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# Role of Trauma in Social-Cognitive Adjustment Strategies and Moral Disengagement among African-American Urban Youth

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# **CHAPTER I**

# **Statement of the Problem**

Juvenile delinquency is a growing problem that has drastic societal consequences. Of particular concern is the dramatic rise in violent offenses committed by adolescents (Tate, Peppucci, & Mulvey, 1995). The financial burden placed on society for housing and treating juvenile delinquents is staggering. The cost of violent crime involves not only immediate loses, but also the long-term expense of treating and managing the offender (Ellis & Sowers, 2000). It was estimated that failing to prevent one youth from a "life of crime" can costs society between \$1.7 and \$2.3 million dollars (Cohen, 1998). However, finding ways to reduce adolescent criminal behavior has been a difficult task.

Another alarming issue is the overrepresentation of minorities from inner-city neighborhoods involved in the juvenile justice system. In addition, many juvenile offenders from inner city communities experience a high degree of trauma exposure. Some studies have found only modest significant relationships between exposure to violence and psychological and behavioral difficulties (Ng-Mak, Salzinger, Feldman, & Stueve, 2002). Other studies that will be discussed in later sections report higher significant relationships between exposure to violence and externalizing or delinquent behaviors.

Recent studies have shown that alarmingly high numbers of African American children have been victimized or witnessed victimization at some time in their life. In terms of violence exposure, Osofsky, Werers, Hann, and Fick (1993) found that 91% of African American children living in inner city neighborhoods witnessed violence. Accordingly, African American children had victimization rates as high as 70% (Dempsey, 2002). The Diagnostic and Statistical Manual—IV of the American Psychiatric Association (2000) found that out of 221 low-income African American youth 27% met full criteria for a PTSD diagnosis and only 11% failed to meet any of the PTSD symptom criteria. This chronic exposure to violence that African American youth living in inner city communities experience can have a profound impact on their psychological state. Many of these juveniles have high intensity anger and their ability to cope psychologically may be inhibited by trauma exposure and victimization.

Research studies suggest an imperative need for trauma intervention programs as a prevention method for crime and recidivism. It is important to note that upon release from detention facilities, most offenders return to their communities where the same risk factors that may have been responsible for their incarceration are still present. Such exposure can be direct as mentioned earlier, or through media avenues such as television, music, and movies. If these adolescents have difficulty finding effective solutions to their challenging social world and coping with their environment, this re-exposure to trauma, in addition to many environmental and cultural influences leads to the juvenile detention centers becoming nothing more than a "revolving door" for adolescent offenders. Without proper intervention strategies, such chronic negative experiences can adversely affect the youth's development, their communities, and society as a whole.

# Ethnicity and Gender

African Americans and Latinos are overrepresented within many of the major inner cities throughout the United States. The primary population of focus in this review is African American youth although additional information is provided on inner city ethnic minorities in general, and other populations to elaborate and provide a thorough literature background. On the surface, Latinos may be a more heterogeneous population than African Americans. Latinos in the United States often have different countries of origin such as Mexico, Cuba, Puerto Rico, and various other parts of South America. This paper is meant to be a review of the literature and provide a framework for research on how a certain population is impacted by trauma, how they are affected by it, cope with it, and adapt to it. Given the heterogeneity of the Latino population as previously explained, future studies will explore these processes within this population and control for the potential differences caused by varying countries of descent. Although researchers and clinicians should always be cautious of making generalizations, it is important to understand the dynamic reciprocal interaction between person and environment within a specific socio-cultural context.

In terms of sex differences, recent studies suggest that the gender gap of externalizing behaviors dissipates as individuals developmentally progress through adolescence (Galambos, Baker, & Almeida, 2003). A longitudinal study conducted on New York City sixth and seventh graders found that girls had greater increases in aggression compared to boys (Nichols, Graber, Brooks-Gunn, & Botvin, 2006). There has been a steady rise in the antisocial behavior of young females. Molnar, Roberts, Browne, Gardener, and Buka (2005) stated that there have been increases in girls' involvement in violence and reported corresponding increases in arrests for this population in the United States. Based on the literature on increasing violent offenses among inner city minority girls, this review will focus on the population irrespective of gender differences. However, future research will explore gender differences to expand on the topics discussed in the current paper.

#### Trauma

The concept "trauma" has a very broad definition because it can encompass a wide spectrum of experiences. Allen (1995) defined trauma as an experience of a threatening or overwhelming event that leads to an extreme stress reaction. The American Psychiatric Association (2000) defined a stressful event as witnessing and/or being the target of a threatening situation and the person experiences intense fear, helplessness, or horror. This paper does not define trauma exclusively as those who have developed symptoms of Post Traumatic Stress Disorder (PTSD) because this can be very limiting. Not all individuals who are exposed to traumatic experiences necessarily meet criteria for PTSD, but this does not exclude them from being victims of past or current traumatic events. As this relates to inner city youth, there are extremely stressful environmental conditions which expose them to chronic and sometimes dangerous situations. Therefore, trauma in this review refers to a broad spectrum of these events rather than being limited to the diagnosis of PTSD.

Buckner, Beardslee, and Bussuk (2004) found that exposure to violence in any of its variations appeared to be the most damaging and detrimental experience for a child. Unfortunately, ethnic minorities in nearly every inner city in America are exposed to trauma on a chronic basis. Although research has provided much information on gender differences in victimization for minority youth living in urban areas, it is clear that males are more frequently the targets of non-sexual violent, physical aggression. This may be due to higher physical violence between males in dealing with conflict, even though this number has been increasing for females. Furthermore, this disparity is striking in terms of ethnicity. The odds of a black male being a homicide victim is 1:21; 1:104 for black females; 1:131 for white males; and 1:369 for white females (Bell & Jenkins, 1991). Data also suggest that there is a higher incidence of child, spouse, and partner physical abuse among African Americans (Hampton, 1987). In a study conducted in a violent neighborhood in Chicago, 73% of children surveyed reported that they witnessed someone being shot, stabbed, robbed, or killed (Shakoor & Chalmers, 1991). In Washington, DC, 45% of children witnessed muggings, and 39% had seen dead bodies (Richters & Martinez, 1994). Wyatt (1992), based on a study of rape victims, suggested that African American women accept their victimization as inevitable. African American women who were raped were more likely than White women to offer explanations about their victimization that involved the riskiness of their living conditions and held a belief that they were more likely to be sexually assaulted (Wyatt, 1992; Hammond & Yung, 1994). This parallels the theory regarding inner city youth in which chronic exposure to violence and trauma among African Americans in poor inner city areas can lead to a feeling of helplessness and inescapable vulnerability.

Media attention following incidents such as the Columbine school shooting, and similar incidents has led to increasing awareness of school violence. However, violence in schools is not a new phenomenon. Thus, it is not to say that these incidents should not cause alarm, but these issues should have been addressed when the first warning signs appeared. Violence and guns in inner city schools were a huge problem prior to the first media publicized school shooting incident. If this had been addressed then, perhaps school psychologists and other health officials would have been better prepared for how to deal with such tragedies. The traumatic experiences that inner city youth are exposed to include violence in the home, school, and community. One would hope that most environments would be protective factors for a child. Unfortunately, many urban youth deal with trauma across settings at a chronic level. This can have long-standing consequences on a child's adjustment. These include chronic PTSD, personality alterations, and major behavioral and belief changes to make sense of this constant exposure (Garbarino, 1999).

# Trauma's Link to Delinquency and Aggression

Adolescence is a time when many youth go through an exploration, growth, and experimentation stage to define their identity (Dusek & Flaherty, 1981). However, traumatic experiences can disrupt this process and lead to maladaptive behaviors. Esbensen and Huizinga (1991) suggest that the probability of youths' victimization increases proportionately with their involvement with delinquency. This may be a reciprocal process that begins with a traumatic experience. The literature has firmly established the role of trauma in the etiology of delinquency, particularly how it disproportionately affects ethnic minority youth in inner city communities. These experiences include, but are not limited to, sexual abuse, physical abuse, family, school, and community violence. A recent study of low-income, multiethnic youth in alternative high schools in Miami found that more than 93% had witnessed at least one violent event in their community, 44% had been victims of at least one of these violent events, and 41.6% had witnessed a murder (Berman, Kurtines, Silverman, & Serafini, 1996). Homicide is the leading cause of death among African American youth (Fingerhut, Ingram, & Feldman, 1992). Such chronic exposure to violence may have a tendency to magnify disruptive behaviors.

Widom (1989) found a strong relationship between history of either physical abuse or neglect and later violent behavior. Studies have continued to document the relationship between violence exposure, victimization, and delinquency (Rickel & Becker-Lausen, 1995).

Collins and Bailey (1990) conducted research with a sample of 1,140 incarcerated adult male felons and found a relationship between PTSD, arrest, and incarceration for expressive violence, when demographic, antisocial personality, and problem drinking variables were controlled. Artz (1998) found that violent girls reported significantly greater rates of victimization and abuse than their nonviolent counterparts. A study of the backgrounds of 96 girls in custody by the California Youth Study found that although boys were more likely to be traumatized as observers of violence, girls were more likely to be direct victims and have higher rates of PTSD (Caufman, Feldman, Waterman, & Steiner, 1998). Studies of juvenile offenders reveal that as much as 24% to 51% of male juvenile offenders (Berton & Stabb, 1996; Burton, Foy, Bwanausi, Johnson, & Moore, 1994; McMackin, Morrissey, Newman, Erwin & Daly, 1998; Nadel, Spellman, Alvarez-Canino, Lausell-Bryant, & Landsberg, 1996) and 49% of female juvenile offenders meet criteria for a PTSD diagnosis (Caufman, et al., 1998). Studies indicate that 25% to 30% of individuals exposed to traumatic events subsequently develop PTSD (Carlson, 1997). One study of abused women and their children revealed that the earlier the youth was exposed to domestic violence, the more frequent and severe was the youth's participation in delinquent behavior (Kruttschnitt & Dornfeld, 1993). This is extremely disturbing because children and adolescents where partner violence occurs are physically abused or seriously neglected at a rate of 1,500% higher than the national average (OJJDP, 2000). Children who come from violent homes are at higher risk for developing maladaptive behaviors and psychological problems. Overall, effects of exposure to partner violence can include anxiety, depression, low self-esteem, suicide, withdrawal, anger, aggression, acting out, and substance use (Johnson & Ferraro, 2000). According to Novaco and Chemtob (1998) anger regulation is affected by traumatic experience. Violent and aggressive behavior is unfortunately common among inner city delinquent and youthful offenders. When children are unable to cope with their angry feelings, they are more likely to act out in the form of violence (Omizo, Hershberger, & Omizo, 1988). Research has established a strong link between trauma and the aggressive, acting out behavior of juvenile offenders.

# Coping Responses

Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person." This definition has been widely used in research to understand the concept of "coping." There has been a number of ways that researchers have classified coping processes. Two main coping responses that have been identified are problem-focused and emotion-focused coping (Lazarus & Folkman, 1984; Compas, Davis, Forsythe, & Wagner, 1987). Problem-focused coping aims to change the stressful situation, and emotion-focused coping attempts to change the emotional reactions to the stressful situation (Lazarus & Folkman, 1984; Griffith, Dubow, & Ippolito, 2000). The approach-avoidance dichotomy has been used in research on coping responses. Approach coping is similar to the problem-focused style because it includes direct efforts to alter the stressor. The avoidance approach, like emotionfocused coping, refers to the attempts to distance oneself by focusing on feelings or avoiding the problem (Griffith et al., 2000).

Wagner, Myers, and McIninch (1999) stated that the best selection of a coping strategy might be contingent upon the control the individual has over the stressor. Controllable stressors may call for problem-focused coping, and emotion-focused strategies may be best for stressors that must be endured and outside the person's control (Wagner et al., 1999). Studies have shown that approach coping are usually used when stressors are perceived as controllable compared to avoidance strategies, which are more likely to be elicited when stressors are not perceived as within the person's control (Griffith et al., 2000).

Research has shown interesting, but mixed age differences in coping techniques. According to Stern and Zevon (1990), younger adolescents (ages13-17) used more emotion-focused coping than older adolescents (18-20), whereas Altshuler and Ruble (1989) found that older children (9-12) used more avoidance strategies than younger children (5-8). Other researchers have found no significant age differences in coping responses to stressors. Gender has revealed similar patterns of mixed findings. Reid, Dubow, and Carey (1995) reported that females used more avoidance coping on several stressors, while others found no gender differences (Griffith et al., 2000). Other research found that females reported a greater number of stressful events as well as being more affected by these events than males (Newcomb, Huba, & Bentler, 1986; Roecker, Dubow, & Donaldson, 1996; Stark, Spirito, Williams, & Guevremont, 1989). Griffith et al. (1999) demonstrated that not only do females report more stressors, but they also used more approach and avoidance coping strategies. Patterson & McCubbin (1987) suggested that female's tendency to use more approach coping might be due to their socialization within our society.

Griffith et al. (1999) found that in terms of ethnicity African American students reported higher levels of approach coping than Caucasians, but also more avoidance coping than Caucasians and Hispanics for peer stressors. However, the sample sizes were disproportionate leading them to caution the reader on the generalizability of their results on these ethnic differences.

### Trauma's Impact on Coping Responses

Violence exposure is extremely prevalent in inner city communities across America. In recent years, particularly among Black and Hispanic youth, homicide was the leading cause of death (Singh & Yu, 1996). A study by Ginsberg, Loffredo, and the Centers for Disease Control and Prevention (1993) found in a sample of youth in New York City, that 36% were physically threatened and 25% were involved in a physical altercation during the preceding year. Vaughan, McCarthy, Armstrong, Walter, Waterman, and Tiezzi (1996) stated that 42% of middle school, inner-city children admitted to having a close friend or relative who had been shot. Among the research on exposure to violence is the literature on the effects of coping. Research has shown high rates of PTSD and trauma symptomatology among inner city youth. Berman et al. (1996) indicated that negative coping styles such as distraction, withdrawal, criticizing, and blaming others were positively associated with PTSD (Post Traumatic Stress Disorder), whereas positive coping strategies such as problem solving and cognitive restructuring were not associated with PTSD. PTSD is a syndrome that includes symptom clusters of hyperarousal, reexperiencing the trauma, and avoidance or numbing, which can be acute

or chronic (Allen, 1995). The authors noted the confounding issues in this study were that the behaviors inherent in PTSD include many of these negative coping strategies. One possible conclusion is that a disproportionate amount of inner city youth use more negative coping strategies as evidence by the higher rates of PTSD. However, determining any causal relationship is difficult because it is a daunting task to find out whether the negative coping strategies is a result of the trauma, or if the trauma is a result of the negative coping.

Rosario, Salzinger, Feldman, and Ng-Mak (2003) studied the moderating role of coping in the relationship between community exposure and delinquency, in which coping was defined as the use of social relationships and behavioral strategies to buffer the impact of stress. High-risk coping has been described as a mixture of aggressive and withdrawn behavior, and more effective coping includes a plethora of solution oriented and behavioral control strategies (Blechman, Dumas, & Prinz, 1994). What can be considered as high-risk coping in some situations may place inner city youth at a lesser risk of danger. When aggression is part of the acceptable norm, reluctance to occasionally deal with problems in this manner may lead to that individual becoming a "target" for other aggressive youth.

The exposure to violence may impact coping by effecting their perceptions of safety (Rasmussen, Aber, & Bhana, 2004). Perceptions of control appear to play a role in coping and youth's exposure to violence. When the exposure is perceived as uncontrollable, it induces more fear in the youth (Rasmussen et al., 2004). This is interesting since many inner city youth may feel a sense of helplessness due to their environmental conditions. There also is a feeling of pessimism surrounding their options

for a promising and fulfilling future. It is difficult to be optimistic in the presence of many environmental and cultural stressors faced by ethnic minority inner city youth. These stressors may be viewed as uncontrollable and this is reinforced by the chronic exposure of such stressors. There have been studies linking coping styles to better adjustment and outcomes. Kliewer, Lepore, Oskin, and Johnson (1998) found that social support from parents buffered the relationship between exposure and experiencing intrusive thoughts. Unfortunately, parental support has been viewed as lacking in many poor urban areas for a variety of reasons. This can be the result of drugs, single parent homes, where one parent is often away as the "sole breadwinner", neglect, or a combination of these factors.

Rasmussen et al. (2004) pointed out that most of the literature on coping concerns White, middle class populations. In studies on African American youth, peer social support was found to moderate the relationship between exposure and problem behaviors (Rosario et al., 2003). The African American community is a collectivistic culture and places heavy emphasis on the 'group' rather than on the individual. This kind of cultural value may point to the moderating relationship of peer social support in violence exposure and problem behaviors. Unfortunately, the presence of peer support often times in inner city areas, strengthens violence exposure through gang activity.

Although much of the literature has focused on better outcomes when using approach or problem focused coping responses, some studies have found different results in terms of ethnicity. Among inner city African American youth who experienced high amounts of violence, those who engaged in more avoidant coping experiencing fewer PTSD symptoms compared to their counterparts who used less avoidant coping (Dempsey, Overstreet, & Mobley, 2000). Family violence and victimization by parents has been associated with behavioral problems in youth (Fantuzzo, DePaolo, Lambert, Martino, Anderson, & Sutton, 1991; Malinosky-Rummell, & Hansen, 1993; Salzinger, 1999). High exposure to violence can lead to a normal adaptation to such stressors. Therefore, some inner city youth may find a more confrontational style of coping as an acceptable, cultural norm. Reese, Vera, Thompson, and Reyes (2001) found that girls associate with gangs as a form of social support group to protect them from sexual victimization. This study further indicated that boys associate with gangs as a source of protection from being victimized by the gangs themselves (Reese et al., 2001). According to Rasmussen et al. (2004) African Americans confrontive coping and planful problem solving were associated with greater personal safety perceptions. The frequency of coping behaviors has not been found to be associated with a reduction in exposure to violence (Rasmussen et al., 2004). However, which coping strategies are the most effective may vary across different situations. For these inner-city youth, learning which strategies to use may be basic for survival. Ineffective use of these strategies may not only have drastic consequences for their psychological well-being, but also for physical safety.

# Coping Processes in Delinquency and Aggression

Boys witnessing community violence were protected from delinquency in the presence of high peer support compared to their counterparts experiencing lower levels of peer support (Rosario et al., 2003). Unfortunately, detention and incarceration is not uncommon for adolescents and adults in high crime communities. Once incarcerated, the primary source of a person's peer support comes from other incarcerated individuals who

are likely to have the same deficits in coping with difficult stressors. Incarcerated individuals tend to use avoidance coping styles rather than problem-focused techniques (Zamble & Porporino, 1990). This environment does not foster the development of adaptive coping strategies. It is important to note that many coping techniques used in prison may be considered maladaptive in society, but may be critical to their survival while incarcerated. Rosario et al. (2003) suggested that using avoidance coping served as a protective factor from delinquency among Black and Hispanic youth living in New York City. One research study found that delinquent females used control as a form of coping in addition to overt hostility and aggression (Kelley, Blankenburg, & McRoberts, 2002). Using aggression as a way of coping is not specific only to offenders. Research has suggested that aggression is a coping mechanism used to regulate affect. Bushman, Baumeister, and Phillips (2001) found that people responded to anger with increased aggression when they believed that they would experience an improvement in their mood. This study also revealed that people would not display aggression when they believed that such behavior would make them feel worse, thereby implicating the role that affect regulation plays in both aggressive and nonaggressive reactions (Bushman et al., 2001). Griffith et al. (2000) found that in terms of ethnicity African American students reported higher levels of approach coping than Caucasians, but also more avoidance coping than Caucasians and Hispanics for peer stressors. However, the sample sizes were disproportionate leading them to caution the reader on the generalizability of their results on these ethnic differences.

This could aide in our understanding of aggression as a form of coping among delinquent youth. However, the purpose for confrontive or aggressive behavior in high crime inner city communities may be more of a survival strategy or adaptation to their stressful environmental influences.

# Social Problem-Solving

Problem solving has been defined as a complex, cognitive, affective, and behavioral interactive process that allows the individual to generate a variety of potential effective alternatives for dealing with problematic situations in addition to increasing the likelihood of selecting the best response from these available alternatives (D'Zurilla & Nezu, 1982). Research has shown relationships between problem solving and different forms of psychopathology.

Problem solving can be interpersonal, intrapersonal, or social. In this study, the main focus will be on social problem solving. Social problem solving implies that the problem-solving situation is occurring in a real-life context and is part of a series of cognitive-behavioral skills related to social learning (D'Zurilla & Nezu, 1990). Social problem solving has been linked to suicidal behavior in adolescents (Sadowski & Kelley, 1993). Individuals who attempt suicide have a tendency to be less accurate in their problem solving thought processes, express more affect when faced with dilemmas, and use fewer adaptive behavioral responses to problematic situations compared to their distressed and nondistressed counterparts (Sadowski & Kelley, 1993).

A self-destructive or passive/avoidant problem solving orientation was found to predict depression in the presence of negative life experiences among adolescents (Adams & Adams, 1996). Problem orientation is defined as the cognitive, emotional, and behavioral influences that reveal the extent to which the individual is aware of beliefs about, appraisals, and expectancies relating to both the occurrence of problems in addition to his or her ability to solve them (Spence, Sheffield, & Donovan, 2002). When cognitions and emotions lead to the inhibition of adaptive problem solving, this is referred to as a negative problem solving orientation (Spence et al., 2002). Negative problem orientation also consists of low self-efficacy perceptions and a perception that problems are threatening and unsolvable (Kant, D'Zurilla, & Maydeu-Olivares, 1997). It encompasses negative expectations, maladaptive attributions, and disruptive emotions such as anger and anxiety (Sadowski & Kelley, 1993). Problem orientation is one aspect of social problem solving. Research suggests that this kind of orientation has been associated with depression, hopelessness, and suicide (Sadowski & Kelley, 1993). Negative problem solving orientation predicted high depression symptomatology and future increases in depression by a 1-year follow up (Spence et al., 2002). This is an interesting finding since studies have shown that women have a more negative orientation to problems (D'Zurilla, Maydeu-Olivares, & Kant, 1998; Robichaud, Dugas, & Conway, 2003). Calvete & Cardenoso (2005) found that negative orientation towards social problems was the cognitive variable that accounted for most of the variance for gender differences in depressive symptoms. Men have been found to display a more positive problem solving appraisal and greater confidence in their problem solving abilities (Robichaud et al., 2003). This may be the result of gender roles and socialization in our society. Robichaud et al. (2003) argued that such findings were consistent with the women reporting greater worry about lack of confidence issues. Studies that explore these findings in relation to gender and ethnicity could be enlightening to our understanding of problem solving strategies and psychological outcomes.

# Trauma's Impact on Social Problem Solving

Maltreated children are at risk for problems in the development of emotional and social problem solving skills (George and Main, 1979). Previous research has shown that children who are victims of child abuse, or exposed to family violence are significantly more likely to have difficulties in their social problem solving skills (Bolger & Patterson, 2003; English, Marshall, & Stewart, 2003; Pelcovitz, Kaplan, DeRosa, Mandel, & Salzinger, 2000).

According to Bolger and Patterson (2003), adolescents with traumatic histories have a tendency to prefer more aggressive behaviors in their social interactions with peers. Haskett (1990) found a correlation between a history of physical abuse and poor social problem solving ability. This research suggested that abused children demonstrated a greater limitation in their interpersonal abilities to solve problems than their nonabused counterparts. The findings further suggested that abused children show a more restricted and rigid understanding of approaches to peacefully negotiate commonly encountered social conflicts. Their approach to interpersonal problems consisted largely of antisocial behavior as opposed to adaptive, prosocial responses.

It is possible that children with a history of trauma initially attempt to solve problems using positive methods, but the literature suggests that they are more likely to resort to aggressive behavior due to deficits in their problem solving skills. Richard and Dodge (1982) found that adolescents who exhibited behavior problems were significantly more likely to choose aggression as an alternative for solving hypothetical social conflicts. Burack, Flanagan, Peled, Sutton, Zygmuntowicz and Manly (2006) found that maltreated children and adolescents were more egocentric and delayed in their social perspective-taking development than their nonmaltreated peers.

Some studies have identified the effects of trauma on neurodevelopment due to overstimulation of certain brain structures (Gorman-Smith & Tolan, 2003). Therefore, deficits in problem solving may be linked to the neurobiological effects of traumatic experiences, which is not the focus of the paper but should continue to be an area of future scientific research. From a social-learning perspective, there is peer reinforcement for aggressive behavior in inner city communities that often begins as early as the elementary school years.

# Social Problem-Solving in Delinquency and Aggression

Problem solving deficits are often manifested as impulsive behavior and associated with youth aggression and delinquency (Feindler, 1991). Impulsive adolescents often choose solutions without a thorough consideration of alternatives or their consequences (D'Zurilla, Chang, & Sanna, 2003). Calvete and Cardenosa (2005) concluded that this along with a bias for aggressive cognitions may partly explain the etiology of delinquency. Previous research has shown negative problem orientation, affective disorders, and impulsivity as being linked to externalizing behaviors (McMurran, Blair, & Egan, 2002; Calvete & Cardenoso, 2005).

Impulsivity has been shown to be a predictor of violent offending in a longitudinal investigation of young males (Klinteberg, Andersson, Magnusson, & Stattin, 1993). Social problem solving ability has the greatest mediating effect on the relationship between impulsivity and aggression (McMurran et al., 2002). Social problem solving has also been found to be a mediator in the relationship of other variables. In a sample of college students, social problem solving was found to fully mediate the link between self-esteem and general aggression (D'Zurilla et al., 2003).

Some research has hypothesized that poor verbal information processing abilities lead to poor social problem solving, which ultimately leads to aggression (McMurran et al., 2002). Akhtar and Bradley (1991) found that aggressive youth seek less information and consider few alternative solutions to problems. Adolescents with behavioral problems were significantly more likely to suggest aggressive solutions as an option for dealing with social problems (Greening, 1997). Adolescents with greater problem solving ability should respond more adaptively to difficult situations even when overt aggressive responses are available (Jaffee & D'Zurilla, 2003). Developing a repertoire of adaptive responses may be difficult for many inner city youth. Their social environment may require aggressive behavior as the most appropriate and adaptive response in dangerous situations. There are many situations however, where a nonaggressive response may be the most appropriate to prevent the escalation of a dangerous situation. Some people may question the socialization of inner city youth since some of them often choose poor solutions to the social problems they experience. This was addressed in a study by Greening (1997) who found that a cognitive bias for inappropriate alternatives is not the result of deficient social knowledge because these individuals displayed recognition of effective solutions on a problem-solving inventory.

#### Social/Emotional Support as a Protective Factor

The rates of trauma are alarmingly high in these environments and some kind of support system can often serve as a protective factor to assist at-risk youth in developing their ability to solve social problems in more prosocial and adaptive ways. Research studies based on social learning theories have suggested that social support is vital for youth who had suffered direct or indirect trauma. Reviewing the most recent literature on the impact and management of trauma, Caffo, Forresi, and Lievers (2005) found that support has been considered to be an important protective factor on the relationship between exposure to traumatic events and psychosocial symptoms in children and adolescents. Lack of social support is thought to have contributed to the high prevalence of many disorders such as post-traumatic stress disorder (PTSD) (e.g., the high prevalence of PTSD found among Vietnam veterans may have been aggravated by lack of social support) (Oltmanns & Emery, 2001). Social networks offering support immediately after the trauma is a common goal of many interventions because it helps victims verbalize and process the experience and avoid the cognitive process of selfblame and remorse (Oltmanns & Emery, 2001). In fact, the U.S. government has emphasized this notion during massive disasters (Gold & Faust, 2002).

Group therapy and psycho-educational therapy in collaboration with members of close social networks has proven effective to help the victims of mass disasters and abuse (Oltmanns & Emery, 2001; McGain & McKinzey, 1995). Several studies have shown evidence of the benefits acquired (e.g., improved psychosocial functioning and adjustment) by therapeutic treatment modalities guided towards enhancing social support (Mohlen, Parzer, Resch, & Brunner, 2005; Tremblay, Hebert, & Piche, 1999). Other studies have suggested that early interventions for communities that experience traumatic events should incorporate special emphasis on forming both individual and environmental support systems (Shalev, Tuval-Mashiach, & Hadar, 2004). Either way, most studies agree that social support and its enhancement in the community and close

networks is a vital intervention for all different types of trauma. In addition, social support exerts a direct influence on the child's adjustment rather than on the mediator influences (Tremblay et al., 1999).

The need to provide social support and psycho-educational therapy to the traumatized child and the larger system is vital to decrease the potential to develop psychosocial problems (Mohlen et al., 2005), externalizing behaviors, and avoid secondary traumatization in family members (Manion, McIntyre, Firestone, Ligezinska, Ensom, & Wells, 1996). The presence of effective social support for traumatized youth could potentially decrease the likelihood of these children becoming abusers and violent adults (Ruscio, 2001; Hall, Sachs, & Rayens, 1998).

Garmezy (1988) found that positive and stable social support was critical in protecting youth from the stressful effects of community violence. Hawkins, Farrington, and Catalano (1998) indicated that available emotional and practical support contributes to positive adjustment and buffers the negative effects of stress. Children are less likely to withdraw and increase the negative effects of being exposed to stressful conditions when they feel secure and have secure relationships that provide needed resources, advice, and emotional release (Dulmus, 2003).

One research study that looked at the relationship between parental problem solving, adolescent problem solving, and externalizing behaviors, suggested that preventive measures are needed to train parents how to teach effective problem solving to their preadolescent and adolescent children (Jaffee & D'Zurilla, 2003). However, in many inner city communities, there is a breakdown of the family structure. In such situations, it may be important to wonder whether these youth turn to peers or school when the family does not provide an environment conducive for the child to learn how to solve problems.

## Moral Development

Kohlberg (1976) progressively developed a theory of didactic moral development based on the paradigm that thinking can develop into behavior. According to Kohlberg and Hersh (1977), moral development represents the transformations that occur in a person's form or structure of thought, in addition to representing acquired cultural and ethical information. With this definition, Kohlberg and Hersh (1977) advocated the notion that moral development is an intrinsic factor that is universal regardless of differences across cultures and ethnic groups. In order to study moral development, they elucidated six-stages through which moral reasoning develops based on the assumption that moral education can stimulate people's thinking ability over time in ways which will enable them to use more adequate and complex reasoning patterns to solve moral problems, and that justice is a basic and universal standard (Kohlberg and Hersh, 1977).

The six-stage theory of moral development (Kohlberg, 1976) involves the following progression: (1) the punishment-and-obedience orientation: physical outcomes of the individual's behaviors determine moral reasoning; (2) the instrumental-relativist orientation: moral reasoning is determined by self-instrumental satisfaction; (3) the interpersonal concordance or "good boy – nice girl" orientation: the right action is dictated by other's approval; (4) the "law and order" orientation: moral reasoning is guided by authority, regulations, and social order; (5) the social-contract, legalistic orientation: moral reasoning is dictated by beliefs of individual rights and standards at the societal level; and (6) the universal-ethical-principle orientation: moral reasoning is

the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency.

The first two stages are at the preconventional level, where the child understands right and wrong doing, but only in terms of the consequences (i.e., punishment, reward). The next two levels (i.e., 3 and 4) are at the conventional level, where behavior is maintained by other individuals' expectations regardless of the consequences. The final two levels (i.e., 5 and 6) are at the postconventional, autonomous, or principled level, in which it is perceived an effort to define valuable and pragmatic moral values and principles regardless of others (Kohlberg & Hersh, 1977).

### Demographic differences in Moral Development

In terms of age differences, prosocial and moral behaviors are greater during adolescence than during childhood (Fabes, Carlo, Kupanoff, & Laible, 1999). Carlo and colleagues (1999) stated that, "few developmental periods are characterized by so many changes at so many differing levels as is early adolescence. With these rapid and multiple changes comes a heightened potential both for positive and negative outcomes." The ability to display higher degrees of prosocial behaviors as a child progresses to adolescence has been advocated by numerous developmental psychologists and theorists (Eisenberg, 1986; Kohlberg, 1976; Piaget, 1932; Piaget, 1965) and has been supported in several studies (Fabes & Eisenberg, 1996; Fabes et al., 1999). Weiss's (1982) study supports the idea of different levels of moral thinking. Moral understanding was shown to be directly and positively associated to moral decision making in adolescents (16 to 18 years of age).

Studies have revealed mixed results in gender differences regarding the display of prosocial behaviors. Eisenberg and Fabes (1998) indicated that girls had a tendency to be more prosocial during both childhood and adolescence than boys, and this gender difference also increases with age (Fabes et al., 1999). Other studies have shown that there is not much gender difference in the manner in which positive behaviors are developed. A meta-analysis by Mednick (1989) revealed no significant gender differences between the use of 'care' and 'justice' moral orientations. The 'care' orientation refers to a desire to maintain relationships and respond to other's needs, whereas the 'justice' orientation is the balance between a consideration of fairness and equity. In contrast, Jaffe and Hyde (2000) found that the care orientation is employed mostly by females and the justice orientation is used mostly by males (Jaffe & Hyde, 2000).

#### Environmental Influences on Moral Development

Positive outcomes are influenced and enhanced by a myriad of individual and environmental processes (Carlo et al., 1999; Fabes et al., 1999). Individual processes have been significantly associated to prosocial behaviors such as changes associated with puberty (e.g., physical changes, motivation for sexual intimacy, and adherence to gender roles), moral reasoning, perspective taking defined as the ability or tendency to understand the internal and external states of others (e.g., going from egocentric to sociocentric), empathy and sympathy as forms of emotional involvement, cognitive processes, temperament, and personality (Fabes et al., 1999).

Environmental processes such as the influence of family, peers, schooling, and society have also been associated with changes in prosocial and moral behaviors during adolescence (Carlo et al., 1999). In relation to family influences on positive outcome, attention has been focused on the parent-child conflict that emerges during adolescence. Coleman (1961) suggested that the parent-child conflict is the result of intergenerational disputes within the family, whereas Collins (1997) stated that this conflict arises due to incongruities between the anticipated and the actual behavior of family members (Carlo et al., 1999). Eisenberg and Murphy (1995) found that parents influence the moral development of children by directly modeling, teaching, reinforcing, and punishing the child to guide him/her towards the positive desired behaviors, and by encouraging empathy development (Carlo et al., 1999).

Dunn and Munn (1986) suggested that other family members such as siblings can influence the moral development and the use of prosocial behaviors by propitiating conflicting situations that may foster social understanding (Carlo et al., 1999). A study by Simmons and Blyth (1987) suggested that the development of peer networks affect the development of self-esteem, which according to Berndt and Keefe (1995), affects motivation and participation in positive activities (e.g., getting good grades, participating in extracurricular programs) (Carlo et al., 1999).

Moral development can be influenced and regulated by culture and ethnicity. Research studies support the notion that cultural standards and experiences influence prosocial and moral behaviors during adolescence. Staub (1978) found that empathy, self-gain and approval, and internalized values (e.g., responsibility, justice, norms in society) are types of motives identified as necessary foundations for prosocial behaviors. According to Whiting and Edwards (1988), cultural and social contexts and activities may encourage motives deemed particularly important to specific cultures (Carlo et al., 1999).

## Moral Development and Reasoning link to Transgressive Behavior

Research suggests that behavior is influenced by moral reasoning (Higgins, 1989; Power, Higgins, & Kohlberg, 1989). A study by Kuther (2000) indicated that preconventional moral reasoning and perceptions of low behavioral and scholastic competence, as evidenced by substance use and antisocial behavior, may serve as risk factors for engagement in transgressive and dangerous activity. However, other studies have suggested that moral reasoning is related to antisocial behavior and less consistently with substance use (Trevethan & Walker, 1989; Gibbs, 1991).

Humphries, Parker, and Jagers (2000) conducted a study that examined predictors of moral reasoning among African American children. One noteworthy finding that emerged from this study is that not only was grade a predictor of moral reasoning but it was the only significant correlate of moral reasoning for girls. For example, females in higher grades were in higher stages of moral reasoning. Gibb (1991) suggests that with increasing age, people acquire greater skills, knowledge, and experience and as people acquire more experience making moral judgments, their moral reasoning abilities improve. In regards to gender, studies have found among adolescents that moral reasoning of girls is better developed than boys (Garmon, Basinger, Gregg, & Gibbs, 1996). This has been supported by other studies (Humphries, Parker and Jagers, 2000).

Delinquency provides a natural ground for testing the relations between moral reasoning and moral behavior (Blasi, 1980). There are a number of empirical studies that support the hypothesis that delinquent individuals tend to use developmentally lower levels of moral reasoning compared to their non delinquent counterparts. Blasi (1980) critically reviewed and analyzed the existing literature on moral reasoning studies and concluded delinquent behaviors may be the result of personality characteristics as opposed to level of moral reasoning.

Social scientists have also identified the importance of cultural factors in moral development. Ward (1995) focused primarily on morality of African American adolescents from a cultural perspective and found that being 'Black' meant exposure to strong forces of sociocultural, economic, and political oppression. Based on this notion, Black youths internalize a reality that forces them to feel disconnected from mainstream society (Ward, 1995). Detachment in human relationships can create serious problems in moral development and reasoning. Ward (1995) identified lack of care and a feeling of isolation as variables contributing to poor moral development in African American adolescents, subsequently leading to violent and other forms of transgressive behaviors.

The media has also been implicated in the breakdown of moral reasoning among inner city youth. Media messages that glorify violence may result in feelings of ambivalence among the youth about how they should handle and express their anger and frustration. This can be particularly challenging when the youth are not only bombarded with media violence but also violence in their communities. In some cases, violence is encouraged and accepted as 'necessary' for survival.

It is important to direct attention towards the role of moral reasoning as this is one avenue that can expand our understanding of engagement of risky behaviors. In examining moral development in African American youths we must look at how cultural norms affect differential experiences. Further studies should be done in this area so that a more comprehensive understanding of the African American youth's moral development is achieved.

It has been suggested that behavioral outcomes, when faced with moral dilemmas in social situations may be different across diverse cultures or ethnic groups, in terms of the rate of recurrence and the motivation to act prosocially (Carlo et al., 1999). This is critical in environments where the residents are exposed to high rates of violence. It may be easier to have a higher tolerance for transgressive behavior when violence is normalized as a result of chronic exposure to such acts.

# Bandura's Theory of Moral Disengagement

Morality implies the use of thoughts, feelings, and actions of the self and others in both transgressive and benevolent behaviors (Humphries, Parker, & Jagers, 2000). Moral standards are developed through the use of direct tuition, self-evaluations of conduct, and exposure of these standards modeled by others (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). People use this as a way to guide their actions and behaviors. From a social-cognitive perspective, moral agency is viewed within the context of selfregulation. This process includes self-monitoring of one's conduct, action which gives rise to self-reaction by which judgment is evaluated against internal standards and situations, and moral judgment sets the occasion for this self-reactive influence (Bandura et al., 1996). These self-reactive influences do not operate unless they are activated, and self-sanctions can be disengaged from inhumane conduct (Bandura, 1990, 1991). Therefore, someone can respond to a situation in different ways without changing their moral standards. Bandura (1999) refers to this process as serving a dual purpose. The inhibitive form of morality is expressed in the power to refrain from behaving humanely, whereas the proactive form is expressed in the power to behave humanely (Bandura, Caprara, Barbaranelli, Pastorelli, & Regalia, 2001). Therefore, someone can selectively activate and disengage their internal controls. According to Bandura (1990), self-sanctions can be disengaged when an individual rationalizes their behavior. This concept has been used to understand how 'man' can commit atrocities against other human beings.

Moral disengagement has been applied to explain events such as acts of terrorism, mass genocide, and warfare. An example of when this occurs on a societal level entails intergroup bias. Racism and prejudice contain this same bias on a very pervasive societal level. This is the tendency to perceive out-groups as less desirable or possessing less positive attributes than one's own group (Mikulincer & Shaver, 2001). An example is the ongoing conflict between the Israelis and Arabs. Regardless of the reasons for which the conflict began, the mindset becomes one of "them against us." This also can occur within groups or cultures. The nature of gang activity includes separate factions that fight against each other for a variety of reasons. Another example may be large urban areas where sub-communities fight against each other as a form of braggadocio to show which neighborhood is the 'toughest'. In many inner city areas there is the formation of peer groups that may not necessarily be considered gangs. However, they serve the function of a gang and fuel delinquent or antisocial behavior. All of these situations are conducive to the development of inter-group biases. Such processes can set the stage for moral disengagement in a variety of contexts.

The concept of moral disengagement is not specific to the aforementioned circumstances. Rather it happens at an individual level on a daily basis. Without

digressing too far, some everyday examples will be used to illustrate this point. This could include examples of people who consider themselves moral, but can recall instances when they have behaved in such a manner that might be perceived as racist or sexist by actions or remarks. On a more benign level, people will sometimes choose to do things they consider harmful or wrong. A good example of this may be substance abusers. They may know that it is wrong, but will continue using even when physiological dependence is not a factor, such as driving while under the influence. People may say that this behavior is not the right thing to do, but also recall times in their life when they engaged in such behavior. These examples may divert a little off the topic of moral disengagement in the literal sense; however, they provide insight into how these processes can occur in everyday experience.

Bandura (1990) found that the cognitive mechanisms that make it possible to morally disengage from destructive conduct include altering one's perception of the conduct through moral justification, palliative comparisons, and euphemistic labeling. Another mechanism is altering one's sense of the behavior's detrimental effects through minimization or misconstruing the consequences. And lastly, altering one's sense of responsibility in the link between the person's conduct and its effects through diffusion of responsibility and dehumanizing the victim (Zimbardo, 1995). It is not hard to understand how these processes can activate under extreme conditions as in the case of inner city youth. Recently, this model has been used to explain what happens to youth growing up in urban areas with chronic exposure to trauma and violence.

# Moral Disengagement among Inner City Youth as a Coping Response

Normalization of violence is identified as a form of pathological adaptation for inner city youngsters who become accustomed to violence as a cultural norm. This, in turn, shields them from emotional harm while also legitimating violent behavior (Ng-Mak et al., 2002). This model predicts that chronic exposure to violence results in desensitization, which will blunt affective effects and magnify behavioral effects. Exposure to violence would therefore be strongly correlated with aggressive behavior and weakly associated with depressive symptoms (Ng-Mak et al., 2002). Violence exposure is also often indirect and referred to as co-victimization. Co-victimization is less direct exposure, however the act of witnessing such an act against another person is considered traumatic (Kuther & Wallace, 2003). Co-victimization refers to the indirect experience of violence by observing the assault of another person, which can lead to emotional, cognitive, and behavioral changes (Shakoor & Chalmers, 1991). The eminent threat of danger that these children experience can immobilize them and their capacities to cope with their environments (Kuther & Wallace, 2003). Negative psychological consequences of violence exposure have implications for school performance, relationship development, and overall quality of life (Gorman-Smith & Tolan, 2003). The intense anger that these youth feel can inhibit their ability to focus on other's feelings (Kuther & Wallace, 2003). Because cognitive and socio-emotional domains are necessary for a certain level of moral reasoning, deficits in these areas caused by victimization may adversely impact their moral development (Kohlberg, 1984).

Normalization processes that subdue aggression and violence come from both within the individual and societal norms. This can be weakened by repeated exposure to violence and lead to a disengagement of moral controls, which allows the individual to maintain their self-esteem and moral worthiness (Opotow, 2000). Such a normalization process places African American youth at risk for severe behavioral problems. However, nearly half of African American youth living in inner city neighborhoods appear to function with relatively little psychological difficulty (Dempsey, 2002). While many African American youngsters in the inner city engage in positive community activities, this group remains overrepresented in the juvenile justice system. This appears to be evidence that there are some other mechanisms or processes that separate the youths that engage in severe aggressive behaviors from those that do not. These youth who live in areas with high degrees of trauma exposure need assistance in learning how to cope with their environment. They begin to perceive the world through a hostile lens where adults can offer little protection. According to Garbarino (1999), these youth need to be taught how to redefine their world in moral and structural terms. Previous research suggests that children can begin to encode, accept, and rationalize violence as the cultural norm.

Desensitization to violence may lead to a "cool" posture image by youth, which is a sign of being strong and able to manage despite their chaotic, violent neighborhood (Anderson, 1999). This may be adaptive in some situations, but hinder the development of empathic responses (Kuther & Wallace, 2003). Children's normative beliefs affect the way they perceive the actions of others (Huesmann & Guerra, 1997). By age 8, patterns of aggressive behavior and legitimization of aggression becomes a stable pattern that will likely continue into adulthood (Eron & Huesman, 1990).

The experience of social prejudice and discrimination has been found to play a role in processing social cues. Harsh circumstances such as discrimination,

unemployment, poverty, and other types of marginalization in society may cause conflict for African American youth in understanding the concepts of fairness and justice (Kuther & Wallace, 2003). As a result, African American children are likely to display hostile attribution biases and evaluate the outcomes of aggression as favorable and an acceptable norm (moral disengagement) (Dodge & Schwartz, 1997). The more they approve of aggression, the more likely they are to perceive hostility in others (Huesmann & Guerra, 1997). However, for these inner city youth, hostile attribution bias may actually be a safer, adaptive strategy in some situations. The problem lies when the youth does not know when to turn off this bias and adapt to less threatening situations. Some peers may influence youth in socially appropriate ways while others may influence the expression of more deviant behaviors (Rosario et al., 2003). Deviant peers have been found to encourage youth's delinquent behavior (Keenan et al., 1995). The role of the adolescent's ties to his or her community has also been implicated in delinquency and aggression. Perez-Smith, Albus, and Weist (2001) suggested that the more adolescents become involved in the immediate community, for example through peer associations, the more opportunities will be present for them to engage in antisocial behavior or be exposed to violence.

According to Brezina (2000), some delinquent behaviors are effective problem solving strategies, while also carrying the risk of isolating youth through incarceration (Rasmussen et al., 2004). This can be apparent in situations where inner city youth find themselves trying to survive under extremely stressful environmental conditions.

African American youth, specifically those in inner city neighborhoods, experience more anger, have more positive attitudes towards violence, and are also more

inclined to be morally disengaged to deal with their environment. But is it moral disengagement if it is an adaptive survival strategy? Children's growth is an interactive process between them and their environment. As a child grows, he uses increasingly more complex cognitive resources to understand the world, but the salient elements of the environment depend on cultural appropriate schemas and their social interactions (Haste, 1987). For inner city African Americans, what becomes appropriate may be violence and retaliation to other aggressors. However, there is no evidence to suggest that behaving this way is psychologically healthy for a youth's development. Furthermore, if it is healthy for them, how do they learn when to activate or deactivate transgressive behavior in situations where such a response is inappropriate? Moral disengagement is not necessarily critical for survival because African Americans from these inner city communities often go on to become very successful. This does not mean that they did not engage in transgressive behavior during their lifetime, but it is likely that they have learned to adjust it for more positive contingencies from the larger society. In addition, this group of African Americans may be less likely to morally disengage and choose different responses to challenging situations. Evidence shows that low moral disengagers are more prosocially oriented (Bandura et al., 1996). Also, attributional bias was lower among children that maintain aggression through positive environmental contingencies (Dodge & Schwartz, 1997).

Exposure to violence also leads to attributions of hostility in the actions of others, which consequently increases the odds of aggression and overt conflict (Ng-Mak et al., 2002). This attribution bias arouses greater degrees of anger. This can be fuel for a self-perpetuating and escalating spiral of anger-driven conflict (Allred, 2000). Many of these

youth may be using aggressive behaviors that they deem to be socially acceptable and "normalized" through a cognitive process referred to as moral disengagement.

# Purpose of Current Study

Delinquent youth have impaired social cognitive functioning due to early trauma, which impairs self-regulation. Unfortunately, delinquent behaviors among inner city youth are highly associated with violent and aggressive behavior. Previous studies have suggested that exposure to violence in inner city neighborhoods may cause moral disengagement, but the various other factors and the extent to which trauma impacts them remain undefined. The purpose of this study is to identify the impact that negative or traumatic experiences have on social-cognitive processes such as social problem solving, and their influence on violence and aggression among African American inner city youth within Albert Bandura's Model of Moral Disengagement. This may be critical in understanding the processes that differentiate African American inner city youngsters that respond to their unfortunate environmental conditions in adaptive ways and become successful versus those who respond in maladaptive ways that often lead to a stable pattern of delinquency and antisocial behavior.

#### Hypotheses:

The following hypotheses have been formulated based on the foregoing literature review:

1) Social problem solving functions as a mediator in the relationship between

trauma and moral disengagement.

- Social resources and support will function as a moderator in the relationship between trauma and moral disengagement in the presence of social problem solving as a mediator.
- Moral disengagement serves as an avoidant-coping response to traumatic exposure. Therefore, moral disengagement will be significantly correlated with avoidance-coping scales.

## **CHAPTER II**

#### Methodology

## Participants

The participants for this study consisted of 46 students (25 males and 21 females) in grades 10 through 12, recruited from Miami Norland Senior High School. The mean age for the sample was 16 years old. Out of the 46 students in this study, 19 students were in the 10<sup>th</sup> grade, 18 students were in the 11<sup>th</sup> grade, and 9 students were in the 12<sup>th</sup> grade. Each participant was given an envelop packet containing questionnaires. The measures were administered as self-reports. Each student was assigned a numeric identification number to put on the top of each measure to maximize confidentiality of respondent's answers. In order to address concerns regarding emotional distress due to the nature of this study addressing traumatic experiences, each envelope that was given to the students containing the questionnaires also included an "Option to Debrief" sheet, which is shown in Appendix A. Any student who elected to have a debriefing session could check the appropriate box and meet personally with the investigator to address any concerns that had arisen during their participation. In addition, for those students who may not have felt comfortable with contacting the investigator, each questionnaire packet also included a sheet for the students to keep, displayed in Appendix B as the "Psychological Intervention & Resources Page," which listed contact information for counseling and psychological intervention resources. The study was approved by the Nova Southeastern University Institutional Review Board and the Miami-Dade County Public School's Office of Program Evaluation. Participants received a \$10 gift certificate as an incentive for participating in this study.

#### Measures

*Coping Responses Inventory-Youth Form* (Moos, 1993). This is a 48-item instrument that can be administered either as a self-report or as a structured interview. It assesses the individual on eight different types of coping responses to stressful life events. The instrument uses the approach-avoidance framework and examines cognitive and behavioral coping strategies. Approach response scales are: Logical Analysis, Positive Reappraisal, Seeking Guidance and Support, and Problem Solving, whereas Avoidance responses include: Cognitive Avoidance, Acceptance or Resignation, Seeking Alternative Rewards, and Emotional Discharge. Criteria for interpreting this instrument are based on T scores, where scores greater than 54 are above average and those lower than 46 are considered below average. Cronbach's alphas for males range from .55 to .72 and from .59 to .72 for girls.

Life Stressors and Social Resources Inventory-Youth Form (Moos & Moos, 1994). This 209-item inventory can be administered either as a self-report or in a structured interview format. It has 16 scales, 9 of which measure life stressors and 7 measure social resources. The life stressors scales include: Physical Health, Home and Money, Parents, Siblings, Extended Family, School, Friends, Boyfriend/Girlfriend, and Negative Life Events. The social resources scales are: Parents, Siblings, Extended Family, School, Friends, Boyfriend, and Negative Life Events. The social resources scales are: Parents, Siblings, Extended Family, School, Friends, Boyfriend, School, Friends, Boyfriend/Girlfriend, and Positive Life Events. To interpret this measure, raw scores are first calculated and transformed into T scores. Interpretative guidelines indicate that standard scores greater than 54 are above average and scores lower than 46 are considered below average. Cronbach's alphas for males in the stressor

domain range from .69 to .92 for boys and from .66 to .91 for girls. In the resource domain, Cronbach's alphas for males range from .78 to .92 and from .80 to .93 for girls.

*My Worst Experience Scale* (Hyman, Snook, Berna, DuCette, & Kohr, 2002). This measure is divided into two parts. Part 1 lists 21 events and asks the individual to indicate which was his or her worst experience. Part 2 has the person respond to 105 thoughts, behaviors, and emotions that may be associated with their worst experience. This instrument has an Inconsistent Responding Index, MWES Total, which is a sum of the seven subscales reflecting general psychopathology, DSM-IV Criterion Subscales (Impact of the Event, Re-Experience of the Trauma, Avoidance and Numbing, and Increased Arousal), and seven symptom subscales (Depression, Hopelessness, Somatic symptoms, Oppositional Conduct, Hypervigilance, Dissociation and Dreams, and General Maladjustment. The alpha coefficients for internal consistency on the MWES Total score is .97, and alpha coefficients for the remaining scales range from .69 to .94. Test-retest reliability of the MWES Total score was r= .95. The DSM-IV Criterion Subscales retest correlations ranged from rs= .59 to .79, and ranged from rs= .57 to .89 on the seven symptom subscales.

Social Problem Solving Inventory-Revised (D'Zurilla, Nezu, & Maydeu-Olivares, 2002). This 52-item instrument assesses two constructive/adaptive problem-solving dimensions, Positive Problem Orientation and Rational Problem Solving. The Rational Problem Solving scale contains four subscales: Problem Definition and Formulation, Generation of Alternative Solutions, Decision-making, and Solution Implementation and Verification. This instrument also measures Negative Problem Orientation, Impulsivity/Carelessness Style, and Avoidance Style, which are the three dysfunctional dimensions. Standard scores greater than 114 are considered above the norm group average and scores below 86 are considered to be below the norm group average. The SPSI-R provides a total score, which is a global indicator of the individual's social problem solving ability. Higher scores suggest more effective problem solving, whereas lower scores are indicative of more dysfunctional problem solving strategies. Internal consistency estimates on these scales for the adolescent normative sample range from .60 to .87.

Moral Disengagement Scale (Bandura, 1995). This 32-item instrument measures mechanisms by which moral self-sanctions are selectively activated and disengaged at different points. The scales include: Moral Justification, Euphemistic Language, Advantageous Comparison, Displacement of Responsibility, Diffusion of Responsibility, Distorting Consequences, Attribution of Blame, and Dehumanization. This measure has demonstrated significant and high correlations with delinquent behaviors, and reliability analyses of internal consistency range from .82 to .86 (Bandura et al., 1996, 2001). The Euphemistic Language scale was removed from the measure. Studies revealed that the items tapping Euphemistic Language should be eliminated when applied to American minority samples due to their complexity and children's lack of comprehension of the meaning of these items (Pelton, Gound, Forehand, & Brody, 2004). Other suggested modifications (Pelton et al., 2004) include "It is okay to treat someone badly if they act like a 'worm' (original) to "If someone acts like a jerk, it is okay to treat them badly (revised); "If kids are not disciplined, they should not be blamed for misbehaving (original)" to "Kids who are not taught to obey the rules should not be blamed for misbehaving (revised)." Pelton et al. (2004) pointed out that the "worm", is not culturally meaningful in the American minority population, and the word disciplined is sometimes misunderstood by this population, thus the aforementioned modifications were suggested after several pilot studies on African Americans.

## **CHAPTER III**

## Results

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) version 11.5.

### **Descriptive Statistics**

The validity indices for the instruments were assessed on all protocols. Of the initial 46 participants, data from one participant were discarded because the protocols were invalid due to an insufficient number of responses. The protocols for the remaining participants had validity indices within normal limits. The final sample size for this study was n = 45 (25 males, 20 females).

Regression diagnostics were conducted on the data to check the assumptions and to assess the accuracy of computations for the regression analysis. Studentized jackknife (deleted) residuals are distributed like *t* random variables under the usual assumptions. With larger samples, the residual distribution can be approximated to have a mean of 0 and a variance of 1 (Kleinbaum, Kupper, Muller, & Nizam, 1998). A stem-and-leaf plot, which was generated for a graphical analysis of the jackknife residuals, revealed a normal distribution. A skewness value of -.024 that was found for the jackknife deleted residuals is within the -1 to +1 index for normal distributions. In addition, the Shapiro-Wilk test, which is appropriate for small sample sizes typically less than 50 (Kleinbaum et al., 1998), revealed that the assumption of normality for the studentized deleted residuals was tenable (W = .971, p = .310). The assumption of linearity was demonstrated through an analysis of plotting the studentized jackknife (deleted) residuals against the predicted values.

Analyses were conducted to assess any influential data points by observing the jackknife residuals, leverage values, Cook's distance, DFBETAS, and DFFITS. None of these measures revealed influential data points that warranted significant attention. Further analyses revealed that neither collinearity nor variance inflation between the predictors appeared to be an issue.

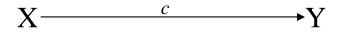
#### Hypothesis 1

Hypothesis 1 predicted that social problem-solving (as measured by the Social Problem-Solving Inventory-Revised; SPSI-R; D'Zurilla et al., 2002) functions as a mediator in the relationship between trauma (measured by the My Worst Experience Scale; MWES; Hyman et al., 2002) and moral disengagement (Moral Disengagement Scale; MDS; Bandura, 1995).

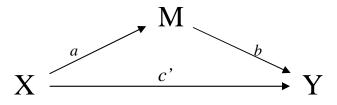
A common technique employed to test mediation hypothesis was developed by Baron and Kenny (1986) who indicated that for a variable to be considered a mediator there are four conditions that *must* be met: 1) the predictor (X), trauma, must be significantly associated with the hypothesized mediator (M); 2) the predictor must be significantly associated with the dependent variable (Y), moral disengagement; 3) the hypothesized mediator, social problem-solving, must be significantly associated with the dependent variable, moral disengagement; and 4) the impact of the predictor, trauma, on the dependent variable, moral disengagement, must be less after controlling for the presence of the mediating variable, social problem-solving (Holmbeck, 1997). Three regression equations, each tested at  $\alpha$ =.05, evaluate these four conditions: a) significance of the relationship between trauma and social problem-solving; b) significance of the relationship between trauma and moral disengagement; c) trauma and social problemsolving are entered as predictors in the regression equation to predict moral disengagement. The effect of trauma on moral disengagement should be less after social problem-solving is controlled for in the equation. The degree of reduction in the effect of trauma as measured by the regression coefficients is meant to serve as an indicator of the potency of the mediator (Holmbeck, 1997). Baron and Kenny (1986) pointed out that there is perfect mediation when the effect of X on Y decreases to zero when the mediator is included.

The assumption of indirect effects does not assume that there is an initial total effect between the independent and dependent variable. Preacher and Hayes (2004) indicated that there does not need to be a significant relationship found between the independent and dependent variables in order for there to be a significant indirect effect. Sobel (1982) developed a test, which compared the strength of the indirect effect between the independent and dependent variables. This indirect effect of the independent variable on the dependent variable is defined as the product of the relationship found between the independent variable and the mediator  $(X \rightarrow M \text{ path})$  (a) and the relationship found between the mediator and the dependent variable ( $M \rightarrow Y$  path) (b), or ab (Preacher & Hayes, 2004). In this study, ab is the term which represents the indirect or mediated effect. As shown in Figure 1, c is the total effect of the dependent variable on the independent variable, not controlling for the mediator. Figure 2 shows the direct effect or c', which is the  $X \rightarrow Y$  path coefficient after controlling for the mediator. Preacher and Hayes (2004) argued that testing for a finding of no difference between the total effect, relationship between the independent variable and dependent variable, and the direct effect, which is the relationship between the independent variable and dependent variable

controlling for the mediator in the model, is a more accurate test of mediation than the series of regression equations suggested by Baron and Kenny (1986). Therefore, the first hypothesis was tested using the model suggested by Preacher and Hayes (2004), which is a more powerful strategy for testing mediation and requires that (1) there exists an effect to be mediated ( $c \neq 0$ ) and (2) that the indirect effect is significant. Also, the model suggested by Preacher and Hayes (2004) has greater power because their test of mediation requires fewer significance tests than the mediation model suggested by Baron and Kenny (1986). In addition, several researchers have questioned whether there needs to be an initial total effect for mediation to be present (Shrout & Bolger, 2002; Mackinnon, 2000; Mackinnon, Krull, & Lockwood, 2000; Collins, Graham, Flaherty, 1998). According to Shrout and Bolger (2002), the size of the effect decreases as the causal process between the independent and dependent variables becomes more distal. In such cases, the detection of the total effect using the strategy recommended by Baron and Kenny (1986) has limited power (Shrout & Bolger, 2002).



*Figure 1.* The total effect is illustrated as the effect of the dependent variable on the independent variable not controlling for the mediator.



*Figure 2.* The direct effect is illustrated as the relationship between the dependent and independent variables while controlling for the mediator.

The independent variable, trauma was measured by the total score of the My Worst Experience Scale (MWES; Hyman et al., 2002). Higher scores on the MWES represent greater global symptom severity. The mediator, social problem solving, was measured by the total score on the Social Problem Solving Inventory-Revised (SPSI-R; D'Zurilla et al., 2002). A high total score on the SPSI-R indicates good social problem solving ability. The dependent variable, moral disengagement, was measured by the total score on the Moral Disengagement Scale (MDS; Bandura, 1995), with higher scores being indicative of a higher tendency to disengage moral controls. Bivariate scatterplots were generated to scan the data for outliers. The bivariate scatterplots revealed no significant, r (43) = .147, p = .336, as shown in Table 1. The relationship between the potential mediating variable, social problem solving (SPS) and the dependent variable (SPS) was statistically significant, r (43) = -.391, p = .008. The relationship between social problem solving and trauma was also significant, r (43) = -.322, p = .026.

Table 1. Correlations between social problem solving, trauma, and moral disengagement.

		1	2	3	
1.	SPS		332*	391**	
2.	MWES			.147	
3.	MDS				
Nota	n < 05	$n < 01^{**}$	n < 0.01		

<u>Note</u>: p < .05, p < .01, p < .001

The first four rows in Table 2 refer to the unstandardized regression coefficients in the regression equations discussed by Baron and Kenny (1986). The first row: (YX) is the total effect of the independent variable (X), trauma, on the dependent variable (Y), moral disengagement (c in Figure 1). This effect is not significantly different from zero,

indicating that trauma has no initial total effect on moral disengagement, t (43) = .9735, p= .3357. The second row: (MX) is the effect of the independent variable on the proposed mediator (M), social problem solving (a in Figure 2). This effect is significantly different from zero, indicating that students with higher trauma had lower social problem solving scores, t(43) = -2.3087, p = .0258. The third row: (YM.X) is the effect of the mediator on the dependent variable, controlling for the independent variable (b in Figure 2). This effect was also significantly different from zero, indicating that students with lower social problem solving scores tended to be higher in moral disengagement even after controlling for traumatic experiences, t(42) = .-2.5516, p = .0145. The fourth row: (YX.M) is the direct effect of the independent variable on the dependent variable, controlling for the mediator (c' in Figure 2). This effect is not significantly different from zero, indicating no relationship between trauma and moral disengagement after controlling for social problem solving, t(42) = .1280, p = .8988. According to the Baron and Kenny (1986) criteria, social problem solving could not possibly be a mediator because trauma has no initial direct effect on moral disengagement. However, there is evidence that trauma does have an indirect effect on moral disengagement through social problem solving. The positive, although nonsignificant relationship between trauma and moral disengagement (c = .0177) is smaller after controlling for social problem solving (c' = .0023).

Table 2. Baron & Kenny (1986) Regression equations testing for mediation

Variable	b	S.E.	t	p-value
1. (YX)	.0177	.0182	.9735	.3357
2. (MX)	0053	.0023	-2.3087*	.0258
3. (YM.X)	-2.8790	1.1283	-2.5516*	.0145
4. (YX.M)	.0023	.0182	.1280	.8988
Note: *n <	$05^{**}n < 0^{1}$	$1^{***}n < 00$	)1	

<u>Note</u>: p < .05, p < .01, p < .001

Small sample sizes suffer from low statistical power. Due to the small sample (n = 45), bootstrapping was used to increase the statistical power. Bootstrapping makes no assumptions about the shape of the distributions of the variables or the sampling distribution of the test statistic and has been suggested as a way of dealing with the issue of low statistical power (Preacher & Hayes, 2004).

Using the recommended strategy by Preacher and Hayes (2004) for assessing mediation by testing for the indirect effect, a confidence interval was derived using the bootstrapped sampling distribution. It also address potential problems of nonnormality because this procedure produces a test that is not based on large-sample theory, and therefore can be applied to small samples with more confidence (Preacher & Hayes, 2004). According to Preacher and Hayes (2004), bootstrapping data is a suggested statistical procedure to test for an indirect effect in mediation. For this study, there were 10,000 bootstrap resamples requested in the SPSS command syntax. The point estimate that was calculated, as shown in Table 3, is the mean indirect effect, ab = (.0155) that is computed over the 10,000 samples, and the estimated standard error (s.e. = .0080) is the standard deviation of the 10,000 sample estimates of the indirect effect (Preacher & Hayes, 2004). Based on the bootstrapped results, the lower limit of the confidence interval was .0028 and the upper limit was .0340. The results revealed that the confidence intervals are not equally distant from the mean estimate of the indirect effect, which is consistent with Preacher and Hayes (2004) findings that the *ab* distribution is often not symmetrical. The bootstrap output shows that the true indirect effect is estimated to lie between .0026 and .0353 with 95% confidence. Because zero is not in the 95% confidence interval, the indirect effect is significantly different from zero (p < .05).

Test of indirect effect					
	Mean	S.E.	LL 95% CI	UL 95% CI	
Indirect Effect	.0155	.0080	.0028	.0340	

Table 3. Bootstrap results for testing indirect effect.

<u>Note</u>: bootstrap resamples = 10,000

#### Hypothesis 2

Hypothesis 2 predicted that social resources (measured by the PLE scale of the Life Stressors and Social Resources Inventory-Youth Form; LISRES-Y; Moos & Moos, 1994) will function as a moderator in the relationship between trauma (MWES, Hyman et al., 2002) and moral disengagement (MDS, Bandura, 1995) in the presence of social problem-solving (D'Zurilla et al., 2002) as a mediator.

The predictor, mediator, and moderator, trauma, social problem-solving, and social resources and support, respectively, main effects will be entered into the regression first, followed by the interaction term between the predictor and the moderator. The presence of a significant interaction (p<.05) would suggest that social resources functions as a moderator in the aforementioned relationship. Baron and Kenny (1986) identified that a moderator specifies the conditions under which a given condition occurs and the conditions under which the direction or strength of an effect vary (Holmbeck, 1997). The moderator, social resources, should interact with the predictor variables in such a way to have an effect on the level of the dependent variable.

The PLE scale was used as the overall measure of social resources and support because it is a numerical index representing the number of positive events occurring in all six of the LISRES (Moos & Moos, 1994) social resources and support domains. The first model included MWES, SPS, and PLE as predictors of MDS. The second model included MWES, SPS, PLE, and the interaction term between MWES and PLE (MWESxPLE). The overall R Square ( $R^2$ ) for the first model was .186. The overall R Square ( $R^2$ ) for the second model with the interaction term was .222. This indicated that there was a .036 increase of the variance in moral disengagement accounted for by the regression equation on trauma, social problem solving, social resources, and the inclusion of the interaction term between trauma and social resources.

As revealed in the first model and displayed in Table 4, trauma did not significantly contribute to the prediction of moral disengagement when social problem solving and social resources and support were held constant, t (41) = .165, p = .870. When trauma and social resources and support were held constant, social problem solving significantly predicted moral disengagement, t (41) = -2.663, p = .011. Social resources did not significantly contribute to the prediction of moral disengagement while holding trauma and social problem solving constant, t (41) = 1.297, p = .202. The overall first model, which included the three predictors, was significant, F (3, 41) = 3.13, p = .036. The overall second model, which included the three predictors and the interaction term, was significant, F (4, 40) = 2.85, p = .036.

b		b		
003	.018	025	165	.870
-2.989	1.122	399	-2.663*	.011
.547	.422	.187	1.297	.202
.060	.050	.499	1.196	.239
-3.019	1.112	403	-2.716	o** .010
1.618	.897	.554	1.804	.079
005	.004	726	-1.349	.185
	1.618 005	1.618  .897   005  .004	1.618  .897  .554   005  .004 726	1.618.897.5541.804005.004726-1.349

Table 4. Regression coefficients testing significance of moderation of social support.

<u>Note</u>: <sup>\*</sup>p < .05, <sup>\*\*</sup>p < .01, <sup>\*\*\*</sup>p < .001

In the second model, the inclusion of the interaction term between trauma and social resources and support did not significantly contribute to the prediction of moral disengagement when trauma, social problem solving, and social resources and support were held constant, t (40) = 1.349, p = .185. Because the interaction term between the predictor, trauma, and the potential moderator, social resources and support, was not significant, social resources is not a moderator.

In order to assess the influence of gender, additional analyses were conducted. After creating 'dummy' codes to recode the gender variable, interaction terms were created and entered into the regression analysis. Interaction is the condition where the relationship of interest is different at different levels (e.g., values) of the extraneous variables. Table 5 reveals that gender was a significant predictor of moral disengagement while trauma, social problem solving, and social resources and support are held constant, t (40) = 2.468, p = .018. However, the results revealed no significant interactions between any of the predictors with gender. Therefore, the interaction terms between the predictors and gender does not contribute to the prediction of moral disengagement while the remaining predictors in the model are held constant.

Predictors u	unstandardized	S.E.	standardized	t	p-value
	b		b		
Model 1					
MWES	.015	.019	.127	.806	.425
SPS	-2.399	1.085	320	-2.210*	.033
PLE	.335	.407	.115	.822	.416
GENDER	9.567	3.877	.360	2.468*	.018
Model 2					
MWES	.003	.031	.027	.106	.917
SPS	-1.543	1.430	206	-1.079	.287
PLE	.760	.711	.260	1.069	.292
GENDER	39.202	30.660	1.474	1.279	.209
MWESxGEND	DER .007	.041	.064	.169	.867
SPSxGENDER	-2.135	2.331	929	916	.366
PLExGENDEF	R620	.875	337	708	.484

<u>Note</u>:  $^{*}p < .05^{**}p < .01$ ,  $^{***}p < .001$ 

## Hypothesis 3

Finally, Hypothesis 3 predicted that moral disengagement (MDS, Bandura, 1995) serves as an avoidant coping response to traumatic exposure. Therefore, moral disengagement scale should be highly correlated with avoidance-coping scales (as measured by the Coping Responses Inventory, Moos, 1993).

Correlation analyses were conducted to test the significance of the relationships between moral disengagement (MDS) with the following avoidance coping responses: Cognitive Avoidance, Acceptance or Resignation, Seeking Alternative Rewards, and Emotional Discharge (CRI-Y). A pseudo-Bonferroni correction was used to control for an inflated type-I error. Significance was tested at  $\alpha$ =.01. Bivariate scatterplots were generated to check for influential data points and revealed no outliers. There was no significant relationship found between Moral Disengagement and Cognitive Avoidance, r (43) =.078, p = .612, as shown in Table 6. Moral Disengagement was not significantly related to Acceptance or Resignation, r (43) =.141, p = .356. There was no significant relationship between Moral Disengagement and Seeking Alternative Rewards r (43) =.249, p = .099. Moral Disengagement was not significantly related to Emotional Discharge, r (43) =.003, p = .987.

Table 6. Correlations between moral disengagement and avoidance coping scales.

	1	2	3	4	5
1. MDS		.078	.141	.249	.003
2. CA			.474**	.513**	.477**
3. AR				.305*	.560**
4. SR					.314*
5. ED					
Nata *** + 05	** 01	***	0.1		

<u>Note</u>: p < .05, p < .01, p < .001

# **CHAPTER IV**

#### Discussion

The first hypothesis indicated that social problem solving functions as a mediator in the relationship between trauma and moral disengagement. Although a significant relationship was not found between trauma and moral disengagement, the findings of the present study suggest that social problem solving served as a mechanism through which trauma was able to influence moral disengagement. According to the Baron and Kenny (1986) criteria, social problem solving could not be a mediator because trauma had no initial direct effect on moral disengagement. However, studies have questioned the necessity for Baron and Kenny (1986) Step 1 (XY) in order to establish mediation (Shrout & Bolger, 2002; Mackinnon, 2000; Mackinnon, et al., 2000; Collins et al., 1998). One explanation for the absence of a significant effect between trauma and moral disengagement may be due to the distal relationship between these two variables. According to Shrout and Bolger (2002), a test of bivariate association of the total effect  $(X \rightarrow Y)$  has limited power when this causal process is distal, and the mediation analysis should be not be based on the presence of a significant relationship of X on Y, but rather on theories developed through a critical evaluation of how these processes hypothetically function.

It is unclear how long it takes moral disengagement to occur following a traumatic event. Moral disengagement functions as an adaptation process to environmental circumstances and conditions. Given the amount of time it takes for a person to develop maladaptive cognitive and behavioral responses to traumatic events, it is reasonable to assume that there is a latency period before moral disengagement occurs

following a traumatic experience. In addition, repeated trauma in some cases may either accelerate or delay the moral disengagement process depending on other random factors or competing causes (Shrout & Bolger, 2002), which can be introduced at different stages within this process. This leads to an understanding that the development of moral disengagement strategies may not occur directly or immediately after a traumatic event but rather, these strategies are formed over time. This supports the literature that suggest moral disengagement is an adaptation process (Ng-Mak et al., 2002) that occurs over time and developmental processes are typically distal (Shrout & Bolger, 2002) in nature. Students with higher trauma had poorer social problem solving ability and vice versa. This same relationship was apparent between social problem solving and moral disengagement whereas students with better social problem skills were lower in moral disengagement. However, the positive, although nonsignificant relationship between trauma and moral disengagement, which as explained earlier was perhaps due to their distal relationship, was smaller after controlling for social problem solving, suggesting that social problem solving had an indirect mediating effect in the relationship between trauma and moral disengagement. In other words, trauma influenced social problem solving, which in turn, influenced moral disengagement.

Social problem solving refers to problem solving in social contexts. It is the process by which people attempt to identify or discover effective and adaptive solutions to problems in everyday life (D'Zurilla et al., 2002). There is a growing body of literature that support this study's findings that trauma impairs internal processing mechanisms in social situations, such as problem solving and self-regulation. This is evidenced by the results which show that youth with higher trauma scores had

significantly lower social problem solving scores. Youth exposed to trauma experience changes in articulation of ideological interpretations of the world that provides a framework for making sense of ongoing danger (Garbarino, Kostelny, & Dubrow, 1991).

Traumatized children often have constricted abilities in affect labeling and regulation. According to Baer and Maschi (2003), this leads to an underutilization of affect responses and identification, which narrows their range of problem solving strategies (Garrison & Stolberg, 1983; Ingram & Kendall, 1986). From a neurobiological perspective, the stress response (cortisol) precipitated by trauma shifts energy away from the brain cortex and towards the limbic system, which reduces the child's ability to rationally analyze, problem solve, and appropriately store memory (Dulmus, 2003). This is consistent with the findings in this study that trauma was significantly related to poorer social problem solving skills.

The results suggest that the mechanism by which moral disengagement occurs in the form of altered interpretations of right and wrong happen as a result of traumatic experiences are indirectly and at least partially due to deficits in social problem solving. Youth exposed to trauma suffer from a state of hyperarousal which causes deficits in social cognitive functioning in the form of misinterpretation of environmental cues (Dodge, Lochman, Harnish, Bates, & Pettit, 1997) leading to a negative repertoire of interactional responses that has social consequences (Dulmus, 2003). Youth that perceive the world the world as hostile would have little internal resistance to engage in self-destructive behavior towards himself and others, thus have a tendency to justify their transgressive actions (Baer & Maschi, 2003). The present study suggests that adolescents with more constructive or effective problem solving are not only less likely to engage in delinquent and aggressive behavior, but are also less likely to use moral justification to validate their transgressive behaviors. These findings add to the literature that social problem solving has an impact on transgressive behavior. Good social problem solving skills have been linked to well-being and social competence. Poor social problem solving has been found to contribute most to aggressive outcomes in risky interpersonal interactions (McMurran et al., 2002), hostility, delinquency, substance abuse, stealing, and other externalizing behaviors (D'Zurilla et al., 2002).

The link to problem solving deficits is meaningful because, in terms of moral disengagement (Bandura, 1996), these transgressive behaviors are likely to occur as a volitional process in which regulatory self-sanctions are selectively disengaged from the conduct by cognitively converting these harmful acts into moral ones with worthy purposes. Youthful offenders, for example have a tendency to sometimes excuse their behavior stating the view that the victim in some way deserved it (Baer & Maschi, 2003). Unfortunately in inner city communities, these worldviews are reinforced because the youth process the world as a hostile environment incapable of protecting them.

As suggested by the results of the first hypothesis of this study, deficits in the social problem solving domain are linked to the moral justification of aggression and transgressive behaviors. This study's findings indicated that youth with lower social problem solving scores had significantly higher scores in moral disengagement. Children who display transgressive behaviors encode social cues differently than nonaggressive children (Dodge, 1986). Baer and Maschi (2003) indicated that aggressive children

attend to more hostile cues, do not use complex inferences about other people's behavior, and under-perceive their own aggression. The use of processing social cues to handle daily interactions is an aspect of social problem solving (D'Zurilla et al., 2002). Such distorted perceptions and interpretations of others and contributes to their justification of aggression (Baer & Maschi, 2003).

The second hypothesis stated that social resources and support will function as a moderator in the relationship between trauma and moral disengagement in the presence of social problem solving as a mediator. However, the results did not support the hypothesis that social support and resources moderated the relationship between trauma and moral disengagement in the presence of social problem solving. The relationship between trauma and moral disengagement in the presence of social problem solving did not differ for adolescents based on positive life events in all social support and resources domains. This finding is not consistent with some of the literature on the buffering effects of social resources and support (Simons, Lorenz, Conger, & Wu, 1992; Kessler, Price, & Wortman, 1985; Cohen & Hoberman, 1983).

The results indicated that social resources and support was not a moderator. One possible explanation for this finding is that the social stressors that these youth experience significantly outweigh their experiences of positive life events. These youth may perceive social resources and support as lacking in their lives. This is apparent by the relatively small differences noted between the scores on the stressors scales and the scores on the resources scales. Due to the chronic dangers that are noticeably visible in inner city neighborhoods, there may be very little support and resources available to these youth. Another explanation may be that the stress of living in these environments

compromises both access to and awareness of resources that are available in the community. Because many of these youth are exposed to chronic stressors, the buffering impact of social support and resources in the role of moral disengagement is probably minimal.

Moral disengagement in the context of inner city youth can include the mobilization of internal resources and the use of transgressive behaviors to cope with their environment. The measurement of social resources and support in this study was the contribution of external resources as a moderator in the trauma-moral disengagement relationship in the presence of social problem solving as a mediator. Similar to moral disengagement, social problem solving also requires the use of an internal capacity to use decision making abilities to adapt to the social environment and maneuver effectively through difficult socio-moral dilemmas. These results might suggest that the use of adaptive internal resources may be more important to prosocial functioning for inner city children and adolescents than external contingencies of social support and resources.

Another important consideration for these findings is how social support is defined by these youth. For some adolescents in the population of interest, support is gained through identification with other troubled youth (Reyes, 2001; Reese et al., 2001) while for others more positive, prosocial resources define their support network. This inherent distinction, which has long been a factor in the etiology of gangs and delinquent behavior especially in high crime urban environments, may have impacted perceptions of resources and support in this study. The hypothesis of the moderating impact of social support also could have failed to yield significant results because many urban children

withdraw from family members, teachers, and other community members due to feeling unsafe or perceive environmental input as inadequate (Dulmus, 2003).

The third hypothesis stated that moral disengagement serves as an avoidantcoping response to traumatic exposure. Therefore, moral disengagement should be significantly correlated with avoidance-coping scales. This would suggest that moral disengagement functions as a form of avoidance coping. According to Moos (1993), "approach coping is problem-focused and refers to cognitive and behavioral attempts to master or resolve life stressors, whereas avoidance coping is emotion-focused and refers to cognitive and behavioral attempts to avoid thinking or managing the stressor." The lack of significance found between moral disengagement and coping response may be related to the actual purpose that moral disengagement serves in specific situations. In this regard, moral disengagement as a coping response may be very situation-dependent.

#### Limitations

Although this study contributes to the current literature on trauma's impact on social problem solving and its connection to transgressive behavior, there were several limitations. The sample size (n = 45) was relatively small. Small sample sizes suffer from low statistical power. Bootstrapping was used in testing the first hypothesis to compensate for this limitation. However, small samples are typically problematic and can have an impact on the integrity of data analysis and lead to a greater likelihood of Type II errors.

Due to the small sample size and its impact on statistical power, multiple comparisons were not made based on variables such as gender. The literature provides mixed results on the differential impact of trauma and associated deficits in coping strategies and aggression based on gender. Some research suggests there are minimal differences (Galambos, 2003; Molnar et al., 2005; Nichols et al., 2006), while others report significant gender differences in these areas (Caufman et al., 1998; Griffith et al., 2000; Reid et al., 1995). Future research should explore possible gender and age differences using a larger sample.

Another limitation is the applicability of the moral disengagement model to inner city African-Americans. Bandura's model was initially conceptualized as a process to explain how people can commit atrocious acts against others as well as find adaptive ways to function in dangerous environments. The initial conceptual framework included countries and populations exposed to war and genocide (e.g., terrorist attacks, torture). However, although there have been numerous studies that has examined this process among inner city minorities and African-Americans living in the United States, additional research is needed with this population. Even though the applicability of this model needs further study, the current research contributes to the understanding of how this process may function among inner city African Americans.

Also, there is a limitation regarding the measures used for this study. There are not many measures that have been developed specifically for use with African-Americans. This can make studies on African-Americans difficult because researchers usually have to adapt or use measures that are normed primarily using a Caucasian sample. All of the measures in this study either have African-Americans included in the normative sample or there have been research or pilot studies using these assessment measures with African-Americans. A related problem is applicability of these instruments with the inner city subpopulation of African-Americans. This study may have yielded more significant findings but failed to do so perhaps because of the lack of empirically-sound measures that are directly suitable for the population of interest. This is a limitation which is not only an issue of this research, but also within the social sciences in general.

There has been an ongoing debate among test developers in which one argument is that the normative sample should try to reflect the distribution of the national census. Others have argued for the development of tests that can be more race or culture-specific. As for now, the responsibility falls on the researchers to use assessments within ethical boundaries, apply them to the populations of interest, use a critical review of the literature and develop theoretical arguments for hypotheses, and remain mindful of the limitations of assessment measures in research.

#### Implications for Practice and Future Research

There is little research on the role that traumatic experiences play in social problem solving particularly among inner city ethnic minority youth. There is an imperative need for research to understand the cognitive and behavioral adaptation processes that happens to inner city youngsters as a result of chronic exposure to trauma. Research was reviewed that identified the effects that trauma has on the various social-cognitive processes and how it may lead to antisocial behavior. No definitive cause and effect relationship between trauma and delinquent behavior has been found. However, this research supports at least the presence of a relational process between trauma and delinquent behavior through social-cognitive mechanisms. Furthermore, the present findings expand on the literature by exploring the impact of these factors on social problem-solving as conceptualized within Bandura's model of moral disengagement.

A model that explains a form of adaptation to chronic traumatic exposure and its effects on cognitive resources such as social problem-solving and coping can significantly aide in the understanding of delinquency and aggressive behavior in African American inner city youth. The current study pointed to evidence that enhanced problem solving skills are not only impacted by trauma, but they also have a relationship to moral disengagement, which the literature has strongly linked to transgressive behavior. By evaluating the social-cognitive deficits of adolescents who exhibit antisocial behavior we may better understand situations involving poor social judgment on their part and how this is impacted by traumatic experiences.

It is important to remember that although there are antisocial youth in these areas, there are also a number of youth that do not engage in such behaviors. Some at-risk youth maintain a positive sense of self, internal locus of control (Dulmus, 2003), an optimistic outlook (Garmezy, 1981), easy and outgoing temperament (Werner, 1989), and exercise a greater degree of self-regulatory behavior and moral agency. All youth are forced to deal with their environment and additional research in social-cognitive processes and support systems may have implications for the development of cost-effective interventions that can be used in educational and community settings.

The present findings support existing literature that social problem solving skills are impacted by trauma. There are many programs and techniques used to treat children and youth exposed to trauma. The literature suggests that strategies should also be incorporated into these treatment modalities to minimize the deficits in social problem solving and internal processing mechanisms caused by traumatic exposure. Social problem solving has been implicated in the justification of transgressive behavior by youth, which often is associated with youthful offending and negative social consequences. As a result, developing children's abilities in processing social information to solve problems can at least partially contribute to minimizing youth involvement in delinquent and aggressive acts, which they sometimes rationalize as acceptable forms of behavior. This rationalization is disturbingly common among inner city youth who perceive their communities as dangerous environments where violence is normalized.

As a result of enhanced social problem solving abilities, the normalization of violence process may be less likely to occur and lead to positive improvements in the youth and consequently, the communities in which they live. Schools can also implement programs that engage in building social problem solving skills in addition to providing more intensive services and involvement for those with traumatic backgrounds and experiences. This would be consistent with the main functions of most schools which are to enhance children's emotional, cognitive, and social development through enhanced social problem solving skills. One possible consideration may be that inner city children with better social problem solving skills have greater ability to use their internal resources to minimize the likelihood or impact of repeated victimization. In this regard, schools can serve as one of the primary sources of prevention and early intervention for at-risk youth.

There are also implications for further study of the neurobiology of trauma. The existing literature lends evidence to support the notion that trauma causes changes in the brain's developmental pathways (van der Kolk, 2003; Dulmus, 2003). Accordingly, there seems to be associated problems that may inhibit the development of cognitive

abilities such as problem solving skills, which in turn leads to antisocial behavior and impairments in self-regulation. Further research should include finding ways to address and mediate the neurobiological impact of trauma.

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Appendix A

# Option to Debrief

Social Problem Solving and Resources Study

Please check the appropriate box:

- □ NO; I do *not* need to talk to someone about how I feel.
- □ YES; I have signed up to participate in this study. I would like to talk to someone about how I feel after answering some of the questions. If yes, write down your name and contact information where you can be reached. The person running the study will contact you within 24 hours.

If you checked *yes* fill this in:

Name: \_\_\_\_\_

Phone number:	(home)
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(cell)

# Appendix B

# Psychological Intervention & Resources Page

- Center for Family and Child Enrichment Family Support Services / Intensive Crisis Counseling Program Outpatient Counseling (305) 624-7450
- National Lifeline (800) 273-TALK
- Miami-Dade County Public Schools Crisis Management (305) 995-2273

Crisis Counseling Switchboard of Miami 24 hours / 7 days

• The HELP-line

(305) 358-HELP (4357) (305) 358-2477 TDD/TTY

- The Teen Link Line (305) 377-TEEN (8336) 80 Taped Messages for Teens
- Teen Talk Line (305) 377-TALK (8255) *To Speak to a Counselor*
- Children & Youth Behavioral Hotline (305) 358-HELP (4357)