhood to Adolescence

When does aggression start in children? Loeber and associates (Loeber, et al., 1993; 1997a,b) in their study of the age of onset for different forms of aggression reported that there is an increase for each level of the different forms of aggression. They

described the different levels of aggression as the following: minor aggression, which included annoying other people and bullying; physical fighting, which included both gang fighting and any other type of physical fighting; and violence, which included attacking people, strong-arm tactics, and rape. The sample consisted of 503 subjects from the youngest sample of the Pittsburgh Youth Study. They created graphs from prospective and retrospective information from parents and their male children. Loeber, et al., (1997a & b) reported that for each level of severity of aggression, there was an increase in the age of onset of aggression. Additionally, it appears that the seriousness of the aggression followed a maturational ordering with age. From age 3 to 16, boys expressed both being annoyed at people and bullying. This was followed by the emergence of physical fights, which appears to escalate from age 10 and up. Moreover, fighting was trailed by the start of violence, which rocketed from age 11 and older. These graphs showed a developmental ordering of age with aggression. The onset of male aggression was focused in the preschool period, but also the developmental phase that runs from childhood into adolescence in which more males start to express aggression (see also Haapaslo & Tremblay, 1994). Their study did not include females. Future studies involving females would be helpful in identifying different forms of aggression with in this gender.

Some researchers have argued that there should be separate categories for early-onset and late-onset aggressive behavior (Moffitt, 1993; Patterson, Crosby, & Vuchinich, 1992). Moffitt (1993) argued that there is a distinction between antisocial individuals who start aggressing as a child versus adolescents who start being deviant in adolescence,

but does not persist with this behavior over years. On the other hand, Loeber and Hay (1997) noted that even though such a classification is possible, there are some things that make this distinction difficult.

First, they noted that the way aggression is measured may create different measures of stability or discontinuity of the behavior. The example given by them was that official records of delinquency fail to provide an accurate record of all serious offenses, therefore providing an inaccurate picture of delinquency. Second, most studies in which adolescents' aggressive behavior was investigated failed to follow-up the subjects, therefore having no idea if the deviancy had stopped. Third, the conceptualization of late-onset and early-onset is based on data from males. Elliot (1994) reported that females usually start aggressing later than males and some of these females would become regular offenders. Fourth, not all individuals, who are committing serious violence as adults were markedly aggressive as children (Windle and Windle (1995). Lastly, Loeber and Hay (1997) reported that they did not have a bimodal distribution, which could have provided some support for distinction of early versus late-onset.

As indicated by survey studies, the occurrence of physical aggression is most prominent during childhood and tends to decrease during adolescence (Cairns, et al., 1989; Loeber, 1982). However, for more serious violence, the trend tends to increase with age, particularly during adolescence. Farrington (1986) noted that the occurrence of violence follows the age-crime curve. Violence tends to accelerate during late adolescence or early adulthood, but then decelerate with age.

Stability of Aggression

How early in life does aggression become stable? Farrington (1994) showed that early manifestation of aggression predicted later aggression, for example, numerous physical fights by age 18, attacking ones spouse or live-in lover, and being a felon by age 32 because of violent offenses.

Hay, Castle, Stimson, and Davies (1995) indicated that toddlers' behavior displaying proactive and not retaliative aggression is stable for both males and females over 6 months of age. Shaw, Keenan, and Vondra (1994) reported that aggression that occurred during infancy could be used as a predictor of males' behavioral problems at 3 years of age. It appears that for males with high levels of aggression at age 2 were more likely to show a high rate of aggression 3 years later in a similar setting (Cummings, Ballard, El-Sheikh, & Lake, 1991). This finding was used to explain that stability over a long period of time was more evident for males with high levels of aggression than females. Female's level of aggression during the toddler period did not predict aggression at 5 years of age.

Is aggression for males more or less stable than for females? The studies noted earlier indicates that the prevalence of aggression tend to be higher among males than females. However some studies (Cairns & Cairns, 1984; and Elliott, 1994) showed the opposite findings of the previous studies. They report that similar or higher stability for aggression with females than males. Does aggression become more stable with age? Loeber (1982) compared stability coefficients across many studies and indicates that the degree of the coefficients peaks by early adolescence. This finding implies that changes

in aggression are noticeable early in life. However, from early adolescence, aggression tends to be more stable as the adolescent becomes older.

The findings that indicate correlation coefficients for early and late aggression involving both genders should be viewed as preliminary with the understanding that reservations exist. First, the huge individual differences in the stability of aggression point to the fact that the individuals who in the beginning are least aggressive or most aggressive tend to be the most stable individuals over time in terms of behavior (Loeber, 1982). Second, how do we account for the fluctuation in aggressive behavior that some adolescents display? They may be highly aggressive in one period, passive in the next, and return to their state of aggression at another period. Is this fluctuating aggression even taken into consideration? I don't believe that it is considered. More importantly, the stability coefficients for aggression at one age level (period 1) and then at more advanced age level (period 2) would therefore underestimate the "true" stability of aggression over time. Lastly, what does it mean to have a high correlation between aggression at one age level and aggression at a later age level? It indicates that those subjects who scored high on aggression in period 1 also scored high the same in period 2. A correlation does not take into account the changes in the population regarding the levels of aggression from a child to a teenager. As mentioned earlier, physical fighting tends to decrease from childhood to adolescence, while violence tends to increase with age. Correlation does not show what percentage of kids have stable aggression, what percentage show a decrease in the amount of aggression, and what percentage show an increase in the amount of aggression with age.

Religiosity

An area in the research literature where there appears to be little or no information has to do with the relationship between religion, problem solving style and adolescent aggression. Church attendance is recognized widely as playing an important role in the functioning of many families. It may affect parent and children's values and in turn, this affect the parents' disciplinary methods, children's attitude toward others and children's problem solving style in the home and other settings. Boone (1991) found that regular church attendance (at least twice monthly) by both African-American respondents and their mothers was associated with males' membership in the nonaggressive group. Whereas, respondents in the institutionalized aggressive group and their mothers rarely attended church. Actually, the measures of church attendance habits of mothers and respondents were consistently more potent discriminant variables than mothers' emotional attitudes and their punitive behaviors. Boone (1991) concluded that the relatively high levels of church involvement on the part of nonaggressive respondents and their mothers might reflect shared coherent belief systems that are characterized by self-respect and concern for others in these families.

The manner in which an individual approaches solving a problem has been related to numerous variables, among them are the effectiveness of the solution; how the individual adjusts to the problem long-term, and the life satisfaction of the individual (Tyler, 1978). Models for problem-solving have also looked at the activities that help people manage their feelings relating to dealing with a problem. Religion, as was hinted earlier, may play a significant role in the problem-solving process of many people.

Pargament (1988) reported that religion might help people to understand and cope with life events by offering guidance, support and hope. Understanding the impact of religion on problem solving approach may us help to understand the likelihood of aggression being used in situations? Unfortunately, no research articles were found that have investigated religious problem solving style and adolescent aggression.

Paragament (1988) through interviews with people and literature review, formulated three styles of problem solving: Self-Directing, Deferring, and Collaborative that varied on two key dimensions underlying the individual's relationship with God. These two dimensions are (1) the locus of responsibility for the problem-solving process and (2) the level of activity in the problem-solving process. The Self-directing approach relies on personal rather than religious resources to resolve problems. It is not associated with traditional forms of religious expression that is practiced among Christian groups. On the other hand, the Deferring style is related to religious expressions tied to traditional structures of Christian groups and the belief that God will respond to personal needs. Contrary, the Collaborative style is associated with a problem solving approach that involves less reliance on God to meet personal needs and more on practices which facilitate and maintain a personal relationship with God.

The three styles also have different implications for the competence of the individual. The Self-Directing problem-solving style incorporates someone who sees themselves as competent in dealing with their environment. A person using this style confronts and deals with personal problems. The Deferring style, however, may ultimately hinder the individual from confronting and dealing with personal problems and

developing greater competence. The Collaborative problem-solving style incorporates the notion of shared responsibility for problem solving. This style relates to high levels of competence. How one views his/her reliance on God to help with problem solving will account for the likelihood of an aggressive or non-aggressive approach in resolving disputes and being aggressive, in general.

Statement of the Problem

Aggression, quite often resulting in violence, is of increasing concern to educators and other professionals in both the Caribbean and the United States. Understanding the correlates of such behaviors may offer some clues about adolescent development and the development of internalizing and externalizing behavioral problems in these cultures.

The current study focuses on exploring the attitude of adolescents in the Caribbean and the United States toward aggression . St. Thomas, the research site in the Caribbean is unique in that it is a territory of the United States, therefore it is heavily influenced by problems facing adolescents on the mainland, such as drugs and violence. However, its culture is predominantly Afro-Caribbean and there is this push and pull taking place to maintain its Caribbean roots. Additionally, many of the occupants residing in St. Thomas are from neighboring islands those are/were former British colonies. They like the Americans also bring with them their cultural ways. St. Thomas's culture is not predominately American, but is a mixed of Afro-Caribbean cultures intertwined being influenced by the American culture trickling down. The other research site is Knoxville, Tennessee. The population of this mid-sized city is

predominately White with a small African-American presence. Its culture is Southern. The comparison of adolescents on the measure of aggression from these two diverse cultures could provide valuable information in understanding how culture and its effect on adolescents' aggression. Are there differences in the beliefs about aggression held by adolescents from the Caribbean and the United States? If differences do exist, what role does culture play in the beliefs held? Do adolescents in these cultures use aggression to avoid negative self-image? It is hypothesized that there will be significant differences between students who indicate a willingness to use aggression as a means of solving problems. These differences will be a function of specifically, self-esteem, beliefs about aggression, religious problem solving style, location, and gender.

The following hypotheses have been proposed based on my literature review:

1. There will be a significant positive relationship between self-esteem and aggression for respondents with infrequent church attendance; and, a significant negative relationship for respondents with frequent church attendance.
2. Adolescents whose parents do not punish will be positively associated with external aggression, especially in males. However, those adolescents whose parents withdraw privileges as punishment will be negatively associated with aggression, especially in males.
3. Respondents with aggressive behavioral patterns will show relatively high levels of stability across different settings (home, school and peers) for males, but not for females.

4. Aggressive behavior is more likely to be displayed by respondents who use a self-directing problem solving style and less likely in respondents who use a deferring problem solving style.
5. Adolescents from the Caribbean will differ from adolescents residing on the mainland United States on the following measures: beliefs about aggression, religious problem solving style, and self-esteem.

My goal is to contribute information that will help health providers and policy-makers to better understand the impact culture has on children's aggressive tendencies. It is my hope that this study will generate more research focused on adolescents, culture, and aggression. More importantly, this study may inspire new approaches to intervention and prevention programming at treatment facilities. In attempting to understand the problem of adolescent's aggression, as a future psychologist, I cannot just look at the individual, but must also take into account the person's culture. As this nation becomes more culturally diverse, we must be prepared to meet the challenges. Researchers must be willing to look at new ideas and move beyond their perspective fields in their attempt to discover possible links and different means of approaching and understanding the many problems we are faced with in this country. This study represents my attempt to begin this process.

CHAPTER II

METHOD

Subjects

There were 291 students who participated in this study. Twelve of them were excluded from the sample for the following reasons: eight students failed to complete any of the instruments, two students were White, and two students were under the age of 12. The remaining 279 students were African-Americans ranging in age 12-15. There were 137 students (58 females; 79 males) from Knoxville, Tennessee and 142 students (89 females; 53 males) from St. Thomas, United States Virgin Islands. In St. Thomas, students were recruited from a public middle school. The grades targeted were 7th and 8th. In Knoxville, the participants came from the Boys and Girls Club of Knoxville, TN. Attempts to collect data from the two public middle schools in Knoxville with large percentage of African-American students were rejected by the principals. They gave no explanations. The Boys and Girls Club of Knoxville was chosen because of greater accessibility to the African-American participants.

Instruments

This study is correlational in design. Five instruments were used (see Appendix A for a copy of the instruments).

The Personal Data Form was developed specifically for this study to gather demographic information about the respondent, such as gender, church attendance,

religious affiliation, and frequency of punishment. This instrument consisted of 13 items in which some items had more than one part to it. For example, the question on punishment had three parts. One question asked, "What kind of punishment is most used in your home?" There were eight choices that ranged from "yelling" to "ignoring". The second question relevant to punishment asked, "On average, how often are you punished?" There were three choices that ranged from "few times per day" to "few times per month". The third question asked relating to punishment was "Which parent is usually responsible for disciplining?" There were two choices, "male parent/guardian" or "female parent/guardian". Another question on this instrument was "How important is religion to you?" There were four choices that ranged from "not active" to "very active". The majority of the questions on this instrument was to be answered on Likert scale format.

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a 10-item questionnaire designed to measure adolescent self-esteem. Each item was to be answered on a four-point Likert scale format in which "1" represented "strongly agree" and "4" represented "strongly disagree". This instrument is frequently cited in the literature. Rosenberg reported reliability of .92 and test-retest reliability of .85.

The Behavior Rating Profile (Brown & Hammill, 1990) is an ecological-behavioral assessment device used to identify behaviorally deviant children. It also identified settings in which the child was viewed as deviant. This instrument consisted of 6 independent components. For the purposes of this study, only the Student Rating Scales that is comprised of three independent scales, school, home, and peer were used.

Adolescents rated their behavior in these three different settings. An example of an item from the school scale was "My teacher often gets angry with me." An example of an item from the home scale was "My parents 'bug' me a lot." An example of an item from the peer scale was "Other kids don't seem to like me very much." The Behavior Rating Profile, Student Rating Scales consisted of 60 items (20 items for each scale) in which students answered "true or "false". It was standardized for students ages 6 through 18 and grade 1-12 (Brown and Hammill, 1990).

The Behavior Rating Profile, Student Rating Scales was used to create the variable, external aggression. Seven items were selected from this instrument, which specifically addressed external aggression. Some examples of these items include, "Sometimes I get so angry at school that I yell at the teacher and want to stomp out of the school," "I argue a lot with my family," and "I seem to get into a lot of fights." The number of items selected from the Behavior Rating Profile, Student Rating Scales are as follows: two items were chosen from the school scale; two items were chosen from the home scale; and three items were chosen from the peer scale.

The Religious Problem Solving Scale (RPS) (Paragament, Kennell, Hathaway, Grevengoed, Newman, & Jones, 1988) consisted of 18 statements answered on a five-point Likert scale format in which "1" represented "never" and "5" represented "always". This instrument measured three styles of problem solving, which have high internal consistency: collaborative, $\alpha = .94$; deferring, $\alpha = .91$; and self-directing, $\alpha = .94$. Each scale consisted of 6 items. An example of an item from the collaborative scale was "Together, God and I put my plans into action." An example of an item from the

deferring scale was “When a situation makes me anxious, I wait for God to take those feelings away.” An example of an item from the self-directing scale was “When faced with trouble, I deal with my feelings without God’s help.”

The Beliefs About Aggression Scale was developed by this author in the Psychometrics course at the University of Tennessee. This instrument was piloted on approximately 100 adolescents. It consisted of 26 items that were answered on a five-point Likert scale format that ranged from “strongly agree” to “strongly disagree”. It measured three beliefs about aggression that were found to be reliable: aggression increases self-esteem, $\alpha=.84$; aggression helps to avoid a negative image, $\alpha=.81$; and legitimacy of aggression, $\alpha=.79$. The “aggression increases self-esteem” scale had 8 items. An example from this scale was “Being aggressive is an important part of who I am.” The “aggression helps to avoid a negative image” scale had 8 items. An example from this scale was “If you back down from a fight, everyone will think you are a coward.” The “legitimacy of aggression” scale had 10 items. An example of an item from this scale was “It is all right to attack someone who stares you down.”

Procedure

The participants were recruited for this study by this author with the assistance of teachers and the Boys and Girls Club of Knoxville. In St. Thomas, U.S.V.I. and Knoxville, TN, teachers and the club staff informed students about the study and those interested were given informed consent forms to take home for both their signatures and their parent(s) or legal guardian to sign (see Appendix B for a copy of the informed

consent). Before any student was allowed to participate, he or she must return signed informed consent forms with both student's and parent's signatures. Those students who returned them were allowed to participate.

The completion of the questionnaires was done in groups for both the school and the Boys and Girls Club. Participants were given a packet that contained the instruments to be completed. Upon completing the instruments, the participants were asked to place the sealed packet into a box that was located in a designated area of the classroom or group room. The teachers in St. Thomas, U.S.V.I. and the author in Knoxville, TN collected these boxes. After questionnaires were completed, students were asked to place them into a large sealed envelope these envelopes were placed into a box in the classroom or group room. All participation was voluntary and confidential. Students were not asked for their names or any other information that can identify them. In order to encourage more participation from the students, teachers and the staff of the Boys and Girls Club provided incentives of extra credit for the students at the schools and pizza for the students at the Boys and Girls Club. As an additional incentive for the students at the Boys and Girls Club, they were given the chance of winning two compact disk players.

Data Analysis

The statistical tests used in this study were the Pearson correlation and the Analysis of Variance (ANOVA). Duncan's Multiple-Comparison test was also used to compare differences among correlation coefficients. An Alpha level of .05 was selected to determine significance for the test results.

CHAPTER III

RESULTS

This chapter will describe the statistical results for the five hypotheses of interest in this study. Additional statistical analyses were conducted to look at other relationships among variables.

Hypothesis #1: There will be a significant positive relationship between self-esteem and aggression for respondents with infrequent church attendance; and a significant negative relationship for respondents with frequent church attendance.

Pearson correlation coefficients were calculated to investigate the relationship between self-esteem, aggression, and church attendance. There were two measures of aggression used to test this hypothesis. The first measure of aggression was the Behavior Rating Profile, Student Rating Scales, which consisted of three scales, Home, School, and Peer. The second measure of aggression was the Beliefs About Aggression, which consisted of three scales, Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem. The data for church attendance were analyzed as a whole, which included data for adolescents, who attended church frequently and those who attended church infrequently.

The analysis of church attendance and the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer) yielded no significant correlation coefficients.

No relationship was found between adolescents' church attendance and their use of aggression at home, $r(264) = -.05$, $p < .38$. Likewise, no relationship was found between church attendance and adolescents' use of aggression at school, $r(264) = -.08$, $p < .20$ or with peers, $r(264) = -.08$, $p < .21$ (see Table 1).

When the analysis was done for self-esteem and the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer), one significant positive correlation was yielded. As adolescents use of aggression at school increased, their self-esteem also increased, $r(279) = .17$, $p < .005$. However, no relationship was found between self-esteem and adolescents use of aggression at home, $r(279) = .09$, $P < .12$, or with peers, $r(279) = .06$, $p < .31$ (see Table 1).

When the second measure of aggression, Beliefs About Aggression (Legitimacy About Aggression, Avoid Negative Image, and Increase Self-Esteem) and its relationship to self-esteem and church attendance was analyzed, the findings were mixed with regards to support of this hypothesis. Two significant negative correlations were found that supported hypothesis #1. First, as church attendance increased, adolescents' justification for use of aggression as a means to increase self-esteem decreased, $r(264) = -.15$, $p < .01$. Second, as church attendance increased, adolescents' use of aggression as a means of avoiding negative image also decreased, $r(264) = -.13$, $p < .04$. On the other hand, there was no relationship between church attendance and adolescents' legitimizing their use of aggression, $r(264) = -.11$, $p < .07$ (See Table 2).

Table 1

**Correlations Between Aggressive Behavior, Church Attendance
and Self Esteem**

<u>Behavior Rating Profile, Student Rating Scales</u>	<u>Church Attendance</u>	<u>Self-Esteem</u>
Home	-.05	.09
School	-.08	.17**
Peer	-.08	.06

Note. Church Attendance (N) = 264

Self Esteem (N) = 279

**p < 0.01

Table 2

**Correlations Between the Beliefs About Aggression, Church Attendance
and Self-Esteem**

<u>Beliefs About Aggression</u>	<u>Church Attendance</u>	<u>Self-Esteem</u>
Legitimacy of Aggression	-.11	.17**
Avoid Negative Image	-.13**	.09
Increase Self-Esteem	-.15**	.06

Note. Church Attendance (N) = 264

Self Esteem (N) = 279

* p < 0.05

** p < 0.01

When the analysis was performed investigating self-esteem and beliefs about aggression, one significant positive correlation was found. As self-esteem increased, adolescents' legitimizing their use of aggression increased likewise, $r(279) = .17$, $p < .004$ (see Table 2). Two other findings were not significant. First, no relationship was found for self-esteem and adolescents' use of aggression to avoid negative image. Second, no relationship was also found for self-esteem and adolescents' use of aggression to increase self-esteem (see Table 2).

Hypothesis #2: Adolescents whose parents do not punish will be positively associated with external aggression, especially in males. However, those adolescents whose parents withdraw privileges as punishment will be negatively associated with external aggression, especially in males.

A two-way ANOVA was performed to test this hypothesis. A 2 x 4 factorial design with the independent variables of gender (male and female) and punishment (none/talks, withdraws privileges, physical/yells, and multipunishments) was performed in the analysis. The dependent variable, external aggression was created by selecting items from the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer).

Hypothesis #2 was not supported by the data. The analysis showed there were no significant differences for gender ($M_{\text{males}} = 2.34$; $M_{\text{females}} = 2.34$), $F(1,275) = .35$, $p < .55$. However, there were significant differences for punishment ($M_{\text{none}} = 1.97$; $M_{\text{withdraws}}$

privileges = 2.07 $M_{\text{physical/yells}} = 2.77$ $M_{\text{multipunish}} = 2.41$), $F(3,275) = 3.29$, $p < .02$, on the measure of external aggression. More importantly, there were no significant gender x punishment interactions, $F(3, 275) = 2.00$, $p < .11$. A Duncan's Multiple-Comparison test was performed. Differences were found for the levels of punishment. Adolescents who were physically punished or yelled at were found to differ significantly on external aggression from adolescents who were never punished or were simply talked to and adolescents whose privileges were taken away.

An additional analysis was done to examine if there were any group differences on gender or location for external aggression. A 2 x 2 factorial design with the independent variables of gender (male and female) and location (St. Thomas and Knoxville) was performed in the analysis. The dependent variable was external aggression. The results of the analysis revealed that there were no significant differences for gender ($M_{\text{males}} = 2.34$; $M_{\text{females}} = 2.32$), $F(1, 279) = .08$, $p < .77$; or for location ($M_{\text{knoxville}} = 2.53$; $M_{\text{St. Thomas}} = 2.14$), $F(1, 279) = 3.54$, $p < .06$. Moreover, there were no significant gender x location interactions found, $F(1, 279) = 1.21$, $p < .27$.

Analysis was also performed to examine if there were any differences on gender or location for punishment. A 2 x 2 factorial design with the independent variables of gender (male and female) and location (St. Thomas and Knoxville) was performed in the analysis. The dependent variable was punishment. The results of the analysis showed that there were no significant differences for location ($M_{\text{knoxville}} = 3.86$; $M_{\text{St. Thomas}} = 4.18$), $F(1, 275) = .17$, $p < .68$. However, there were significant differences for gender (M_{females}

= 4.45; $M_{\text{males}} = 3.55$), $F(1, 275) = 5.34$, $p < .02$. The analysis revealed no significant gender x location interactions, $F(1, 275) = .46$, $p < .50$.

Hypothesis #3: Respondents with aggressive behavioral patterns will show relatively high levels of stability across different settings (home, school, and peer) for males, but not for females.

Intercorrelational Differences Among Aggression by Gender and Location

A Pearson correlation test was performed on the data for this hypothesis to investigate the relationship between adolescents' use of aggression at home, at school, and with peers by gender. As Table 3 shows, there were significant positive correlation coefficients yielded for all the relationships between the use of aggression over different settings (home, school, and peer) by gender (male and female). However, in order to test the hypothesis that "Respondents with aggressive behavioral patterns will show relatively high stability over different settings (home, school, and peer)," the differences between the correlation coefficients for males and those for females had to be compared. Fisher's r to z transformations was used to compare correlation coefficients found for males and those found for females and to identify when these differences were significant.

Hypothesis #3 was partially supported by the data. Male adolescents' aggressive behavioral patterns did not differ significantly from female adolescents over different settings (home, school and peer). The differences between males and females should have been consistent in order for this hypothesis to have been supported. However, this was

Table 3

**Intercorrelations Among the Behavior Rating Profile,
Student Rating Scales by Gender and Location**

<u>Behavior Rating Profile, Student Rating Scales</u>			
<u>Gender</u>	<u>Home and School</u>	<u>School and Peer</u>	<u>Peer and Home</u>
Male (n = 132)	.51**	.43**	.60**
Female (n = 147)	.51**	.31**	.38**
<u>Location</u>			
St. Thomas (n = 142)	.52**	.33**	.42**
Knoxville (n = 137)	.50**	.41**	.56**

Note. Gender (N) = 279

Location (N) = 279

* $p < 0.05$

** $p < 0.01$

not found to be the case. Only one significant difference was found for correlation coefficients based on gender. For the use of aggression at home and also with peers, a significant difference was found between males and females, $z = -2.44$, $p < .007$. Male adolescents had a stronger relationship than female adolescents with regards to their use of aggression at home and with peers. As male adolescents' use of aggression at home increased, so did their use of aggression with peers. On the other hand, the difference between males and females with regards to their aggression at home and their aggression at school were not significant, $z = -.05$, $p < .48$. Similarly, the difference between males and females with regards to their aggression at school and their use of aggression with peers were not significant, $z = -1.15$, $p < .125$.

Analyses were also performed comparing the Knoxville adolescents and the St. Thomas adolescents with regards to their aggressive behavior in different settings (home, school, and peers). Table 3 shows significant positive correlation coefficients for both males and females with regards to their aggressive behavior at home, at school and with their peers. Fisher's r to z transformations was used to test whether the differences between the Pearson intercorrelation coefficients for the St. Thomas and the Knoxville adolescents were significantly different. For adolescents' use of aggression at home and at school, no significant differences were found between the St. Thomas adolescents and the Knoxville adolescents, $z = -1.56$, $p < .06$. A similar nonsignificant difference was yield with regards to the Knoxville adolescents and the St. Thomas adolescents on their use of aggression at home and at school, $z = .21$, $p < .42$. When the Knoxville adolescents

and the St. Thomas adolescents were compared on their use of aggression at school and with their peers, no difference was found, $z = -.80$, $p < .21$.

Differences Among Beliefs About Aggression by Gender and Location

Additional analyses were performed using the Pearson correlation test to investigate the relationships between the Beliefs About Aggression (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem) by gender and by location (St. Thomas and Knoxville).

The first analysis examined the relationship among the Beliefs About Aggression (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem) by gender. As Table 4 shows, significant positive relationships were yielded for both males and females on their Beliefs About Aggression (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem). Fisher's r to z transformations was performed to compare the differences between the Pearson correlation coefficients for males and those for females. The results of these transformations revealed that there were no significant differences between males and females for their use of aggression to increase self-esteem and to legitimized the use of aggression, $z = -1.04$, $p < .15$. Likewise, when the differences between male adolescents and female adolescents were compared to their use of aggression as a means to Avoid Negative Image and to Increase Self-Esteem, the differences were not significant, $z = -.05$, $p < .48$. A similar result was found when male adolescents and female adolescents were compared on their use of aggressive behavior to avoid negative image and to legitimize their use of aggression, $z = -.50$, $p < .31$.

Table 4

**Intercorrelations Among Beliefs About Aggression
by Gender and Location**

<u>Gender</u>	<u>Beliefs About Aggression</u>		
	<u>Legitimacy of Aggression and Increase Self-Esteem</u>	<u>Increase Self-Esteem and Avoid Negative Image</u>	<u>Avoid Negative Image and Legitimacy of Aggression</u>
Male (n = 132)	.76**	.69**	.69**
Female (n = 147)	.71**	.69**	.66**
<u>Location</u>			
St. Thomas (n = 142)	.66**	.70**	.66**
Knoxville (n = 137)	.84**	.69**	.72**

Note. Gender (N) = 279

Location (N) = 279

* $p < 0.05$

** $p < 0.01$

The second analysis examined the differences in correlation coefficients among beliefs about aggression (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem) by location (St. Thomas and Knoxville). Table 4 shows the results of this analysis, in which significant positive correlation coefficients were yielded. Fisher's r to z transformations was performed to find out if the differences between the St. Thomas adolescents and the Knoxville adolescents were significant. A significant difference was found between the St. Thomas and the Knoxville adolescents on using aggression to avoid negative image and legitimizing the use of aggression, $z = -3.09$, $p < .001$. As adolescents' use of aggression to avoid negative image increased, so did their legitimizing the use of aggression. This relationship was much stronger for the Knoxville adolescents than the St. Thomas adolescents. On the other hand, no differences were found between the St. Thomas adolescents and the Knoxville adolescents when they were compared on their use of aggression to avoid negative image and to increase self-esteem, $z = .13$, $p < .45$ or on their use of aggression to increase self-esteem and to legitimize the use of aggression, $z = -.91$, $p < .18$.

Hypothesis #4: Aggressive behavior is more likely to be displayed by respondents who use a self-directing problem solving style and less likely in respondents who use a deferring problem solving style.

Hypothesis #4 was examined using Pearson correlation coefficients to analyze the relationships between the religious problem solving style scales (Collaborating, Self-

Directing, and Deferring) and the two measures of aggression, (1) Behavior Rating Profile, Student Rating Scales (Home, School, and Peer) and (2) Beliefs About Aggression (Legitimacy of Aggression, Increase Self-Esteem, and Avoid Negative Image). For the analysis of religious problem solving style by Behavior Rating Profile, Student Rating Scales (Home, School, and Peer), no significant correlations were yielded (see Table 5). Hypothesis #4 was not supported by the data on adolescents' aggressive behavior. Aggressive behavior was equally likely to be displayed by adolescents who used a self-directing religious problem solving style as by adolescents who used a deferring religious problem solving style.

However, a different picture emerged when adolescents' beliefs about aggression were examined. Three significant positive correlations were yielded for the analysis of the self-directing religious problem solving style and the Beliefs About Aggression (Legitimacy of Aggression, Increase Self-Esteem, and Avoid Negative Self-Image). First, as adolescents' self-directing religious problem solving style increased, so did their willingness to legitimize the use of aggression (see Table 6). Second, as adolescents' self-directing religious problem solving style increased, so did their willingness to justify their use of aggression as a means of increasing self-esteem (see Table 6). Third, as adolescents' self-directing religious problem solving style increased, so did their willingness to justify their use of aggression as a means to avoid a negative image (see Table 6). The hypothesis that aggressive behavior is more likely to be displayed by

Table 5

**Correlations Between the Behavior Rating Profile, Student Rating Scales
and Religious Problem Solving Styles**

BRP Student Rating Scales	Religious Problem Solving Styles		
	Collaborating	SDirect	Defer
Home	-.06	.04	-.05
School	.01	.07	.001
Peer	-.03	.01	-.005

Note. N = 279

* p < 0.05

** p < 0.01

Table 6

**Relationship Between Beliefs About Aggression and Religious
Problem Solving Styles**

Beliefs About Aggression	Religious Problem Solving Styles		
	Collaborating	SDirect	Defer
Legitimacy of Aggression	.04	.15*	.07
Increase Self-Esteem	-.01	.14*	.02
Avoid Negative Image	.04	.16**	.06

Note. N = 279

* $p < 0.05$

** $p < 0.01$

respondents who use a self-directing religious problem solving style is supported by these data about adolescents' beliefs about aggression. On the other hand, the analysis of the collaborating religious problem solving style by Beliefs About Aggression (Legitimacy of Aggression, Increase Self-Esteem, and Avoid Negative Image) yielded no significant findings (see Table 6). Likewise, there was no relationship found between the Deferring religious problem solving style and the Beliefs About Aggression (Legitimacy of Aggression, Increase Self-Esteem, and Avoid Negative Image) (see Table 6).

The Pearson correlation test was also performed to analyze the relationship between the two measures of aggression, the Behavior Rating Profile (School, Home, and Peer) and the Beliefs About Aggression (Legitimacy of Aggression, Increase Self-Esteem, and Avoid Negative Image). The relationship between Legitimizing the use of aggression and the Behavior Rating Profile, Student Rating Scales (School, Home, and Peer) yielded two significant findings. First, as legitimizing the use of aggression increased for adolescents, so did their aggression at school, $r(279) = .40, p < .0000$. Second, as legitimizing the use of aggression increase for adolescents, so did their aggression at home, $r(279) = .13, .04$. However, no relationship was found for legitimizing the use of aggression for adolescents and the use of aggression with peers, $r(279) = -.01, p < .85$

For the relationship between adolescents' use of aggression as a means of increasing their self-esteem and the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer), three significant positive correlation coefficients were found. First, as adolescents' aggression at home increased, so did their justification to use

aggression as a means of increasing self-esteem, $r(279) = .21, p < .0003$. Second, as adolescents' aggression at school increased, so did their justification to use aggression as a way of increasing self-esteem, $r(279) = .43, p < .000$. Third, as aggression with peers increased, so did their justification to use aggression as a means of increasing self-esteem, $r(279) = .15, p < .01$.

Two significant positive correlation coefficients were also found for the relationship between adolescents' use of aggression as a means of avoiding negative image and the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer). First, as adolescents' aggression use at home increased, so did their use of aggression to avoid negative image, $r(279) = .19, p < .002$. Second, as adolescents' aggression use at school increased, so did their use of aggression to avoid negative image, $r(279) = .34, p < .000$. However, no relationship was found for adolescents' aggression use with peers and avoiding negative image, $r(279) = .010, p < .87$.

Hypothesis #5: Adolescents from the Caribbean will differ from adolescents residing on the mainland United States on the following measures: beliefs about aggression, religious problem solving style, and self-esteem.

Group Differences on Beliefs About Aggression

For the beliefs about aggression, three One-Way ANOVA tests were performed. The independent variable for each of the analyses was location (Knoxville and St. Thomas). The dependent variables represented each scale of the Beliefs About

Aggression (Increase Self-Esteem, Avoid Negative Image, and Legitimacy of Aggression). Three One-Way ANOVA tests were also used to test for differences between the St. Thomas and Knoxville adolescents on the three problem solving styles: Collaborating, Self-Directing, and Deferring. For self-esteem, there was only one scale that was used and therefore a One-Way ANOVA test was used. When gender was added as an additional factor, 2 x 2 factorial designs with independent variables of gender (male, female) and location (St. Thomas, Knoxville) was performed for each analysis.

Hypothesis #5 was supported by two of the three Beliefs About Aggression scales. As predicted, St. Thomas adolescents differed significantly from Knoxville adolescents on legitimizing their use of aggression and using aggression to avoid negative image (see Table 7). Knoxville adolescents were more likely to legitimize their use of aggression than the St. Thomas adolescents, $F(1, 279) = 4.19, p < .04$. Additionally, St. Thomas adolescents were more likely to use aggression as a means of avoiding negative image than the Knoxville adolescents, $F(1, 279) = 4.28, p < .04$. On the other hand, when St. Thomas adolescents were compared to Knoxville adolescents on their use of aggression to increase self-esteem, no significant differences were found for the two groups of adolescents, $F(1, 279) = .01, p < .94$.

When gender was added as an additional factor to the analysis, Two-Way ANOVA tests were performed. Significant differences were found between males and females on their beliefs about aggression (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem). Males were found to be more likely to legitimize their

Table 7

Mean Levels of Beliefs About Aggression by Location

Location	Beliefs About Aggression					
	Legitimacy of Aggression		Increase Self-Esteem		Avoid Negative Image	
	(mean)	(SD)	(mean)	(SD)	(mean)	(SD)
Knoxville (n = 137)	14.45*	.51	13.55	.55	20.30*	.57
St. Thomas (n = 142)	12.99	.50	13.49	.54	21.96	.56

Note. Location (N) = 279

* $p < 0.05$

** $p < 0.01$

use of aggression than females, $F(1, 279) = 15.95, p < .0001$. Males were also found to be more likely to justify their use of aggression as a means of increasing their self-esteem than females, $F(1, 279) = 16.66, p < .0001$. When adolescents were compared on their use of aggression as a way to avoid negative image by gender, males were more likely to use this justification than females, $F(1, 279) = 4.89, p < .03$. This can be seen in Table 8, in which the means for males on all three scales (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem) of the Beliefs About Aggression are significantly higher than for the females. On the other hand, for the analysis of location (St. Thomas and Knoxville), only one significant difference was yielded. St. Thomas adolescents were more likely than Knoxville adolescents to use aggression as a means of avoiding negative image, $F(1, 279) = 6.54, p < .01$. As Table 8 shows, the means for Knoxville adolescents when compared to the means for St. Thomas adolescents do not differ significantly for legitimacy of aggression, $F(1, 279) = 1.39, p < .24$ or for using aggression as a means of increasing self-esteem, $F(1, 279) = .63, p < .43$.

Group Differences on Religious Problem Solving Styles

For the religious problem solving style analysis, three One-Way ANOVA tests were performed. The independent variable for each of three analyses was location (Knoxville, St. Thomas). The dependent variables for the religious problem solving styles were (1) Collaborating, (2) Self-Directing, and (3) Deferring. When gender was added as an additional factor, 2 x 2 factorial designs with independent variables of gender (male, female) and location (St. Thomas, Knoxville) was performed for each analysis.

Table 8

Mean Levels of Beliefs About Aggression by Gender and Location

	Legitimacy of Aggression		Increase Self-Esteem		Avoid Negative Image	
<u>Gender</u>	(mean)	(SD)	(mean)	(SD)	(mean)	(SD)
Male	15.29**	.50	15.10**	.54	21.87*	.58
(n = 132)						
Female	12.28	.48	12.10	.51	20.49	.55
(n = 147)						
<u>Location</u>						
Knoxville	14.45*	.51	13.55	.55	20.30*	.57
(n = 137)						
St. Thomas	12.99	.50	13.49	.54	21.96	.56
(n = 142)						

Note. Gender (N) = 279

Location (N) = 279

* $p < 0.05$

** $p < 0.01$

The hypothesis that St. Thomas adolescents will differ from Knoxville adolescents on religious problem solving style was supported by the statistical analyses.

Significant differences were found between the means of Knoxville adolescents and the means of St. Thomas adolescents on the religious problem solving styles measure (see Table 9). Knoxville adolescents were more likely than St. Thomas adolescents to use a collaborating religious problem solving style, $F(1, 279) = 6.92, p < .01$. Likewise, Knoxville adolescents were more likely than St. Thomas adolescents to use a self-directing religious problem solving style, $F(1, 279) = 7.42, p < .03$. The Knoxville adolescents were also more likely than the St. Thomas adolescents to use a deferring religious problem solving style, $F(1, 279) = 14.78, p < .0004$.

When gender was added as an additional factor to the analysis, Two-Way ANOVA tests were performed. Only one significant difference was found for gender ($M_{\text{males}} = 16.20; M_{\text{females}} = 17.96$). Females were more likely than males to use a collaborating religious problem solving style, $F(1, 279) = 7.44, p = .007$. By contrast, when males and females were compared on the self-directing and the deferring religious problem solving style, no significant differences were found between them (see Table 10). Both males and females were equally likely to use either a self-directing religious problem solving style, $F(1, 279) = .02, p < .90$ or a deferring religious problem solving style, $F(1, 279) = 1.67, p < .20$. The Two-Way ANOVA tests results for location (St. Thomas and Knoxville) reflected the same significant differences as was found in the One-Way ANOVA tests performed on the same variables. Knoxville adolescents were more likely than St. Thomas adolescents to use a collaborating, self-directing, or a

Table 9**Mean Levels of Religious Problem Solving Styles by Location**

	Collaborating		Self-Directing		Deferring	
Location	Mean	SD	Mean	SD	Mean	SD
Knoxville (n = 137)	18.24**	.59	15.59*	.51	17.23*	.59
St. Thomas (n = 142)	16.06	.58	14.04	.50	14.28	.58

Note. Location (N) = 279

* $p < 0.05$

** $p < 0.01$

Table 10

Mean Levels of Religious Problem Solving Styles by Gender and Location

	Collaborating		Self-Directing		Deferring	
Gender	Mean	SD	Mean	SD	Mean	SD
Male (n = 137)	16.20**	.57	15.02	.52	15.50	.60
Female (n = 142)	17.96	.60	14.61	.50	15.94	.56
<u>Location</u>						
Knoxville (n = 137)	18.24**	.59	15.59*	.52	17.23**	.58
St. Thomas (n = 142)	16.06	.58	14.04	.51	14.28	.57

Note. Gender (N) = 279

Location (N) = 279

* p < 0.05

** p < 0.01

deferring religious problem solving style (see Table 10). None of the Two-Way ANOVA test results revealed significant gender x location interactions: $F(1, 279) = .19, p < .66$ (Collaborating); $F(1, 279) = 1.32, p < .25$ (Deferring); or $F(1, 279) = .08, p < .78$ (Self-Directing).

Group Differences On Self-Esteem

The statistical analysis of the self-esteem data by location was performed using a One-Way ANOVA test. The hypothesis that St. Thomas adolescents will differ from Knoxville adolescents on self-esteem was not supported by the data. There were no differences found between St. Thomas adolescents ($M_{\text{St Thomas}} = 20.77$) and Knoxville adolescents ($M_{\text{Knoxville}} = 21.11$) on the measure of self-esteem, $F(1, 279) = .19, p < .67$. When gender was added as an additional factor, a 2x2 factorial design with independent variables of gender (male, female) and location (St. Thomas, Knoxville) was performed. There were no differences found between the male adolescents ($M_{\text{male}} = 20.43$) and the female adolescents ($M_{\text{female}} = 21.39$) on the measure of self-esteem, $F(1, 279) = 1.86, p = .17$. For location, no differences were found for the St. Thomas adolescents ($M_{\text{St. Thomas}} = 20.77$) and the Knoxville adolescents ($M_{\text{Knoxville}} = 21.11$) on the measure of self-esteem, $F(1, 279) = .43, p < .51$. There were no significant gender x location interactions, $F(1, 279) = .75, p < .39$.

Group Differences on the Behavior Rating Profile, Student Rating Scales

Analyses were also performed to find out if any group differences existed for location (St. Thomas and Knoxville) or gender (males and females). Three One-Way ANOVA tests were performed on the analysis of the independent variable, location (St. Thomas and Knoxville). The dependent variables were the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer), which were used as measures of aggression in this study. Additional analyses were performed that consisted of three Two-Way ANOVA tests to look at group differences on the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer). The analyses consisted of 2 x 2 factorial designs with independent variables of location (St. Thomas and Knoxville) and gender (male and female). The dependent variables were the Behavior Rating Profile, Student Rating Scales (Home, School, and Peer). For simplicity, the analyses (One-Way ANOVA and Two-Way ANOVA) for each of the independent variables will be addressed separately.

The results of the One-Way ANOVA test for use of aggression at home, yielded a significant difference between the Knoxville adolescents and the St. Thomas adolescents. St. Thomas adolescents ($M_{\text{St. Thomas}} = 6.97$) were found to be less likely than the Knoxville adolescents ($M_{\text{Knoxville}} = 6.07$) to use aggression at home, $F(1, 279) = 4.76$, $p < .03$. For the Two-Way ANOVA, when gender (male, female) was added to the analysis, a significant difference was found. Male adolescents were more likely than female adolescents to use aggression at home, $F(1, 279) = 4.87$, $p < .03$. This can be seen in

Table 11, in which the means for male adolescents on the use of aggression at home is significantly lower for female adolescents. On the other hand, the significant difference yielded for the St. Thomas adolescents and the Knoxville adolescents on use of aggression at home in the One-Way ANOVA tests was not found for the Two-Way ANOVA test. Both St. Thomas and Knoxville adolescents were equally likely to use aggression at home, $F(1, 279) = 3.39, p < .07$ (see Table 11).

However, a significant interaction was yielded in the Two-Way ANOVA test for gender (male, female) and location (St. Thomas and Knoxville) on use of aggression at home, $F(1, 279) = 6.05, p < .01$. Duncan's Multiple-Comparison procedure was used to identify which adolescent combination based on gender (male and female) and location (St. Thomas and Knoxville) differed significantly on the use of aggression at home. The Knoxville males were found to differ significantly from the St. Thomas females, the St. Thomas males, and the Knoxville females on their use of aggression at home. They were more likely to use aggression at home as compared to the St. Thomas females, the St. Thomas males, and the Knoxville females. This can be seen in Table 12 and Figure 1 in which the mean for the Knoxville males (aggression at home) is significantly lower than those of the other three groups.

The result of the One-Way ANOVA test for use of aggression at school, yielded no differences between the Knoxville adolescents ($M_{\text{Knoxville}} = 5.90$) and the St. Thomas adolescents ($M_{\text{St. Thomas}} = 5.24$), $F(1, 279), p < .15$. Both the St. Thomas adolescents and the Knoxville adolescents were equally likely to use aggression at school. When gender was added to the analysis, no significant differences were found for gender (male and

Table 11

**Mean Levels of Behavior Rating Profile, Student Rating Scales
by Location and Gender**

		Behavior Rating Profile, Student Rating Scales					
Location		Peer		School		Home	
		Mean	SD	Mean	SD	Mean	SD
<u>Knoxville</u>		4.72	.29	5.9	.32	6.07*	.29
(n = 137)							
<i>St. Thomas</i>		4.94	.29	5.24	.32	6.97	.28
(n = 142)							
<u>Gender</u>							
Male		4.89	.30	5.90	.33	5.97*	.29
(n = 132)							
Female		4.78	.28	5.26	.31	7.03	.28
(n = 147)							

Note. The lower mean scores reflect higher aggression levels.

Location (N) = 279

Gender (N) = 279

* $p < 0.05$

** $p < 0.01$

Table 12

**Mean Levels of Behavior Rating Profile, Student Rating Scales
(Home and School) by Gender and Location Interactions**

Gender x Group	Behavior Rating Profile, Student Rating Scales			
	Home		School	
	Mean	SD	Mean	SD
Female Knoxville n = 79	7.19*	.44	6.28*	.50
Female St. Thomas n = 89	6.93*	.36	4.60*	.40
Male Knoxville n = 53	5.25*	.38	5.62	.43
Male St. Thomas n = 58	7.04*	.47	6.32*	.52

Note. The lower mean scores reflect higher aggression levels.

Location (N) = 279

Gender (N) = 279

* $p < 0.05$

** $p < 0.01$

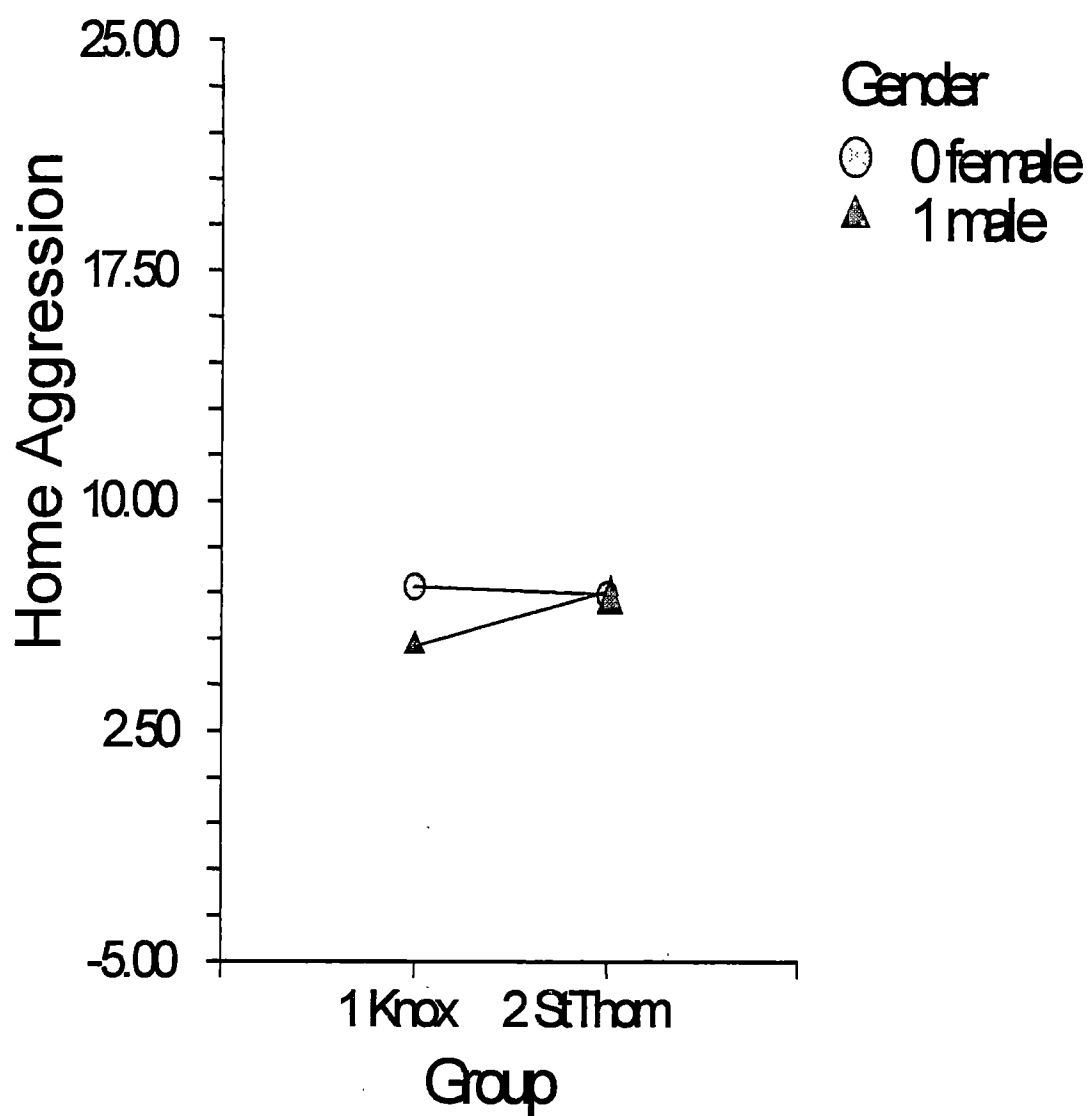


Figure 1

Means of Home Aggression

female) or for location (St. Thomas and Knoxville)(see Table 11). Males and females were found to be equally likely to display aggression at school, $F(1, 279) = 1.32, p < .25$. Likewise, Knoxville adolescents and St. Thomas adolescents were also found to be equally likely to display aggression at school, $F(1, 279) = 1.11, p < .29$.

However, the analysis revealed significant interactions between gender (male and female) and location (St. Thomas and Knoxville), $F(1, 279) = 6.53, p < .01$. Duncan's Multiple-Comparison procedure was used to identify which adolescent combination based on gender (male and female) and location (Knoxville and St. Thomas) differed significantly on the use of aggression at school. The St. Thomas females were found to differ significantly from the St. Thomas males and the Knoxville females. This can be seen in Table 12 and Figure 2 in which they were more likely to display aggression at school than the St. Thomas males and the Knoxville females. On the other hand, the Knoxville males were found not to be significantly different from any of the other three groups, the Knoxville females, the St. Thomas males, and the St. Thomas females. They were equally likely to display aggression at school when compared to the Knoxville females, the St. Thomas males, and the St. Thomas females.

The results of the One-Way ANOVA test for location (St. Thomas and Knoxville) on the use of aggression with peers yielded no significant findings. Knoxville adolescents ($M_{\text{Knoxville}} = 4.72$) and the St. Thomas adolescents ($M_{\text{St. Thomas}} = 4.94$) were equally likely to use aggression with peers, $F(1, 279) = .29, p < .59$. When gender was added to the analysis, there were no significant differences found. Males and females were equally likely to display aggressive behavior with peers, $F(1, 279) = .17, p < .70$. Likewise, the

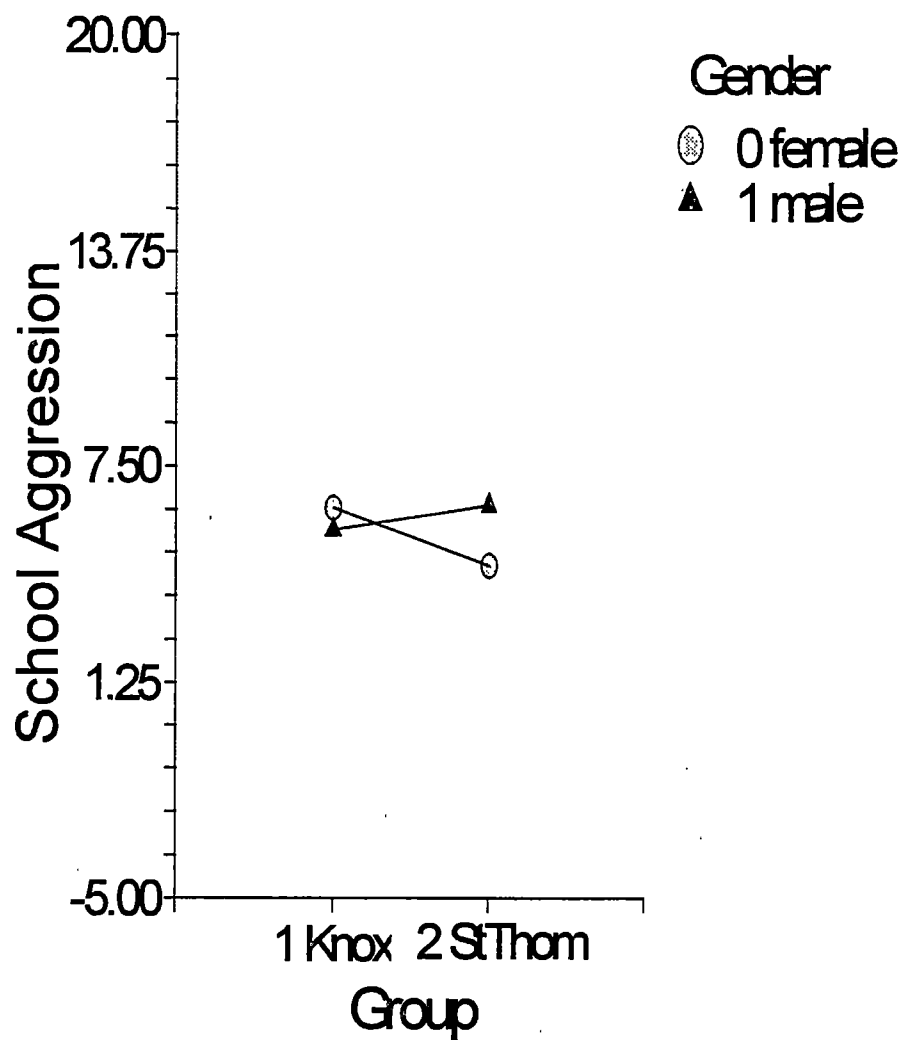


Figure 2

Means of School Aggression

Two-Way ANOVA test involving location (St. Thomas and Knoxville) was similar to the One-Way ANOVA test for location (St. Thomas and Knoxville), no significant differences were found between the two groups of adolescents. The St. Thomas adolescents and Knoxville adolescents were equally likely to use aggressive behavior with peers, $F(1, 279) = .44, p < .51$. For the Two-Way ANOVA, there were no significant gender x location interactions found, $F(1,279) = 1.14, p < .29$.

Relationship Between Religious Importance and Aggression Measures

Additional analyses were performed using Pearson correlation tests to look at the relationship between religious importance and the two aggression measures: Behavior Rating Profile, Student Rating Scales (Home, School, Peer) and Beliefs About Aggression Scales (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem). The result of the Pearson correlation test for religious importance by Behavior Rating Profile, Student Rating Scales (Home, School, and Peer) yielded 3 nonsignificant correlations. First, there was no relationship found between religious importance and the use of aggression at home, $r(272) = -.016, p < .80$. Second, there was no relationship between religious importance and the use of aggression at school, $r(272) = -.09, p < .12$. Third, there was no relationship between religious importance and the use of aggression with peers, $r(272) = -.06, p < .34$.

For the relationship between the Beliefs About Aggression scales (Legitimacy of Aggression, Avoid Negative Image, and Increase Self-Esteem) and religious importance, one significant correlation was yielded. As religious importance increased for

adolescents, their justification for the use of aggression as a means to increase self-esteem decreased, $r(272) = -.14$, $p < .02$. By contrast, no relationship was found between religious importance and adolescents use of aggression to avoid negative image, $r(272) = -.06$, $p < .34$. Likewise, no relationship was found between religious importance and adolescents' legitimizing their use of aggression, $r(272) = -.06$, $p < .34$.

CHAPTER IV

DISCUSSION

Significant findings in this study provided some support for the hypotheses. Church attendance was negatively related to the beliefs about aggression, but not for aggressive behavior in different settings. Positive relationships were found between aggression and self-esteem. As expected male adolescents had stronger relationships in their aggressive behavioral patterns than female adolescents. Aggression was more likely to be displayed by adolescents who use a self-directing problem solving approach. Adolescents from the Caribbean differed from adolescents on the mainland United States on beliefs about aggression, and religious problem solving styles, but not self-esteem. Gender differences were also found between the Knoxville adolescents and the St. Thomas adolescents on beliefs about aggression and religious problem solving styles. Positive relationships were found between the two measures of aggression, Behavior Rating Profile, Student Rating Scales (Home, School, and Peer) and Beliefs About Aggression (Legitimacy of Aggression, Increase Self-Esteem, and Avoid Negative Image). The one hypothesis that was not supported at all is the positive relationship between parents who do not punish and aggressive respondents. Coercive discipline (yelling or hitting) by parents was related to aggressive behavior. Limitations in the study are discussed, such as the use of only self-reports instruments and lack of parents' input. Finally, suggestions are given regarding the future direction that research should head, such as parental interviews and observations of family interaction patterns.

Church was expected to moderate the relationship between self-esteem and aggression. Results gave limited support for the hypothesis. Church attendance was negatively correlated with two of the beliefs about aggression, use of aggression to increase self-esteem and the use of aggression to avoid negative image. These two findings are in agreement with the research literature which shows a negative relationship between aggression and church attendance (Boone, 1991). Boone (1991) found that membership in the nonaggressive group was associated with church attendance. What about church attendance helps some adolescents to handle aggression differently from other adolescents? One possible explanation is that church somehow acts as a buffer for adolescents when it comes to their use of aggression. As a result, there may be a tendency for them to use reasoning to resolve conflicts and to exercise self-control. Moreover, it is reasonable to assume that adolescents who attend church frequently are more likely to share coherent belief systems that are characterized by self-respect and concerns for others.

A second possible explanation about why church attendance may have a positive effect on reducing adolescents' aggression is that churches provide activities in a safe environment, which offers protection from negative influences of the streets. This also brings to question the role of the Black church in these adolescents' life. The church can act as a focal point in these adolescents and their family's social life and as a result give meaning to their life. Additionally, the church may be the second most important association for these adolescents behind the family with its functions of community

involvement and as a center for recreational activities. There is no question that the Black church is a socializing agent in the community with some of its functions being the teaching of moral standards and the efforts for social improvement. Another finding from this study that helps to render support for the importance of the church in adolescent's life is that their religious importance was found to be negatively related to their use of aggression to increase self-esteem. Thus, as adolescents' religious importance increased, their use of aggression to increase self-esteem decreased. The question that might be asked is what part do parents play in their children's religiousness? Nelson (1980) reported a strong relationship between parental religiousness and preadolescent religiousness; but found a weak relationship for parental support. The study also showed that on the measure of religiousness, female preadolescents scored higher than male preadolescents.

An implication arising from these results is that regular church attendance and religious importance may serve to reduce potential aggressive behavior by adolescents. Additionally, regular church attendance and religious importance can be used as means to discriminate non-aggressive from aggressive adolescents. Likewise, it appears that both regular church attendance and religious importance may be useful in the control and prevention of aggression in adolescents.

Adolescents' problem solving style was also investigated from a religious viewpoint. Knoxville adolescents were found to be more likely than St. Thomas adolescents to use any of the three religious problem-solving styles. This result was most puzzling. One would have expected that the self-directing approach would have been the

preferred religious problem solving style, particularly when one looks at their willingness to use aggression and the beliefs that guide their actions. In this study, the Knoxville adolescents were found to be more likely than the St. Thomas adolescents to legitimize their use of aggression and to use their aggression as a means of avoiding a negative image (discussion of these findings occur later in this chapter). Thus, the expectation would have been for the Knoxville adolescents to rely more on their personal resources to resolve problems.

The findings for the St. Thomas adolescents were also puzzling. Based on the results for the Knoxville adolescents regarding their beliefs about the use of aggression, one would have expected the St. Thomas adolescents to prefer a collaborating religious problem solving style, which reflected a shared responsibility with God for problem solving. Nonetheless, the results for the Knoxville adolescents in this study are somewhat reflective of what Pargament et al (1988) found in their study, in which both the deferring and the collaborative religious problem solving styles were significantly correlated with each other. The results of this study shows that the Knoxville adolescents who were likely to use a collaborative religious problem solving approach in one situation were also likely to use a deferring or a self-directing approach in that or other situations. There was no preference for a particular problem solving approach.

What can be made of these results? The lack of preference for a particular problem solving approach by the Knoxville adolescents can be both positive and negative. These adolescents may make good judgment calls at times, but other times, their judgment may be poor. The religious problem solving style that may be helpful in

reducing aggression is the collaborating problem solving approach. This was found to be the preferred problem solving approach by the female adolescents in this study and may be a factor as to why females in general have lower rates of aggression than male.

Moreover, using a collaborating problem solving approach allows individuals to reflect on their options and at the same time have the faith that God is with them. The two other approaches, self-directing and deferring, have their usefulness; but the collaborative approach relies more on the practices which facilitate and maintain a personal relationship with God. Thus, someone using this approach may always feel like they are not alone in handling life's problem.

In this study, two positive relationships were found between self-esteem and aggression. One finding showed that as adolescents' self-esteem increased, so did their use of aggression at school. This finding was interesting because no relationships were found between self-esteem and the use of aggression at home or with peers. A possible interpretation of this finding is that adolescents' aggressive behavior at school may be directed at teachers and other adults of authority, who they may see as being punitive in their ways. However, the lack of relationships between self-esteem and the use of aggression at home and the use of aggression with peers is confusing. Loeber et al (1983) found that boys who displayed assaultive behavior in their communities also displayed more aggressive behavior in family home settings.

The second finding showed that as adolescents' self-esteem increased, so did their willingness to legitimize the use of aggression. The evidence from this study does not provide support for a causal relationship between self-esteem and aggression. However,

this finding supports Baumeister, Smart, and Boden's (1996) position that says it is high self-esteem and not low self-esteem that is related to aggression. The lack of relationships between self-esteem and adolescents' use of aggression to increase self-esteem or adolescents' use of aggression to avoid negative image was also puzzling. Nonetheless, these two findings do provide some evidence to contradict the long held view regarding low self-esteem as a powerful cause of violence. As these two findings revealed, high self-esteem is related to aggression. However, the relationship between self-esteem and aggression is still not clearly delineated. There are many other factors that must be considered regarding this relationship. Baumeister, Smart, and Boden (1996) provided a possible explanation that helps one to understand this relationship. They indicated that the relationship between high self-esteem and aggression involves another factor, ego threat. Following this line of thinking, adolescents who engage in aggression with other adolescents are attempting to protect their high self-esteem by defending any threat to self. Another possible explanation to that may help one to understand the relationship between self-esteem and aggression comes from Anderson (1994), who believes that it is low self-esteem and not high that is related to aggression. I disagree with his position, but feel that he does have something to offer us in attempting to understand the relationship between high self-esteem and aggression. Anderson (1994) talks about the code of the streets, which he defined as informal rules governing public behavior and how one should react if challenged. One such rule is respect, which he loosely defined as being "treated right". Following this line of thinking, if a person interprets another person's behavior as disrespectful, he or she needs to stand up and take action to avoid being viewed by others

as a “coward” or worse someone to take advantage of. Thus, the person will aggress to maintain this positive image of himself and public persona of someone not to mess with. This fits right into the viewpoint of Baumeister and colleagues (1996) who said “the more favorable one’s view of oneself, the greater the range of external feedback that will be perceived as unacceptably low” (p. 9).

Which level of self-esteem is associated with greater violence still remains unclear. Inferences drawn from the results of this study are limited by the facts that only two findings out of a possible six supported the hypothesis of a positive relationship between self-esteem and aggression with church attendance. Even though the focus was on adolescents, one set of data, which might have provided more information would have been finding out to what extent did parents endorsed their children’s aggressive position toward others who challenged them. Inquiring about this information might have help us to understand what role parents played in their children’s willingness to take an aggressive stance when dealing with others who challenged them.

As predicted, male adolescents’ aggressive behavioral patterns in this study showed a stronger relationship than female adolescents. As male adolescents’ use of aggression at home increased, so did their use of aggression with their peers. This finding supported the research literature about males having a higher rate of offending or being assaulted than females (Harlow, 1989; Christoffel, 1990; & CDC, 1991b). In this study, male adolescent were shown to be more likely than female adolescents to legitimize their use of aggression, to use their aggression as a means to increase their self-esteem, and to use their aggression as a means of avoiding negative image. With male adolescents

having the tendency to hold such beliefs, it comes then as no surprise that the research literature showed male adolescents received injuries from assaults more frequently than female adolescents (Harlow, 1989). These injuries were also more likely to be serious for the male adolescents. Further, males were three times more likely than females to engage in risky behavior, such as carrying weapons (CDC, 1991b), which may account for the seriousness of their injuries.

No differences were found between male and female adolescents' relationships for their use of aggression at home and at school. Likewise, no differences were found for adolescents' use of aggression at home and at school. These findings raise more questions than answers. First, what accounts for male and females having similar findings regarding their use of aggression? These findings did not support the research literature about the differences between male and female adolescents' aggressive behavior (Harlow, 1989). Secondly, how does one explain that no differences were found between males and females for their use of aggression at home and also for their use of aggression with peers?

Interestingly, when the St. Thomas adolescents and the Knoxville adolescents were compared on their relationships regarding their use of aggression (1) at home and with peers, (2) at home and at school, and (3) at school and with peers, no differences were found between them. Do these findings mean that both the St. Thomas adolescents and the Knoxville adolescents are similar in their use of aggression?

I would like to comment on the two measures of aggression, the Behavior Rating Profile, Student Rating Scales (Home, School, Peer) and the Beliefs About Aggression

scales (Legitimacy of Aggression, Increase Self-Esteem, Avoid Negative Image) used in this study. The results of the Behavior Rating Profile, Student Rating Scales (Home, School, Peer) has not being consistent with the findings for the Beliefs About Aggression scales (Legitimacy of Aggression, Increase Self-Esteem, Avoid Negative Image) when both have been used separately. For example, when both measures of aggression were used to investigate the relationship between church attendance and measures of aggression, negative relationships were found for the beliefs about aggression, but not for Behavior Rating Profile, Student Rating Scales (Home, School, Peer). The lack of relationships between church attendance and the Behavior Rating Profile, Student Rating Scales (Home, School, Peer) may be accounted for by the generality of the instrument as a means to address aggression. The Behavior Rating Profile, Student Rating Scales covers a broad spectrum of behaviors, such as aggression, misconduct, being unable to do school work, stuttering, anxiety, and so on. As Brown and Hammill (1990), commented in the Behavior Rating Profile Examiner's Manual about the most appropriate use of this test, which is to identify children who may be behaviorally disordered. Aggressive behavior is just one factor used in identifying someone who may be behaviorally disordered. The broad base approach of the Behavior Rating Profile may account for the lack of relationships found for church attendance. One assumes that if this instrument had included more items dealing directly with aggressive behavior, relationships would have been found for church attendance.

Are there relationships between the two measures of aggression? Not surprisingly, positive relationships were found. However, there were also some nonsignificant findings

revealed. The use of aggression with peers was not related to the willingness of adolescents to legitimize their use of aggression and adolescents' use of aggression to avoid negative image. Nonetheless, these results do provide some support for using the Behavior Rating Profile, Student Rating Scales as an instrument for identifying aggressive adolescents.

Furthermore, differences were found between the Knoxville adolescents and the St. Thomas adolescents on their use of aggression at home. The St. Thomas adolescents were more likely to use aggression at home than the Knoxville adolescents. There is no secret that adolescents face their greatest adversity at home. At this stage of life, there is a natural progression for adolescents to move away from the home as being the most important thing in their life and move toward socialization with peers. Their peers now become very important to them. Tensions in the home center around parental directives and discipline which adolescents experience as pressure from parents. In the case of the St. Thomas adolescents, this pressure may at times feel like a strangle hold. St. Thomas is a very small community when compared to Knoxville, Tennessee and as such, the economic hardship families are faced with as well as the pressures on adolescents to get involve in illicit activities (drugs, gambling, stealing) places tremendous strain on parents to maintain their family and protect their children from the streets. In America, 20 % of children live in poverty (Center for the Study of Social Policy, 1993). The 1990 census for St. Thomas listed the percentage of children under age 18 living in poverty is 29.7. For Knoxville, the percentage of children under age 18 living in poverty is 29.3 (U. S. Department of Commerce). Both communities have higher percentage of children living

in poverty than the national average. However, for St. Thomas, I suspect that the impact on families is even greater because of the islands small size and overpopulation. It is not unusual for parents in low paying jobs in St. Thomas to have a second job to help out with the family finances. Thus, parents' unavailability for children at home due to economic hardship may also create tension. In these types of situations you may have children taking care of themselves and when parents are present in the home, there may be tension with children regarding how the home is being taken care of or a desire to restrict their activities. This may set the stage for a coercive style of interaction between children and parents.

Interestingly, when gender was added as a factor, the Knoxville males were more likely than the St. Thomas males, Knoxville females, and the St. Thomas females to use aggression at home. I suspect that similar dynamics are taking place there as was described for the St. Thomas adolescents. However, I believe that some of the factors accounting for the Knoxville male adolescents' differences may be the pressures that parents experience trying to protect their children from the elements of the streets, such as drugs, and gang involvement. Their efforts at home may be coming into conflict with their children's lifestyle. The limitations and expectations that parents may impose on their children could lead to tension and possible verbal altercations between parents and children at home.

No differences were found between the St. Thomas adolescents and the Knoxville adolescents on their use of aggression at school. However, this situation was not the same when gender became a factor. St. Thomas female adolescents were found to be more

likely to display aggression at school than the St. Thomas males, and the Knoxville females. Interestingly, no differences were found for the Knoxville males. The finding for the St. Thomas female adolescents raises some interesting questions. Are these females more vocal and willing to stand up for what they think is right at whatever cost? What type of relationships existed between St. Thomas female adolescents and their teachers? Do St. Thomas female adolescents rebel against school authorities as a means of being tough? The finding for the St. Thomas females is quite interesting, particularly when one realizes that the results run contrary to expectations about male and female differences. The research literature continues to talk about males higher rate of aggressing than females (CDC, 1991b). Additionally, the findings may hint about the lack of school's importance in their lives or probably their dislike for school. Interestingly, Knoxville male adolescents were not found to differ from St. Thomas female adolescents on their use of aggression at school. It is easier to accept the fact that males are more aggressive than females, so therefore, this finding does not raise many questions. However, the same questions that were asked for the St. Thomas females can be asked of the Knoxville male adolescents in an attempt to understand the dynamics taking place at school.

Were there any differences between the Knoxville adolescents and the St. Thomas adolescents on their beliefs about aggression? The answer is resounding yes. Knoxville adolescents were more likely to legitimize their use of aggression and to use their aggression as a means of avoiding a negative image than the St. Thomas adolescents. These findings tend to support the research literature that shows American students are more approving of aggression than students from other countries (Huesmann, Zelli,

Fraczek, & Upmeyer, 1993). However, what can we make of these differences? There is no question that an important contributor to aggressive behavior is the beliefs one holds about aggressive behavior. Dodge (1993) reported that beliefs accepting of aggression promote aggressive behavior by affecting how one processes information from the environment. As he noted, individuals who are highly approving of aggression can be expected to attend to fewer cues that may inhibit aggression, and they are more likely to perceive greater hostility in their environment. Thus, for the Knoxville adolescents, it is not far fetch to assume that they are more highly approving of aggression and may be more likely to react in a hostile manner than the St. Thomas adolescents. Huesmann and Guerra (1997) showed that beliefs about aggression could influence actual aggressive behavior by early adolescence.

Contrary to expectations, no interaction effects were found for gender and punishment on external aggression. There were also no gender differences for external aggression found in this study. This finding was somewhat surprising seeing that differences were found for other aggression measures, such as beliefs about aggression and the Behavior Rating Profile, Student Rating Scales. One possible explanation for the lack of significance for gender may be due to the small number of items used to measure external aggression. Another explanation may be that the few items used did not reflect the wide range of aggressive behavior that the adolescents are accustomed of displaying. This may also account for the nonsignificant finding between the Knoxville adolescents and the St. Thomas adolescents on external aggression (It should be noted that the

differences between these groups were approaching significance with the Knoxville adolescents scoring higher on external aggression).

On the other hand, the results on the different levels of punishment differed significantly on external aggression. Adolescents who were physically disciplined or yelled at by their parents were found to have higher levels of external aggression than those adolescents who were never punished or privileges were taken away. This finding tends to support the research literature, which shows a positive relationship between harsh physical discipline and higher aggressive behavior (Weiss, Dodge, Bates, & Pettit, 1992; Deater-Deckard, Dodge, Bates, & Pettit, 1996).

Moreover, in this study, female adolescents were found to be punished (physical and nonphysical) more than male adolescents. This finding tends to support the long held view that males are allowed more latitude in their behavior and less sanctioning by parents, whereas females are more scrutinized and more likely to be punished for their behavior. The Knoxville adolescents and the St. Thomas adolescents did not differ with regards to their levels of punishment. This finding was somewhat surprising. The St. Thomas adolescents showed higher levels of physical punishment than the Knoxville adolescents. The research literature has shown that West Indian families tend to use physical punishment as a primary source of discipline (Thraser & Anderson, 1988; Gopaul-McNicol, 1999; Thraser, 1988; Brice-Baker, 1994). The view that "to spare the rod is to spoil the child" is one that is endorsed by many West Indians. However, the findings in this study appear to reflect a possible change in behavior and attitudes by parents regarding the use of corporal punishment. There appears to be more willingness

on the part of the parents to use non-physical punishment as alternatives. Moreover, a combination of the two seems to be the preferred. One would think that this approach to disciplining would lead to discussion and open communication between child and parent(s).

There are some limitations to this study that should be considered. First, all of the variables are based on self-report measures. Second, parents did not contribute any data regarding their children's aggressive behavior. Thus, there is no way to substantiate any claims of adolescent's use of aggressive behavior. Third, an instrument with more items focusing specifically on aggressive behavior occurring in different settings would have provided more opportunity for analysis. Fourth, no questions were asked about adolescents' involvement in criminal behavior. Thus, any generalizations of these findings to adolescents who engage in criminal assaults toward others may be limited. Fifth, even though the sample from the Caribbean came from St. Thomas, we cannot rightfully say the differences found for this population reflects a Virgin Islands' culture. More correctly, we might say it is reflective of a West Indian culture mingled with an American influence. A West Indian culture because the St. Thomas adolescents it is assumed may have come from many different Caribbean islands or their parents may have come from different Caribbean islands. Please note that the adolescents from St. Thomas were not asked to provide their place of birth. Nonetheless, my assumption is not far fetched when one understands that many families from other neighboring islands come to the Virgin Islands for a better economic way of life. The Virgin Islands is an American territory and wages paid are much higher than many of the other Caribbean

islands. Sixth, the population in this study is not purported to be representative of all African West Indian or African American adolescents. Seventh, it is important to note that the variables used to assess parental disciplinary practices in this study measured frequency rather than consistency of the disciplinary practices. Eighth, the absence of data concerning the effects of respondents' attitudes and behaviors on their parents' emotional attitudes and disciplinary practices precludes a more comprehensive analysis of the results.

The one thing that this study clearly shows is the need for differentiation and more research among black cultural groups. Thraser (1988) noted that all Blacks do not fit into one cultural group, but that it is important to understand Blacks from different perspectives, including the culture in which they operate from. This becomes even more important when we consider the many violence prevention programs being established nationally, particularly the ones directed at inner city children. Cities like New York (with their many different boroughs), Miami, Atlanta, and Houston just to name a few all have large Caribbean populations within them. Violence prevention programs aimed at African-Americans may not encompass these different cultural groups. The Caribbean is not one culture, but many different cultures intertwined. It is a fallacy to assume that there is one West Indian culture and one African-American culture. Thus, it is incorrect to assume that all Blacks can be treated as if they are the same. Brice-Baker (1994) summed up these sentiments nicely by saying, "Black people have been treated as a homogenous group with no attention paid to regional differences within the United States, differences between African-Americans and African-Caribbeans or differences

among African-Caribbeans or differences between African-Americans and Africans" (p. 25).

Studies investigating cultural differences are very important because they provide information that helps us to understand the differences and similarities between groups of people. One direction that future research on cultural differences regarding ethnic/cultural groups in America should take is parental interviews and / or observations of family interaction patterns in home settings which may help to strengthen one's understanding about the family dynamics taking place. In addition, self-reports/interviews can be used with the children. The interviews and observations may help researchers to recognize the actual events or processes contributing to the different outcomes. Moreover, longitudinal research should be conducted examining the relationship between religion and prevention of aggression. This would allow researchers the opportunity to follow children from early age up to adolescence. More research on self-esteem and aggression is needed. Researchers need to move away from this notion of a relationship between low self-esteem and aggressive behavior. As more research is conducted, the long held tradition of low self-esteem being linked to aggression would be finally put to rest. The research literature has little if any information regarding the relationship between adolescent aggression and religion. More research of this nature may shed some light on how best religion can be incorporated in violence prevention programs. Additionally, the many cultures in a community should be reflected in the curriculum of these violence prevention programs to ensure that everyone benefits and not just a few. Lastly, the family cannot be overlooked as having a major influence on children's behavior. Where

family ties are strong, they can play a critical role in the development, but also the alleviation of aggressive behavior (Eron, Huesmann & Zelli, 1991). The culture the child is socialized in influences his/her beliefs, but we cannot forget that family and peers also play an important factor (Souweidane & Huesmann, 1999). The study of adolescent aggression is very important to our understanding about what factors are critical in the mitigation of it and how best can we help these youngsters to grow up to be productive adults in the community.

REFERENCES

References

- Agnew, R. (1990a). Adolescent resources and delinquency. Criminology, 28, 535-565.
- Agnew, R. (1990b). The origins of delinquent events: An examination of offender accounts. Journal of Research in Crime and Delinquency, 27, 267-294.
- American Academy of Pediatrics. (1992a). Firearm injuries affecting the pediatric population. Pediatrics, 89, 788-790.
- American Psychological Association Commission on Violence and Youth. (1993). Violence and youth: Psychology's response (Vol. 1). Washington, DC: Author.
- Anderson, E. (1994). The code of the streets. The Atlantic Monthly, 273 (5), 80-94.
- Arria, A. M., Wood, N.P., & Anthony, J.C. (1995). Prevalence of carrying a weapon and related behaviors in urban school children 1983 to 1993. Archives of Pediatric Adolescent Medicine, 149, 1345-1350.
- Astor, R. (1991). Children's reasoning about family violence and peer violence: A study of unprovoked physical harm, provocation, and retribution. Unpublished dissertation. University of California, Berkeley.
- Attar, B. K., Guerra, N. G., & Tolan, P. H. (1994). Neighborhood disadvantage, stressful life events, and adjustment in urban elementary-school children. Journal of Clinical & Child Psychology, 23, 391-400.

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. Psychological Bulletin, 103, 5-33.

Baumeister, R. F., Tice, D. F., & Hutton, D. G. (1989). Self-presentational motivations and personality differences in self-esteem. Journal of Personality, 57, 547-579.

Bernard, T. (1990). Angry aggression among the "truly disadvantaged." Criminology, 28, 73-94.

Biederman, J., Munir, K., Knee, D., Habelow, W., Armentano, M., Autor, S., Hoge, S. K., & Waternaux, C. (1986). A family study of patients with attention deficit disorder and normal controls. Journal of Psychiatric Research 20 (4), 263-274.

Bierman, K. L., Smoot, D. L., & Aumiller, K. (1993). Characteristic of aggressive-rejected, aggressive (nonrejected), and rejected (nonaggressive) boys. Child Development, 64, 139-151.

Bohman, M., Cloninger, C. R., Sigvardson, S., & Von Knorring, A. L. (1982). Predisposition to petty criminality in Swedish adoptees: I. Genetic and environmental heterogeneity. Archives of General Psychiatry 4, 1872-878.

Boone, S. (1991). Aggression in African-American boys: A discriminant analysis. Genetic, Social and General Psychology Monographs, 17 (2), 205-228.

Bouchard, T. J., Jr., and McGue, M. (1981). Familial studies of intelligence: A review. Science 21, 1055-1059.

Bowman, P. J. (1980). Toward a dual labor-market approach to Black-on-Black homicide. Public Health Reports, 95 (6), 555-556.

Bowser, B. P. (Ed.). (1991). Black male adolescents: Parenting and education in community context. New York: Oxford University Press.

Bjerregard, B., & Lizotte, A. J. (1995). Gun ownership and gang membership. Journal of Criminal Law and Criminology, 86, 37-58.

Brice-Baker, J. R. (1994). Domestic violence in African-American and African-Caribbean families. Journal of Social Distress and the Homeless, 3 (1), 23-38.

Brown, L. L., & Hammill, D. D. (1990). Behavior rating profile: An ecological approach. Austin, TX: PRO-ED.

Cadoret, R. J., O'Gorman, T. W., Troughton, E. and Heywood, E. (1985). Alcoholism and antisocial personality: Interrelationships, genetic and environmental factors. Archives of General Psychiatry 42, 161-167.

Cadoret, R. J., Stewart, M. A. (1991). An adoption study of attention deficit hyperactivity, aggression and their relationships to adult antisocial personality. Comprehensive Psychiatry, 23, 73-82.

Cairns R. B., & Cairns, B. D. (1994). Lifelines and risks: Pathways of youth in our time. Cambridge: University of Cambridge Press.

Cairns, R., Cairns, B., Neckerman, H., Gest, S., & Garie, J-L. (1988). Social networks and aggressive behavior: Peer support or peer rejection? Developmental Psychology, 24 (6), 815-823.

- Callahan, C., & Rivara, F. (1992). Urban high school youth and handguns. Journal of the American Medical Association, 267, 3038-3042.
- Cattel, R. B. (1982). The inheritance of personality and ability: Research methods and findings. New York: Academic Press.
- Centers for Disease Control. (1991b). Weapon-carrying among high school students. Journal of the American Medical Association, 266, 2342.
- Center for Disease Control. (1986). Homicide surveillance report, 1970-1983. Atlanta: CDC.
- Center for the Study of Social Policy. (1993). Kids count data book: State profiles of child well-being. Washington, DC: Author.
- Cernkovich, S. A., & Giordano, P. C. (1992). School bonding, race, and delinquency. Criminology, 30 (2), 261-290.
- Christoffel, K. K. (1990). Violent death and injury in U.S. children and adolescents. American Journal of Diseases of Childhood, 144, 697-706.
- Chung, T-Y., & Asher, S.R. (1996). Children's Goal and strategies in peer conflict situations. Merrill-Palmer Quarterly, 42 (1), 125-147.
- Clark, K., & Clark, M. (1947). Racial identification and preference in Negro preschool children. In Newcomb, T., & Hartley, E. (Eds.), Readings in social psychology. New York: Holt.
- Coie, J., Dodge, K., Terry, R., & Wright, V. (1991). The role of aggression in peer relations: An analysis of aggression episodes in boys' play groups. Child Development, 62, 812-826.

Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. Personality & Social Psychological Bulletin, 20, 503-513.

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

Dawkins, R., & Dawkins, M. (1983). Alcohol use and delinquency among Black, White, and Hispanic offenders. *Adolescence*, 18, 798-809.

Deater-Deckard, K., Bates, J. E., Dodge, K. A., & Pettit, G. S. (1996). Physical discipline among African-American and European American mothers: Links to children's externalizing behaviors. Developmental Psychology, 32 (6), 1065-1072.

De La Ronde, C., & Swann, W. B. (1993). Caught in the crossfire: Positivity and self-verification strivings among people with low self-esteem. In R. Baumeister (Ed.), Self-esteem: The puzzle of low self-regard (pp. 147-165). New York: Plenum Press.

DeMulder, E. K., & Radke-Yarrow, M. (1991). Attachment and affectively ill and well mothers: Concurrent behavioral correlates. Developmental Psychopathology, 3, 227-242.

Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. Journal of Personality and Social Psychology, 68, 653-663.

Dilalla, L. F., & Gottesman, I. (1989). Heterogeneity of the causes for delinquency and criminality: Life span perspectives. Developmental Psychopathology, 1, 339-349.

- Dilalla, L. F., Mitchell, C. M., Arthur, M. W., & Pagliocca, P. M. (1988). Aggression and delinquency: Family and environmental factors. Journal of Youth and Adolescence, 17 (3), 233-247.
- Dodge, K. A. (1993). Social cognitive mechanisms in the development of conduct disorder and depression. Annual Review of Psychology, 44, 559-584.
- Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. Science, 250, 1678-1683.
- Dodge, K. A., & Coie, J. D. (1987). Social information processing factors in reactive and proactive aggression in children's peer groups. Journal of Personality and Social Psychology, 53, 1143-1158.
- Dodge, K. A., Price, J., Bachorowski, J., & Newman, J. (1990). Hostile attribution biases in severely aggressive adolescents. Journal of Abnormal Psychology, 99, 385-392.
- Dukes, R., & Martinez, R. (1994). The impact of ethnicity and gender on self-esteem among adolescents. Adolescence, 29, 105-115.
- Dunn, J. (1988). The beginnings of social understanding. Cambridge, MA: Harvard.
- Dunn, J. (1988). The beginnings of social understanding. Cambridge, MA: Harvard.
- Emde, R. N., Plomin, R., Robinson, J., Corley, R., Defries, J., et al. (1992). Temperament, emotion, and cognition at fourteen months: The Mac Arthur longitudinal twin study. Child Development, 63, 1437-1455.

Eron, L.D., Huesmann, L. R., & Zelli, A. (1991). The role of parental variables in the learning of aggression. In D. J. Pepler & K. Rubin (Eds.), The development and treatment of childhood aggression (pp.169-188). Hillsdale, N J: Lawrence Erlbaum Associates.

Fagin, J. (1990). The social organization of drug use and drug dealing among urban gangs, Criminology, 27, 633-669.

Farrington, D. P. (1989). Early Predictors of adolescent aggression and adult violence. Violence and Victims 4 (2), 79-100.

Farrington, D. P. (1978). The family background of aggressive youths. In L. A. Hersov, M. Berger, & D. Schaffer (Eds.), Aggression and antisocial behavior in childhood and adolescence (pp.73-93). Oxford: Pergamon.

Federal Bureau of Investigation. (1987). Crime in the United States: 1986. Washington, DC: U.S. Department of Justice.

Federal Bureau of Investigation. (1989). Uniform crime reports for the United States, 1988. Washington, DC: Author.

Fingerhut, L., Ingram, D., & Feldman, J. (1992). Firearm and nonfirearm homicide among persons 15-19 years of age. Journal of American Medical Association, 267, 3048-3053.

Fishbein, D. (1990). Biological perspectives in criminology. Criminology, 28, 27-71.

Fishbein, D. H., Lozovsky, D., and Jaffe, J. H. (1989). Impulsivity, aggression and neuroendocrine responses to serotonergic stimulation in substance abusers.

Biological Psychiatry 25, 1049-1066.

Fox, J. A., & Zawitz, M. W. (1999). Homicide trends in the U. S. U. S. Department of Justice: Bureau of Justice Statistics [On-line]. Available: [Http://www.ojp.usdoj.gov/bjs/homicide/race.html](http://www.ojp.usdoj.gov/bjs/homicide/race.html).

Fox, N. (1989). The psychophysiological correlates of emotional reactivity during the first year of life. Developmental Psychology, 25, 364-372.

Frick, P. J., Lahey, B. B., Loeber, R., Stouthamer-Loeber, M., Christ, M. A. G., & Hanson, K. (1992). Familial risk factors to oppositional defiant disorder and conduct disorder: parental psychopathology and maternal parenting. Journal of Consulting and Clinical Psychology, 60, 49-55.

Gittelman, R. Mannuzza, S., Shenker, R., & Bonagura, N. (1985). Hyperactive boys almost grown up. Archives of General Psychiatry, 42, 937-947.

Ghodsian-Carpey, J. and Baker, L. A. (1987). Genetic and environmental influences on aggression in 4 to 7 years old twins. Aggressive Behavior 13, 173-186.

Gopaul-McNicol, S. A. (1999). Ethnocultural perspectives on childrearing practices in the Caribbean. International Social Work, 42 (1), 79-86.

Graham, S., & Hudley, C. (1992). An attributional approach to aggression in African-American children. In D. Schunk & J. Meece (Eds.), Student perceptions in the classroom (pp. 75-94). Hillsdale, NJ: Erlbaum.

Grossman, F. K., Beinashowitz, J., Anderson, L., Sakurai, M., Finnin, L., & Flaherty, M. (1992). Risk and resilience in young adolescents. Journal of Adolescence, 21 (5), 529-550.

Harlow, C. (1989). Injuries from crime (Bureau of Justice Statistics, Special Report No. NCJ-116811). Washington, DC: U. S. Department of Justice.

Harter, S. (1993). Causes and consequences of low self-esteem in children and adolescents. In R. Baumeister (Ed.), Self-esteem: The puzzle of low self-regard (pp. 87-116). New York: Plenum Press.

Hartup, W. W., Laursen, B., Stewart, M. I., Eastenson, A. (1988). Conflict and the friendship relations of young children. Child Development, 59, 1590-1600.

Hawkins. D. (1986). Longitudinal-situational approaches to understanding Black-on-Black homicide. In Report of the Secretary's Task Force on Black and Minority Health (Vol. 5, pp. 97-116). Washington, DC: U. S. Department of Health and Human Services.

Hawkins, D. (1990). Explaining the Black homicide rate. Journal of Interpersonal Violence, 5, 151-163.

Hay, D. F., Zahn-Waxler, C., Cummings, E. M., & Iannotti, R. J. (1992). Young children's views about conflict with peers: A comparison of the daughters and sons of depressed and well women. Journal of Child Psychology and Psychiatry, 33, 669-683.

Hill, H. M., & Madhere, S. (1996). Exposure to community violence and African American children: A multidimensional model of risks and resources. Journal of Community Psychology, 24, 26-43.

Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: causal relationships and underlying mechanisms. Psychological Bulletin, 111, 127-155.

Howard, R. C. (1984). The clinical EEG and personality in mentally abnormal offenders. Psychological Medicine 14, 569-580.

Howell, J. C. (1995). Gangs and youth violence. In J. C. Howell, B. Krisberg, J. D. Hawkins, & J. J. Wilson (Eds.), A sourcebook: Serious, violent, and chronic juvenile offenders (261-274). Thousand Oaks, CA: Sage.

Huesmann, L. R., & Guerra, N. G. (1997). Children's normative beliefs about aggression and aggressive behavior. Journal of Personality and Social Psychology, 72, 408-419.

Huesmann, L. R., Zelli, A., Fraczek, A., & Upmeyer, A. (1993). Normative attitudes about aggression in American, German, & Polish college students. Presented at the Third European Congress of Psychology, Tampere, Finland.

Huff-Corzine, L., Corzine, J., & Moore, D. C. (1991). Deadly connections: Culture, poverty, and the direction of lethal violence. Social Forces, 69 (3), 715-732.

Humphrey, J., & Palmer, S. (1986). Race, sex, and criminal homicide: Offender-victim relationships. In D. Hawkins (Ed.), Homicide among Black Americans (pp. 57-68). Lanham, MD: University Press of America.

Jankowski, M. S. (1991). Islands in the street: Gangs and America urban society. CA: University of California Press.

Josephson, W. L. (1987). Television violence and children's aggression: Testing the priming, social script, and disinhibition predictions. Journal of Personality and Social Psychology, 53 (5), 882-890.

Keenan, K., Loeber, R., Zhang, Q., Stouthamer-Loeber, M., & Van Kammen, W. B. (1995). The influence of deviant peers on the development of boys' disruptive and delinquent behavior: A temporal analysis. Developmental Psychopathology, 7, 715-726.

Kupersmidt, J. B., & Coie, J. D. (1990). Preadolescent peer status, aggression, and school adjustment as predictors of externalizing problems in adolescence. Child Development, 61, 1350-1362.

Kupersmidt, J. B., Griesler, P. C., DeRosier, M. E., Patterson, C. J., & Davis, P. W. (1995). Childhood aggression and peer relations in the context of family and neighborhood factors. Child Development, 66, 360-375.

Laub, J. (1983). Patterns of offending in urban and rural areas. Journal of Criminal Justice, 11 (2), 129-142.

Lee, C. L., & Bates, J. E. (1985). Mother-child interaction at age two years and perceived difficult temperament. Child Development, 56, 1314-1325.

Lester, D. (1986). The murderer and his murder: A review of research. New York: AMS Press.

Lester, M. L. & Fishbein, D. H. (1987). Nutrition and Neuropsychological Development in Children. In R. Tarter, D. H. Van Thiel, and K. Edwards (Eds.), Medical Neuropsychology: The Impact of Disease on Behavior. New York: Plenum.

Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Prichep, L. S., Feldman, M. & Yeager, C. (1988). Neuropsychiatric, psychoeducational, and family characteristics of 14 juveniles condemned to death in the United States. American Journal of Psychiatry 145, 584-589.

Liebert, R. M., Sprafkin, J. N., and Davidson, E. S. (1989). The early window: Effects of television on children and youth (3rd ed.). New York: Pergamon.

Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. Annual Review in Psychology, 48, 371-410.

Loeber, R., Green, S. M., Keenan, K., & Lahey, B. B. (1995). Which boys will fare worse? Early predictors of the onset of conduct disorder in a six-year longitudinal study. Journal of American Academy of Child & Adolescent Psychiatry, 34, 499-509.

Magnusson, D., & Bergman, L. R. (1990). A pattern approach to the study of pathways from childhood to adulthood. In L. Robbins, & M. Rutter (Eds.), Straight and devious pathways from childhood to adulthood (pp. 101-115). Cambridge: University of Cambridge Press.

Maguin, E., & Loeber, R. (1986). Academic performance and delinquency. In M. Tonry, & N. Morris (Eds.), Crime and justice. Chicago: University of Chicago Press.

Manly, J. T., Cicchetti, D., & Barnett, D. (1994). The impact of subtype, frequency, chronicity, and severity of child maltreatment on social competence and behavior problems. Developmental Psychopathology, 7, 121-143.

- Mannuzza, S., Klein, R. G., Bessler, A., Malloy, P., & LaPadula, M. (1993). Adult outcome of hyperactive boys. Educational achievement, occupational rank, and psychiatric status. Archives of General Psychiatry, 50, 565-576.
- Mednick, S. A., Gabrelli, Jr., W. F. and Hutchings, B. (1984). Genetic influences in criminal convictions: Evidence from an adoption cohort. Science 224, 891-894.
- Mednick, S. A., Moffitt, T. E. & Stack, S. A. (1987). The causes of crime: New biological approaches. New York: Cambridge University Press.
- Meehan, P., & O'Carroll, P. (1992). Gangs, drugs, and homicide in Los Angeles. American Journal of Diseases of Childhood, 146, 683-687.
- Mercy, J., Goodman, R., Rosenberg, M., Allen, N., Loya, F., Smith, J., & Vargas, L. (1986). Patterns of homicide victimization in the city of Los Angeles, 1970-79. Bulletin of New York Academy of Medicine, 62, 427-445.
- Moffitt, T. E. (1993). Adolescence-limited and life-cycle persistent antisocial behavior: A developmental taxonomy. Psychological Review, 100, 674-701.
- National Center for Health Statistics. (1992). Unpublished data tables from the NCHS Mortality Tapes, FBI-SHR. Atlanta, GA: Centers for Disease Control.
- Needleman, H.L., Gunnoe, C., Leviton, A., Reed, P., Peresie, H., Maher, C. and Barrett, P. (1979). Deficits in psychologic and classroom performance of children with elevated dentine lead levels. New England Journal of Medicine 300, 689-695.
- Nelsen, H. M. (1980). Religious transmission versus religious formation: Preadolescent - parent interaction. The Sociological Quarterly, 21, 207-218.

O'Carroll, P. W., & Mercy, J. A. (1986). Patterns and trends in Black homicide. In D. Hawkins (Ed.), Homicide among Black Americans (pp.29-42). Lanham, MD: University Press of America.

Pargament, K. I. Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving: Three styles of coping. Journal of the Scientific Study of Religion, 27 (1), 90-104.

Parker, R. (1989). Poverty, subculture of violence, and type of homicide. Social Forces, 67, 983-1007.

Parker, J. G., & Asher, S. R. (1987). Peer relations and Later adjustment: Are low accepted children at risk? Psychological Bulletin, 102 (3), 357-389.

Patterson, E. B. (1991). Poverty, income inequality, and community rates. Criminology, 29 (4), 755-774.

Peterson, R. D., & Krivo, L. J. (1993). Segregation and Black urban homicide. Social Forces, 71 (4), 1001-1026.

Phinney, J., & Alipuria, L. (1990). Ethnic identity in college students from four ethnic groups. Journal of adolescence, 13, 171-184.

Phinney, J. S., Cantu, C. L., & Kurtz, D. A. (1997). Ethnic and American identity as predictors of self-esteem among African-American, Latino, and White adolescents. Journal of Youth and Adolescence, 26 (2), 165-185.

Plomin, R., Nitz, K., & Rowe, D. C. (1990). Behavioral genetics and aggressive behavior in childhood. In M. Lewis and S.M. Miller (Eds.), Handbook of Developmental Psychopathology. New York: Plenum.

- Porter, J., & Washington, R. (1993). Minority identity and self-esteem. Annual Review of Sociology, 19, 139-161.
- Price, J., Desmond, S., & Smith, D. (1991). A preliminary investigation of inner city adolescents' perceptions of guns. Journal of School Health, 61, 255-259.
- Prothrow-Stith, D. (1991). Deadly consequences: How violence is destroying our teenage population and a plan to begin solving the problem. New York: Harper Collins.
- Raine, A. & Venables, P. H. (1987). Contingent negative variation, P3 evoked potentials and antisocial behavior. Psychophysiology 24(2), 191-199.
- Ramey, L. (1980). Homicide among Black males. Public Health Reports, 95, 549-561.
- Reis, A. J., & Roth, J. A. (Eds.). (1993). Understanding and preventing violence. Washington, DC: National Academy Press.
- Renfrew, J. W. (Ed.). (1997). Aggression and its causes: A biopsychosocial approach. Oxford University Press: New York.
- Richman, C., Clark, M., & Brown, K. (1985). General and specific self-esteem in late adolescent students: Race x gender x SES effects. Adolescence 20, 555-566.
- Richters, J. E., & Martinez, P. E. (1993). The NIMH Community Violence Project. I. Children as victims and witnesses to violence. Psychiatry, 56, 7-21.
- Roberts, S. (1990). Murder, mayhem, and other joys of youth. The Journal of NIH Research, 2, 67-72.
- Rodriguez, J. (1990). Childhood injuries in the United States. American Journal of Diseases of Childhood, 144, 627-646.

Rogeness, G. A., Javors, M. A., Maas, J. W., Macedo, C. A., & Fischer, C. (1987). Plasma dopamine-B-hydroxylase, HVA, MHPG, and conduct disorder in emotionally disturbed boys. Biological Psychiatry 22, 1155-1158.

Rose, H. M., & McClain, P. D. (1990). Race place and risk: Black homicide in urban America. New York: State University of New York.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Rosenberg, M. L. (1991). Violence in America. New York: Oxford University Press.

Rowe, D.C. (1983). Biometrical genetic models of self-reported delinquent behavior: A twin study. Behavior Genetics 13, 473-489.

Rowe, D. C. (1986). Genetic and environmental components of antisocial behavior: A study of 265 twin pairs. Criminology, 24 (3), 513-532.

Rowe, D.C., & Osgood, D.W. (1984). Heredity and sociological theories of delinquency: A reconsideration. American Sociological Review 49, 526-540.

Rushton, J.P., Fulker, D.W., Neale, M.C., Nias, D.K.B., and Eysenck, H.J., (1986). Altruism and aggression: The heritability of individual differences. Journal of Personality and Social Psychology 50(6), 1192-1198.

Sampson, R. (1987). Urban Black violence: The effect of male joblessness and family disruption. American Journal of Sociology, 93, 348-405.

Sanson, A., Smart, D., Prior, M., & Oberklaid, F. (1993). Precursors of hyperactivity and aggression. Journal of American Academic & Child Adolescent Psychiatry, 32, 1207-1216.

Satterfield, J. M., Hoppe, C. M., & Schell, A. M. (1982). A prospective study of delinquency in 110 adolescent boys with attention deficit disorder and 88 normal adolescent boys. American Journal of Psychiatry, 139, 795-798.

Schoenfield, C. G. (1988). Blacks and violent crime: A psychoanalytic oriented analysis. Journal of Psychiatry and Law, 16, 269-301.

Schulsinger, F. (1985). The experience from the adoption method in genetic research. Progress in Clinical and Biological Research 177, 461-478.

Sharp, D., Hay, D. F., Pawlby, S., Schmucker, G., Allen, H., & Kumar, R. (1995). The impact of postnatal depression on boys' intellectual development. Journal of Child Psychology and Psychiatry, 36, 1315-1336.

Sheley, J., McGee, Z., & Wright, J. (1992). Gun-related violence in and around inner-city schools. American Journal of Diseases of Childhood, 146, 677-682.

Sheley, J. F., & Wright, J. F. (1993). Gun acquisition and possession in selected juvenile samples (NCJ # 145326). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Slaby, R. G., & Guerra, N. G. (1988). Cognitive mediators of aggression in adolescent offenders: I. Assessment. Developmental Psychology, 24, 580-588.

Sonuga-Barke, Edmund J. S., Lamparelli, M., Stevenson, J., Thompson, M., & Henry, A. (1994). Behavioral problems and pre-school intellectual attainment: The

associations of hyperactivity and conduct problems. Journal of Child Psychology and Psychiatry and Allied Disciplines, 35 (5), 949-960.

Soubrie, P. (1986). Reconciling the role of central serotonin neurons in human and animal behavior. The Behavioral and Brain Sciences 9, 319-364.

Souweidane, V. & Huesmann, L. R. (1999). The influence of American urban culture on the development of normative beliefs about aggression in Middle-Eastern immigrants. American Journal of Community Psychology, 27 (2), 239-254.

Stattin, H., & Klackenber-Larsen, I. (1989). The relationship between maternal attributes in the early life of the child and the child's future criminal behavior. Developmental Psychopathology, 2, 99-111.

Storashak, E. A., Bellanti, C. J., & Bierman, K. L. (1996). The quality of sibling relationships and the development of social competence and behavior control in aggressive children. Developmental Psychology, 32, 79-89.

Sutker, P. B. & Allain, A. N. (1987). Cognitive abstraction, shifting and control: Clinical sample comparisons of psychopaths and nonpsychopaths. Journal of Abnormal Psychology 96 (1), 73-75.

Synder, H. N. Sickmund, M., & Poe-Yamagata, E. (1996). Juvenile offenders and victims: 1996 update on violence (NCJ# 159107). Washington, DC: Office of Juvenile Justice and Delinquency Prevention.

Tajfel, H. (1981). Human groups and social categories. Cambridge, UK: Cambridge University Press.

Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel, & W. Austin (Eds.), Psychology of intergroup relations. Chicago: Nelson-Hall.

Tardiff, K., & Gross, E. (1986). Homicide in New York City. Bulletin of the New York Academy of Medicine, 62, 413-426.

Tashakkori, A. (1992). Gender, ethnicity, and the structure of self-esteem: An attitudes theory approach. Journal of Social Psychology, 133, 479-488.

Taylor, R. (1990). Employment. Black adolescence (pp. 93-107), Boston, MA: The Consortium for Research on Black Adolescence.

Tellegen, A., Lykken, D.T., Bouchard, T.J., Wilcox, K., Segal, N. & Rich, S. (1988). Personality similarity in twins reared apart and together. Journal of Personality and Social Psychology 54(6), 1031-1039.

Thomas, A., Chess, S., & Birch, H. G. (1968). Temperament and behavior disorders in children. New York: NY University Press.

Thraser, S. P. (1988). Ethnographic interviews with West Indian families and a workshop for practitioners. Unpublished doctoral dissertation, City University of New York.

Thraser, S. & Anderson, G. (1988). The West Indian family: Treatment challenges. Social Casework, 69 (3), 171-176.

Toch, H. (1969). Violent Men. Chicago: Aldine.

Tremblay, R. E., LeBlanc, M., & Schwartzman, A.E. (1988). The predictive power of first grade peer and teacher ratings of behavior and personality at adolescence. Journal of Abnormal Psychology, 16, 571-584.

Tremblay, R. E., Masse, L. C., Kurtz, L., & Vitaro, F. (1997). From childhood physical aggression to adolescent maladjustment: The Montreal prevention experiment. In R. D. Peters, & R.J. McMahon (Eds.), Childhood disorders, substance abuse & delinquency: Prevention and early intervention approaches (pp. 1-62). Thousand Oaks, CA: Sage.

Turner, J., Oakes, P., Haslam, S., & McGarty, C. (1994). Self and collective: Cognition and social context. Personality and Social Psychological Bulletin, 20, 454-463.

U. S. Department of Commerce. (1993). 1990 Census of population: Social and economic characteristics - Tennessee. Washington, DC: Bureau of Census.

U. S. Department of Commerce. (1993). 1990 Census of population: Social and economic characteristics - Virgin Islands of the United States. Washington, DC: Bureau of Census.

U. S. Department of Justice. (1991). Criminal victimization, 1990 (Special Report No. NCJ-122743). Washington, DC: Bureau of Justice Statistics.

U. S. Department of Health and Human Services. (1991). Youth risk behavior surveillance system. Chronic disease and health promotion: Reprints from the Mortality & Morbidity Weekly Report. Washington, DC: U.S. Government Printing Office.

U. S. Department of Health and Human Services, Public Health Service. (1990).
National health promotion and disease prevention objectives (Report No. 91-50212).
 Washington, DC: U. S. Government Printing Office.

Van Evra, J. (1990). Television and child development. Hillsdale, N.J.: Lawrence
 Erlbaum Associates

Van Praag, H. M., Kahn, R. S., Asnis, G. M., Wetzler, S., Brown, S. L., Bleich,
 A. & Korn, M. L. (1987). Denosologization of biological psychiatry or the specificity of
 5-HT disturbances in psychiatric disorders. Journal of Affective Disorders 13, 1-8.

Virkkunen, M. & Narvanen, S. (1987). Plasma insulin, tryptophan and serotonin
 levels during the glucose tolerance test among habitually violent and impulsive offenders.
Neuropsychobiology 17, 19-23.

Virkkunen, M., Dejong, J., Bartkko, J., Goodwin, F.K. & Linnoila, M. (1989).
 Relationship of psychobiological variables to recidivism in violent offenders and
 impulsive fire setters. Archives of General Psychiatry 46, 600-603.

Walters, G.D. & White, T.W. (1989). Heredity and crime: Bad genes or bad
 research? Criminology 27:455-486.

Webster, D. W., Gainer, P. S., & Champion, H. R. (1993). Weapon carrying
 among inner city junior high school students: Defensive behavior vs. aggressive
 delinquency. American Journal of Public Health, 83 (11), 1604-1608.

Weinberg, K. M., & Tronick, E. Z. (1997). Maternal depression and infant
 maladjustment: A failure of mutual regulation. In J. Noshpitz (Ed.), The handbook of
 child and adolescent psychiatry. New York: Wiley.

Weis, B., Dodge, K. A., Bates, J. E., & Pettit, G. S. (1992). Some consequences of early harsh discipline: Child aggression and a maladaptive social information processing style. Child Development, 63, 1321-1335.

White, J., Moffitt, T. E., Caspi, A., Bartusch, D.J., Needles, D. J., & Stouthamer-Loeber, M. (1994). Measuring impulsivity and examining its relation to delinquency. Journal of Abnormal Psychology, 103, 192-205.

Wilbanks, W. (1986). Criminal homicide offenders in the U. S.: Black vs. White. In D. Hawkins (Ed.), Homicide among Black Americans (pp.43-56). Lanham, MD: University Press of America.

Wilson, M., & Daly, M. (1985). Competitiveness, risk taking, and violence. The young male syndrome. Ethology and Sociobiology, 6, 59-73.

Wolfgang, N., & Ferracutti, F. (1967). The subculture of violence. London: Tavistock.

Wolfgang, N., & Ferracutti, F. (1982). The subculture of violence: Towards an integrated theory in criminology. Newbury Park, CA: Sage.

Zahn-Waxler, C., Iannotti, R. J. Cummings, E. M., & Denham, S. (1990). Antecedents of problem behaviors in children of depressed mothers. Developmental Psychopathology, 2, 271-291.

Zhang, Q., Loeber, R., & Stouthamer-Loeber, M. (1997). Developmental trends of delinquency attitudes: replication and synthesis across time and samples. Journal of Quantitative Criminology, 13, 47-70.

APPENDIXES

APPENDIX A

Personal Data

1. Age____ Gender: ____ Male ____ Female

2. Race or Ethnic Origin: __African-American __Caucasian __Hispanic __ American Indian __ Oriental

3(a). Height__ Weight__

(b). Are you satisfied with your weight? Yes__ Somewhat__ No__

4. Overall, how will you rate yourself in schoolwork? __Poor __Average __ Good __Excellent

5. Who is your primary guardian?

__Mother

__Father

__Grandparent

__Step-parent

__Non-related adult

6(a). What is the highest educational level completed by your father/male guardian?

__Elementary

__High School

__Trade/Vocational School

__College/University

6(b). What is the highest educational level completed by your mother/female guardian?

__Elementary

__High School

__Trade/Vocational School

__College/University

7(a). What is the employment status of your parent(s)/ guardian? __Employed __Unemployed __ Retired

7(b). Which parent does this question apply to? __ Male parent/guardian __Female parent/guardian

7(c). If employed, what kind of job?

Male parent/guardian _____ Female
parent/guardian _____

8. How would you rate your family's standard of living?

__ Poor

__ Working class

__ Middle Class

__ Upper Middle

__ Wealthy

9(a). How many brothers () and sisters () do you have?

(b). What is your birth order? _____ (E.g. First child, second child, etc.).

(c). I have () older brother(s). I have () older sister(s).

(d). Do all your brother(s)/sister(s) live in the same household? __Yes __No

(e). How many persons live in your household? __

10(a). Do you live in a relatively safe neighborhood? __Yes __No

10(b). Is there a lot of violence in your neighborhood? __Not true __Sometimes true __Very true

11. Do you like to watch television shows that have a lot of violence? __Not true __Sometimes __Very true

12(a). What kind of punishment is *most* used in your home?

__Yelling

__Hitting/slapping

__Talking about the problem

__Time out (i.e. being sent to the room)

__Being sent to bed

__Spanking

__Remove privileges (i.e. television watching, grounded, etc.)

__Ignoring

12(b). On average, how often are you punished? __Few times per day __Few times per week __Few times per month

12(c). Which parent is usually responsible for disciplining? __Male parent/guardian __Female parent/guardian

13(a). What is your religious affiliation? _____

13(b). How often do you attend religious services?

__Never

__Occasionally

__Twice a month

__Once a week

__Three or more times a week

13(c). How active are you in your church? __Not active __Somewhat active __Fairly active __Very active

13(d). How important is religion to you personally?

__Not at all __Somewhat important __Fairly important __Very important

Rosenberg Scale

Directions: Please circle the number to the right of each item that best describes your feeling.

	<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
1. I feel that I'm a person of worth, at least on an equal plane with others.	1	2	3	4
2. I feel that I have a number of good qualities.	1	2	3	4
3. All in all, I am inclined to feel that I am a failure.	1	2	3	4
4. I am able to do things as well as most other people.	1	2	3	4
5. I feel I do not have much to be proud of.	1	2	3	4
6. I take a positive attitude toward myself.	1	2	3	4
7. On the whole, I am satisfied with myself.	1	2	3	4
8. I wish I could have more respect for myself.	1	2	3	4
9. I certainly feel useless at times.	1	2	3	4
10. At times I think I am no good at all.	1	2	3	4



Behavior Rating Profile

Second Edition

STUDENT RATING SCALES RESPONSE BOOKLET

Student's Name _____

Date of Rating _____

Instructions for Completing the Student Rating Scales

This booklet contains 60 sentences which describe some of the things that students do at home, at school, and with their friends. Some of these sentences will describe you very well. Other sentences will not describe you at all.

If you think a sentence tells about something you do, then fill in the shape under "True." If a sentence tells about something you do not do, then fill in the shape under "False." It is important for you to answer all 60 questions.

If you do not know the meaning of some of the words in these sentences, ask your teacher or the person who is giving the Student Rating Scales to you.

First, write your name and date in the spaces above. Then, open the booklet and begin completing the items of the Student Rating Scales. Remember to answer all 60 items.

Section I. Items of the Student Rating Scales

TRUE FALSE

- | | | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | 1. My parents "bug" me a lot. |
| ☐ | ☐ | 2. I don't have enough freedom at home. |
| ☐ | ☐ | 3. My parents treat me like a baby. |
| ☐ | ☐ | 4. I think about running away from home. |
| ☐ | ☐ | 5. My teacher often gets angry with me. |
| ☐ | ☐ | 6. Some of my friends think it is fun to cheat, skip school, etc. |
| ☐ | ☐ | 7. Other students don't like to play or work with me. |
| ☐ | ☐ | 8. Sometimes I get so angry at school that I yell at the teacher and want to stomp out of the room. |
| ☐ | ☐ | 9. I have some friends that I don't invite over to my house. |
| ☐ | ☐ | 10. Other kids don't seem to like me very much. |
| ☐ | ☐ | 11. I argue a lot with my family. |
| ☐ | ☐ | 12. My family doesn't do many things together, like going places or playing games. |
| ☐ | ☐ | 13. I get in too many arguments with people I know. |
| ☐ | ☐ | 14. I sometimes stammer or stutter when the teacher calls on me. |
| ☐ | ☐ | 15. When my parents don't let me do what I want, I get real quiet and don't talk. |
| ☐ | ☐ | 16. I am not interested in schoolwork. |
| ☐ | ☐ | 17. My parents don't spend enough time with me. |
| ☐ | ☐ | 18. My parents say that I am awkward and clumsy. |
| ☐ | ☐ | 19. Other people don't like to share things with me. |
| ☐ | ☐ | 20. My parents don't approve of some of my friends. |
| ☐ | ☐ | 21. I spend too much time playing/working by myself. |
| ☐ | ☐ | 22. My friends say that I am clumsy. |
| ☐ | ☐ | 23. The teacher doesn't choose me to run errands. |
| ☐ | ☐ | 24. Other kids don't listen to me when I have something important to say. |
| ☐ | ☐ | 25. I don't have enough friends. |
| ☐ | ☐ | 26. I can't seem to concentrate in class. |
| ☐ | ☐ | 27. My teachers don't listen to me. |
| ☐ | ☐ | 28. Usually, I am not interested in what my teachers have to say to me. |
| ☐ | ☐ | 29. My teachers give me work that I cannot do. |
| ☐ | ☐ | 30. Other kids say I act like a baby. |

TRUE FALSE

- | | | |
|--------------------------|--------------------------|---|
| ☐ | ☐ | 31. I seem to get into a lot of fights. |
| ☐ | ☐ | 32. It is hard for me to make new friends. |
| ☐ | ☐ | 33. I have lots of nightmares and bad dreams. |
| ☐ | ☐ | 34. I get real angry with the way other kids treat me. |
| ☐ | ☐ | 35. My parents expect too much of me. |
| ☐ | ☐ | 36. I sometimes play "hooky." |
| ☐ | ☐ | 37. I have difficulty sitting still in class. |
| ☐ | ☐ | 38. Often, I think about getting sick so I won't have to go to school. |
| ☐ | ☐ | 39. My parents won't let me spend the night away from home. |
| ☐ | ☐ | 40. I don't like it when the teacher tells me what to do. |
| ☐ | ☐ | 41. Teachers are often unfair to me. |
| ☐ | ☐ | 42. I get teased a lot by other kids. |
| ☐ | ☐ | 43. I rarely get to spend the night with my friends at their homes. |
| ☐ | ☐ | 44. People think I'm unattractive. |
| ☐ | ☐ | 45. I am dissatisfied with my progress in school. |
| ☐ | ☐ | 46. I don't like to do chores in the classroom, like erasing the board or running errands. |
| ☐ | ☐ | 47. I often break rules set by my parents. |
| ☐ | ☐ | 48. I never get my way at home. |
| ☐ | ☐ | 49. I am shy around my parents' friends. |
| ☐ | ☐ | 50. Occasionally, I get so upset at things that happen at school that I get sick. |
| ☐ | ☐ | 51. At home, I'm always trying to get out of my chores. |
| ☐ | ☐ | 52. I do a lot of daydreaming in class. |
| ☐ | ☐ | 53. I don't tell anybody how I feel. |
| ☐ | ☐ | 54. I am rarely invited to a friend's home to eat or play. |
| ☐ | ☐ | 55. I can't seem to stay in my desk at school. |
| ☐ | ☐ | 56. Other kids are always picking on me. |
| ☐ | ☐ | 57. I don't listen when my parents are talking to me. |
| ☐ | ☐ | 58. When at home, I spend too much time daydreaming. |
| ☐ | ☐ | 59. The things I learn in school are not as important or helpful as the things I learn outside of school. |
| ☐ | ☐ | 60. Some people think I am dumb. |

Please respond to each of the strategies listed below in terms of how often you use each strategy to solve problems.

- | | | | | |
|-------|--------------|-------|------------|--------|
| 1 | 2 | 3 | 4 | 5 |
| Never | Occasionally | Often | Very Often | Always |
-
- ☐ 1. When it comes to deciding how to solve a problem, God and I work together as partners.
 - ☐ 2. After I have gone through a rough time, I try to make sense of it without relying on God.
 - ☐ 3. Rather than trying to come up with the right solution to a problem myself, I let God decide how to deal with it.
 - ☐ 4. When I have difficulty, I decide what it means by myself without God's help.
 - ☐ 5. In carrying out solutions to my problems, I wait for God to take control and know somehow He'll work it out.
 - ☐ 6. When considering a difficult situation, God and I work together to think of possible solutions.
 - ☐ 7. I do not think of different solutions to my problems because God provides them for me.
 - ☐ 8. Together, God and I put my plans into action.
 - ☐ 9. When faced with trouble, I deal with my feelings without God's help.
 - ☐ 10. When I feel nervous or anxious about a problem, I work together with God to find a way to relieve my worries.
 - ☐ 11. When deciding on a solution, I make a choice independent of God's input.
 - ☐ 12. When a troublesome issue arises, I leave it up to God to decide what it means for me.
 - ☐ 13. I act to solve my problems without God's help.
 - ☐ 14. I don't spend much time thinking about troubles I've had; God makes sense of them for me.
 - ☐ 15. After solving a problem, I work with God to make sense of it.
 - ☐ 16. When a situation makes me anxious, I wait for God to take those feelings away.
 - ☐ 17. When I have a problem, I talk to God about it and together we decide what it means.
 - ☐ 18. When thinking about a difficulty, I try to come up with possible solutions without God's help.

Beliefs About Aggression

Age: _____

Sex: ___ Male ___ Female

Instructions: Read each statement carefully. Place a check () next to the answer that best reflects your views. Answer the statements as TRUTHFULLY as possible.

1. It is all right to hit someone who is harassing you when you are angry.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
2. It is important to show everyone how tough you are by being a good fighter.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
3. If you back down from a fight, everyone will think you are a coward.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
4. People respect you if you are seen as a "fighter."
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
5. If assaulted I will retaliate (strike back).
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
6. It is all right to attack someone who stares you down.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
7. A person who does not back down from a fight is brave.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
8. It is acceptable to attack someone before that person gets a chance to do it.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
9. Aggressive people are respected by their peers.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
10. Short-tempered individuals gets whatever they want.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
11. If threatened with bodily harm, its O.K. to attack that person before he or she gets you.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
12. You gain respect by fighting.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
13. Anyone who hurts or insults you deserves to be physically attacked.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree

14. Friends respect you when you know how to fight.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
15. A passive, shy person is usually taken advantage of by his or her peers.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
16. If someone hits you with an elbow in a basketball game, its acceptable to do the same thing to the individual.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
17. It is important that you be known as a "tough" person.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
18. Being aggressive is important part of who I am.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
19. It is acceptable to use violence to get your own way.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
20. If challenge to a fight, I will not back down.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
21. If someone steps on my new sneakers, it is O.K. to attack that person.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
22. Winning a physical fight brings recognition to the aggressor.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
23. You see someone with your stolen jacket, it is all right to physically take the jacket back.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
24. It is acceptable to assault someone if that is what it takes to get something you want.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
25. Being known as a fighter makes me cool.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree
26. Fighting to protect your honor is a just cause.
 ___strongly disagree ___disagree ___neutral ___agree ___strongly agree

APPENDIX B

Informed Consent

I, _____, agree to take part in the adolescent research project that Kelvin Marcelli, Dr. Curtis Fox, and Dr. Delores Smith are doing.

I understand that the purpose of the research is to better understand how adolescents feel about themselves, their beliefs about aggression and their attitudes toward religion in regards to problem solving.

I understand my child has a choice about taking part in the study and may refuse to participate. I also understand there would be no penalty if I decline to participate in the study.

I understand my child will complete a questionnaire that will take about 20 minutes.

I understand my child's answers are private and that no one except him or her will know what they wrote.

I understand the surveys would be anonymously completed; therefore, the information cannot be traced to my child.

I understand my child will be one of the hundreds of adolescents who are expected to take part in this study.

I understand there are no known risks related to the study. I understand if at any time I have further questions, I may call or write the following individuals:

Kelvin Marcelli
University of Tennessee
Dept. of Psychology
Knoxville, TN 37996
(423) 974-2161

Curtis Fox
University of Tennessee
Dept. of Child/Family Studies
Chattanooga, TN 37403
(423) 755-4550

Dr. Delores Smith
University of Tennessee
Dept. of Child/Family Studies
Knoxville, TN 37996
(423) 974-5599

Parent or guardian's signature

Student's signature

Date

Date

VITA

Kelvin Donald Marcelli was born in St. Thomas, United States Virgin Islands (U.S.V.I.) on June 20, 1965. He was educated through the public school system in St. Thomas, U.S.V.I., where he graduated from the Charlotte Amalie High School in June, 1983. He then entered the University of the Virgin Islands in August, 1983. He attended the University of New Mexico on the National Student Exchange program from August, 1985 to May, 1986. He graduated from the University of the Virgin Islands in May, 1987 with a Bachelor of Arts degree in Psychology. After six years of working in various job positions, such as mental health counselor, homeless shelter manager, and lastly, United States probation officer, he entered Tennessee State University (Nashville, Tennessee) in August, 1993. There he received a Master of Science degree in Psychology in May, 1995. He then entered the Clinical Psychology doctoral program at the University of Knoxville (Knoxville, Tennessee) in August, 1995. He worked part-time as a group facilitator with men who committed domestic violence in his last year of school. He will complete his clinical psychology internship at the Gainesville Veterans Administration Medical Center in Gainesville, Florida. The doctoral degree in Psychology will be conferred upon him in August, 2001.