THE EFFECT OF MORAL RECONATION THERAPY ON ADOLESCENTS IN A GROUP HOME SETTING

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TABLE OF CONTENTS

Page
List of Tables.....v
List of Symbols.....vi
Abstract vii
Introduction 7
Literature Reviews 7
Cognitive Behavioral Therapy (CBT) 9
CBT with Children and Adolescents…….15
Moral Reconation Therapy (MRT)……..……..…..……19
Juvenile MRT: Manual Overview……..……..20
MRT Research……..……27
Adult Offenders…….28
Juvenile Offenders…… 31
Purpose of Research…….……..……..……35
Methods……..…… ……..……41
Participants……..……..41
Program Overview…….……..……..43
Measures…….……..…….44
Procedure…….……..……47
Results…….……..…….48
Discussion……..…….72
Limitations…..……..……77
Directions for Future Research……77
References……..……78
Appendix A…….……..……..89
Appendix B…….……..…….……92
Appendix C…….……..……..95
Appendix D…….……..……..97

LIST OF TABLES

Table 1: Overall Pre-test and Post-test BASC-2 Results……51
Table 2: Pre-test and Post-test BASC-2 Results by MRT Steps Completed…….....52
Table 3: Pearson Correlation Matrix among Demographic Variables……53
Table 4: Pre-test and post-test BASC-2 results, by offense……55
Table 5: Parent Marital Status: Pre-test and post-test BASC-2 results……...56
Table 6: Father's level of education: Pre-test and post-test BASC-2 results……..57
Table 7: Mother's level of education: Pre-test and post-test BASC-2 results……58
Table 8: Recent family problems: Pre-test and post-test BASC-2 results……..59
Table 9: Pearson Correlation Matrix among CPIC scores and BASC-2 Post-test Scores……..……64
Table 10: Pearson Correlation Matrix among CPIC scores and BASC-2 Post-test Scores……..65
Table 11: Family Disagreement Factors: Pre-test and post-test BASC-2 results.....67
Table 12: Time in program: Pre-test and post-test BASC-2 results……...70

LIST OF SYMBOLS

df	degree of freedom
M	Mean (arithmetic average)
N	Total number in a sample
p	Probability
r	Pearson's correlation coefficient
SD	Standard deviation
t	Computed value of *t* test
Δ	Delta (cap); increment of change
η^2	Eta squared; measure of strength of relationship
X^2	Chi square, measure of goodness of fit

ABSTRACT

THE EFFECT OF MORAL RECONATION THERAPY ON ADOLESCENTS IN A GROUP HOME SETTING

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A variety of risk factors have been found to contribute to juvenile delinquency and offending; it is important to consider these factors in prevention and intervention. Rehabilitation and treatment is one approach for addressing the growing concern of juvenile offending. Cognitive-behavioral therapy is a promising treatment approach for offenders. Moral Reconation Therapy (MRT) is a cognitive-behavioral group therapy, designed to rehabilitate offenders and reduce recidivism. The current study explores the effects of Moral Reconation Therapy on adolescents in a group home setting. Participants included 15 adolescents between the ages of 13 and 17, residing in a group home in the Southeastern region of the United States. The Behavior Assessment System for Children, Second Edition (BASC-2) was used as a pre-test and post-test measure to assess participants' self-reported changes in Locus of Control, Social Stress, Anxiety, Depression, Sense of Inadequacy, Sensation Seeking, Relations with Parents, Interpersonal Relations, Self-Esteem and Self-Reliance. Overall results indicated that significant changes existed between pre-test and post-test measures in the areas of Locus of Control, Depression and Relations with Parents. Significant changes were also noted in the areas of Anxiety, Sense of Inadequacy and Self-Reliance, based on factors including the number of MRT Steps completed, type of offense committed, family disagreement factors, length of time spent in the program, and reported family problems. Recidivism

data was available on 8 of the 15 participants; rates were found to be significantly below the state average for juvenile recidivism.

The Effect of Moral Reconation Therapy on Adolescents in a Group Home Setting

Adolescents with numerous risk factors for deviant behavior have an increased likelihood of becoming offenders. Risk factors can occur at the individual level, such as impulsivity, sensation seeking and poor social problem-solving skills (Hoge, Guerra & Boxer, 2008). Risk factors can take place at a family level, which includes family conflict, abuse, and low supervision and monitoring. There can also be risk factors at the school level, including poor academic performance and low educational goals. Finally, risk factors can exist at the social level, including association with delinquent peers. All of these risk factors increase the likelihood that a young person will engage in delinquent behaviors (Hoge et al., 2008). At-risk youth, as defined by the above variables, who engage in delinquent behavior may be placed in group home settings, in attempts to remove the youth from environments which have been conducive to his or her deviant behavior. Group homes often serve as a protective factor for at-risk youth, in that they are given an opportunity to change their behavior in a controlled environment. However, there are times when at-risk youth do not receive sufficient long-term benefits from their time in a group home and may continue down a path of deviant behavior. This behavior is detrimental not only to the youth, but to the community in which he or she resides.

According to the Federal Bureau of Investigation's Uniform Crime Report, there were over 1.5 million juveniles arrested in 2009, accounting for approximately 14.1% of all arrests nationwide (Crime in the United States, 2010). A juvenile is defined as someone who is under 18 years of age. The number of arrests among juveniles in 2009 decreased slightly from 2008; however, juvenile offending remains problematic. The Uniform Crime Report program divides offenses into two main types: Part 1 offenses and

Part 2 offenses. Part 1 offenses are more serious offenses that include: criminal homicide, forcible rape, robbery, burglary, larceny, motor vehicle theft and arson. Part Two offenses include simple assault, vandalism, sex offenses, drug abuse violations, curfew and loitering law violation, and runaways. Many Part Two offenses are classified as status offenses. Status offenses only apply to juveniles, including truancy, running away, being ungovernable or incorrigible, violation of curfew or loitering, and possession of alcohol or tobacco.

There are several costs that are associated with juvenile crimes; the most well recognized is the damage to the victims that results when a juvenile engages in delinquent or criminal behavior. Immediate and ongoing costs to the taxpayers include the expense of processing juveniles through the juvenile justice and court systems; long-term costs include the impact the pattern of criminal behavior will have on the juvenile's future, and his or her ability to become contributing members of society (Hoge et al., 2008). There have traditionally been two ways to deal with juvenile offenders: punishment or rehabilitation and treatment. In general, punishment has been the preferred choice; society tends to view juvenile offenders as making conscious choices to offend, for which they should be punished. However, the rehabilitation and treatment perspective looks at juvenile offending as a product of the youth's environment. This perspective holds society responsible for the rehabilitation of juvenile offenders. When dealing with juvenile offenders it is best to consider both the perspectives of punishment and rehabilitation. Effective treatment of juvenile offenders requires an understanding of the risk factors that may contribute to a youth's decision to offend. For juvenile offenders, there are several different types of treatment options to consider; proven treatment

programs for offenders include Multisystemic Therapy (Klietz, Borduin & Schaeffer, 2010), Functional Family Therapy (Hinton, Sheperis & Sims, 2003), and Aggression Replacement Training (Holmqvist, Hill & Lang, 2009). Cognitive-behavioral therapies are said to be promising treatment programs for offenders (Hoge, et al., 2008). The next section will provide an overview of cognitive-behavioral therapy.

Cognitive Behavioral Therapy

Cognitive-behavioral therapy (CBT) is used to treat many psychological disorders (Bieling, McCabe & Antony, 2006), such as eating disorders (e.g., Bowers & Andersen, 2007; Bowers & Ansher, 2008; Cohen, Simpson & Bride, 2004), anxiety (e.g., Kendall, Hudson, Gosch, Flannery-Schroeder & Suveg, 2008; Saavedra, Silverman, Morgan-Lopez & Kurtines, 2010), depression (e.g., David-Ferdon & Kaslow, 2008; Gaynor, Weersing, Kolko, Birmaher, Heo & Brent, 2003; Shirk, Kaplinski & Gudmundsen, 2009), trauma disorders (e.g., Deblinger, Mannarino, Cohen, Runyon & Steer, 2011; Feather & Ronan, 2006; Mueser, Rosenberg & Xie, 2008), and obsessive-compulsive disorder (e.g., Farrell, Brisbane, Schlup & Boschen, 2010; Williams, Salkovskis, Forrester, Turner, White & Allsopp, 2010). CBT has also been used as an effective treatment option with offenders (e.g., Hoge, et al., 2008; Little, Robinson & Burnette, 1998; Masters, 2004; Robertson, Grimes & Rogers, 2001). CBT focuses on how thoughts guide and influence behavior. The goal of CBT is to bring change to actions, by changing thought processes. Changing unhealthy self-talk is often an effective strategy used in CBT.

Cognitive therapists help clients reduce negative and maladaptive thoughts or beliefs, by replacing them with more constructive thoughts and beliefs (Martin & Pear, 2007). The ideology behind the cognitive and behavioral modification approaches overlaps; in that treatment effectiveness is measured by the amount of improvement seen in the client's behavior. Cognitive behavioral modification approaches include three main methods: cognitive restructuring, self-directed coping, and mindfulness and acceptance. The next subsections will briefly overview models of CBT that are used with children and adolescents, including Rational-Emotive Behavior Therapy (REBT), cognitive therapy, self-instructed training, problem-solving, and Acceptance and Commitment Therapy (ACT).

Cognitive restructuring. Cognitive restructuring methods seek to change client's cognitions, which will ultimately change his or her behavior (Martin & Pear, 2007). One assumption in cognitive therapy is that individuals' beliefs, attitudes and expectations affect their behavior. Another assumption is that cognitive deficiencies can cause emotional disorders. In order to counter faulty thinking, strategies like cognitive restructuring are often employed. Cognitive restructuring strategies deal mainly with a client's private verbal behavior and imagery as they relate to the individual and the world around him or her.

Rational-Emotive Behavior Therapy (REBT) is an example of a cognitive restructuring method (Martin & Pear, 2007). It is often used when clients have irrational thoughts or beliefs that can cause anxiety, sadness or anger. Such thoughts include "I always screw up" and "I can't get anything right." The REBT approach is designed to help a client identify these thoughts and replace them with more rational thoughts. Clients

commonly think in absolute terms, overgeneralize and catastrophize things in their life. These troublesome thoughts, based on irrational beliefs, can affect one's outward behaviors in detrimental ways. REBT gives clients homework that addresses things such as irrational thinking and allows the client to see how rational thinking can be beneficial. Rational-Emotive Behavior Therapy has been found to be effective in treating psychological disorders (e.g., Szentagotai, David, Lupo & Cosman, 2008; Wilde, 2008), in improving anger management skills (e.g., Flanagan, Allen & Henry, 2010; Fuller, DiGiuseppe, O'Leary, Fountain & Lang, 2010; and in improving social skills (e.g., Flanagan, Allen & Henry, 2010; Flanagan, Povall, Dellino & Byrne, 1998).

Cognitive therapy is also classified as a cognitive restructuring technique. The basic premise of cognitive therapy is that dysfunctional thoughts are the source of an individual's problems (Beck, 1976). Dysfunctional thinking may include: (1) *dichotomous thinking,* which is thinking in absolute terms, similar to the "all or nothing" mindset, (2) *arbitrary inference,* which involves using inadequate evidence to draw a conclusion, (3) *overgeneralization,* which is using a small number of instances to reach an overall conclusion, and (4) *magnification,* which is exaggerating the meaning or significance of a specific situation. There are three basic components to cognitive therapy: (1) identification of dysfunctional thoughts, that may be the cause of emotional problems, (2) counteracting the dysfunctional thoughts, and testing the hypothesis that the dysfunctional thoughts are not based on reality, often through the use of homework assignments, and (3) completion of additional homework assignments that focus on changing behaviors.

Cognitive therapy was initially developed for use with patients suffering from depression, and most of the research conducted on the effectiveness of cognitive therapy has focused on populations suffering from depression. Cognitive therapy has been demonstrated to be effective in changing cognitive schemata and behavior associated with depression (e.g., Dozois, Bieling, Patelis-Siotis, Hoar, Chudzik, McCabe & Westra, 2009; Pace & Dixon; 1993; Parrish, Cohen, Gunthert, Butler, Laurenceau & Beck, 2009). Cognitive therapy has also been found to be an effective treatment for individuals with Obsessive Compulsive Disorder (Whittal, Robichaud, Thordarson & McLean, 2008).

Self-directed coping methods. Self-instructional training is one example of a self-directed coping method. It was initially developed by Meichenbaum and Goodman (1971) to help children control impulsive behavior. Self-instructional training is used to help clients develop strategies for coping with stressful situations that may be out of their control. The emphasis is placed not on eliminating the negative emotions that arise, but on learning how to cope with them. The first step in helping clients cope with stress is to help them identify internal stimuli that result from stressful situations as well as the client's use of negative self-talk. The next step is for clients to use self-talk that counteracts the negative self-talk when they are in stressful situations. The third step is for clients to learn how to instruct themselves into taking the next step for appropriate action. Finally, the clients learn to praise themselves for successfully dealing with a stressful situation. Self-instructional training has been found to help increase self-esteem among individuals with low self-esteem (Lange, Richard, Gest, Vries & Lodder, 1998). Self-instructional training has also been found to reduce impulsive behavior, such as interrupting. One study, enabled parents to utilize self-instructional training with their

school-aged children; results indicated decreased child interruptions (Sloane, Endo, Hawkes & Jenson, 1991).

Problem-solving is another form of self-directed coping. Problem-solving methods focus on helping people use logical methods to find solutions to personal problems. D'Zurilla and Goldfried (1971) outlined 6 basic steps in using a problem-solving method:

1. General orientation, in which clients are taught to recognize problems and to realize that they can be resolved using systematic methods.
2. Problem definition, in which clients specifically define what the problem is, which then makes it easier to solve.
3. Generation of alternatives, in which clients brainstorm all of the possible solutions to the problem, both good and bad solutions.
4. Decision making, in which clients carefully consider the consequences of each solution they came up with, and then selects the solution that would most likely have the best outcome.
5. Implementation, in which the client develops a plan for carrying out the optimal solution, decided on in step 4.
6. Verification, the plan is put into effect and the client is encouraged to monitor the progress of the solution in solving the problem.

If the solution chosen does not solve the problem, the process must be restarted. When evaluating the problem-solving method, research has found that adults and children can easily learn problem-solving skills, but that these skills are not always used appropriately to obtain the desired results to personal problems (as cited in Martin & Pear, 2007). A

meta-analysis evaluated the effectiveness of Problem-Solving Therapy (PST) in reducing depressive symptomalogy (Bell & D'Zurilla, 2009). Results indicated comparable efficacy when compared to other psychosocial treatments and medications, and superior efficacy when compared to support/attention and wait-list control groups.

Mindfulness and acceptance. Mindfulness involves awareness, observation and description of one's behaviors, as they occur, in a nonjudgmental way (Baer, 2003). Acceptance is the process of viewing all thoughts as neither good nor bad, neither right nor wrong; rather, simply accepting the thoughts. Acceptance procedures teach individuals that it is acceptable to feel their feelings and think their thoughts, regardless of whether they are good or bad. The individuals can think aversive thoughts, yet still take constructive action that is in line with their life goals and values. Acceptance and Commitment Therapy (ACT) is an intervention that focuses on mindfulness and acceptance. It uses three main phases:

1. The client learns that past attempts to control emotions often fail, and often serve to increase the frequency of such thoughts and emotions.
2. The client uses mindfulness training and acceptance exercises to experience and embrace their thoughts and emotions in a nonjudgmental manner.
3. Clients are encouraged to identify their values in different life domains including work, family and intimate relationships.

The last step is commitment, where clients translate their values into concrete and achievable goals. Clients are also able to identify and attempt to eliminate behaviors that can keep them from reaching their goals (Martin & Pear, 2007).

Research on the effectiveness of Acceptance and Commitment Therapy (ACT) has demonstrated significant decreases in depressive symptoms, measures of anxiety and measures of fatigue, when compared to a non-treatment group (Bohlmeijer, Fledderus, Rokx & Pieterse, 2011). The beneficial effects of ACT were found to be maintained after three months. ACT has also been utilized with participants diagnosed with Obsessive Compulsive Disorder (OCD) (Twohig, Hayes, Plumb, Pruitt, Collins, Hazlett-Stevens & Woidneck), and eating disordered behavior (Juarascio, Forman & Herbert, 2010).

Cognitive Behavioral Therapy with Children and Adolescents

Cognitive behavioral therapy (CBT) has been found to be an effective treatment approach for children and adolescents with many different disorders. This section reviews three programs designed specifically to treat children and adolescents with problematic anger that may lead to disruptive or delinquent behavior. Although CBT is predominantly a psychological method for treating mental illnesses, it is has also been found to be an acceptable treatment approach for socially problematic behaviors such as substance-abuse and criminal conduct (Milkman & Wanberg, 2007). Adolescents who engage in delinquent behavior or criminal conduct, or are at-risk to do so, may fall into certain thought patterns, including feeling like the victim, feeling invincible, feeling disrespected or justifying one's actions. Many times offenders have cognitive distortions that ultimately impact their behaviors. Examples of such distortions include overgeneralizations, personalization and "all or nothing" thinking (Masters, 2004). CBT attempts to help at-risk youth and juvenile offenders change maladaptive thought processes and thought patterns to more realistic and positive ways of thinking. These programs work to produce positive outcomes for participants, as well as for their

communities. Programs designed for juvenile offenders have been found to have the largest and most consistent economic returns (Aos et al., 1999).

Anger coping program. The Anger Coping Program was originally designed as a school-based intervention for children exhibiting aggressive behaviors (Reinecke, Dattilio & Freeman, 2003). It has subsequently been used in outpatient mental health settings. The typical length of group sessions in school settings is 45-60 minutes and 60-90 minutes in outpatient settings. An important aspect of Anger Coping is that initially, each child identifies his or her problem behavior and works on goals designed to improve such self-identified problem behaviors. The Anger Coping Program also places emphasis on finding appropriate coping skills for dealing with anger and working on problem-solving skills in social settings. Anger management techniques used include calming self-thoughts and distraction techniques. The students engage in perspective-taking sessions and are taught to promote generalization of skills learned.

The Anger Coping Program has been found to significantly decrease the disruptive and off-task behaviors in the classroom, among school-aged boys (Lochman, Burch, Curry & Lampron, 1984). Additionally, research indicates long-term effects; one study found that three years after treatment, aggressive boys displayed lower levels of substance abuse, higher levels of self-esteem, and higher levels of home-related self-esteem, when compared to a non-treatment group (Lochman, 1992).

Reinecke (2003) summarized current research on the effectiveness of the Anger Coping Program and found some optimistic outcomes with regard to short-term and long-term behaviors. One study found that aggressive boys in the treatment condition had less

parent-reported aggressive behavior, displayed fewer aggressive and disruptive problems in the classroom, and showed an increase in self-esteem than minimal treatment and no treatment conditions. Another study found that after 7 months children who participated in the Anger Coping Program had fewer off-task behaviors at school and after 3 years, exhibited lower levels of substance abuse and continued to maintain their increases in problem-solving skills and self-esteem than they had at the onset of the program. However, in this particular study, there were no significant decreases in delinquent behavior among the boys who participated in the Anger Coping Program

The Coping Power Program is a more complex version of the Anger Coping program, developed to integrate parental involvement into the treatment program (Reinecke, et al., 2003). The program includes additional sessions that focus on emotional awareness, relaxation training, social skills enhancement, positive social and personal goals and dealing with peer pressure (Reinecke et al., 2003). The Coping Power Program includes both individual sessions and parent group sessions.

In one study, the Coping Power Program was found to improve behavior of participants, both at home and at school; however, it did not appear to impact participants' reactive aggressive behavior (Lochman & Wells, 2002). Another study assessed the effects of the Coping Power Program on aggressive boys (Lochman & Wells, 2004). A one-year follow-up indicated lower rates of self-reported covert delinquent behavior, including theft, fraud or property damage. No positive intervention effects were found on overt delinquent behavior, including robbery and assault. Teacher ratings suggested an improvement in school behavior for program participants, during the year following treatment.

The Anger Replacement Training (ART) program is a cognitive behavioral treatment approach for juvenile offenders (Glick & Goldstein, 1987). The program is designed to treat children and adolescents who are aggressive or engage in delinquent behavior. ART consists of three main parts: structured learning training, anger control and moral education. Structured learning training focuses on systematically teaching pro-social behaviors to chronically aggressive youth. Pro-social skills are taught first by modeling, then by engaging in role-play, followed by performance feedback and finally, transfer training, in which the youth are encouraged to generalize the newly learned skills both in the training sessions and in daily experiences. In the anger control training portion of ART, participants record anger-arousing situations and are then taught to analyze them, by identifying triggers and cues, using reminders and reducers, and finally by providing a self-evaluation. The final component of ART is moral education, designed to improve the participants' level of fairness, justice, and concern with the needs and rights of others, using a series of moral dilemmas.

A pilot study evaluating the effectiveness of ART indicated improved in-facility behavior and increased knowledge of pro-social behaviors compared to non-ART groups (Glick & Goldstein, 1987). Post-treatment in-community behavior was also found to be superior for ART participants when compared to non-ART groups. Another study combined ART and a token economy with offenders in a residential facility (Holmqvist et al., 2009); however, results indicated no significant differences between treatment participants and the control group.

The effect of Aggression Replacement Training (ART) on antisocial behavior was measured on a group of male and female adolescents in a runaway shelter (Nugent,

Bruley & Allen, 1999). The results indicated a decrease in both male and female antisocial behavior in the context of the short-term residential setting. The results also suggested that ART may be more effective in reducing male antisocial behavior when there are fewer males in the facility. The findings further suggested that ART may be effective in reducing female anti-social behavior, regardless of the number of males or females in the facility.

Many cognitive behavioral treatment programs have been found to be effective in dealing with problematic juvenile behavior. Utilizing cognitive behavioral approaches to address juvenile delinquency has the potential for significant decreases in juvenile recidivism, as the premises behind CBT focus on changing one's thought patterns, to ultimately change behavior. Few programs, utilizing a CBT framework, have been found to produce consistent decreases in juvenile recidivism, following program completion. One program that has had positive results in reducing recidivism among adult offenders is Moral Reconation Therapy; it is a promising approach for reducing juvenile recidivism.

Moral Reconation Therapy

Moral Reconation Therapy (MRT) is similar to other models used with children and adolescents, in that it utilizes a cognitive behavioral therapy approach. MRT, like the Anger Coping Program, Coping Power Program and Aggression Replacement Training, is manual-based, and works to enable participants to change their behavior, by changing their maladaptive cognitions. MRT is a cognitive-behavioral treatment approach that was originally designed for use in prison populations and with substance abusers (Little &

Robinson, 1988). The purpose of MRT is to change how offenders make decisions and judgments based on Kohlberg's perspective of moral reasoning (Little, 2000). The word *reconation* refers to the part of the personality that is responsible for conscious decision-making. The term *moral* is used for its connection to Kohlberg's moral development. Therefore, MRT seeks to increase the moral decision-making skills of participants. MRT is like many other cognitive behavioral treatment approaches, in that participants identify and address dysfunctional or maladaptive thoughts, and learn to replace them with more constructive thoughts and beliefs. As constructive thoughts and beliefs are developed and moral decision-making skills are improved, participants begin to demonstrate improvements in behavior.

MRT is a sixteen step program; however, the majority of research investigates the efficacy of MRT when using the first twelve steps (Little & Robinson, 2006; Burnette, Swan, Robinson, Woods-Robinson &Little, 2004). Steps thirteen through sixteen typically take place outside of the group setting and are focused on further personal growth. MRT participants meet as a group twice a week and completion of the MRT program usually takes three to six months (Little, 2000). In MRT, participants are given a workbook, in which they have assigned readings for each step. In order to move on to the next step in MRT, participants must complete homework and present it to the group or the group facilitator, as specified in each step. The group facilitator then decides if each participant has been honest and has met the criteria required complete the step. For the purpose of this study, the workbook for juveniles will be used; *Juvenile MRT: How to escape your prison* (Little & Robinson, 1997).

Step 1: Honesty. "Admitting Disloyalty: Giving up the Lie" is the title of Step 1 (Little & Robinson, 1997). In this first step, participants read about disloyalty, and are then posed with questions to evaluate their own dishonesty. The goal of Step 1 is for the participants to begin the escape from their current difficulties and problems and to take control of their life. In order to do that, participants must first admit that they are the source of the problems in their life and admit to some "disloyalty" in their life. The focus of this step is to allow participants to reflect on their past behaviors, and possibly realize the relationship between their past behaviors that led them to where they currently are: in the MRT group.

Step 2: Trust. "Trust in Self and Others: Your Inner Self Waits" is the title of Step 2 (Little & Robinson, 1997). The reading for Step 2 describes how there are two sides to each person; the "good side", which is referred to as the Inner Self, and the "bad side" where negative thoughts that drive negative behavior. The Inner Self is the key to changing, it is what quietly tells an individual to do the right thing, but often the Inner Self is ignored. One's beliefs, whether good or bad, rational or irrational, are the driving force behind behavior and individuals are slaves to their beliefs. The goal of Step 2 is for participants to choose to trust themselves and what they are doing in the program to help themselves, and they must also learn to trust others. Participants must choose to trust that their Inner Self is a force working inside them to create strong desires to better themselves and become something better than they are now.

Step 3: Acceptance. "Rules are made to be followed" is the title of Step 3 (Little & Robinson, 1997). At this point in the program, "Opposition" may be setting in. The reading for Step 3 discusses opposition. Participants may be opposing the program or the

people around them. Opposition is what can cause a participant to be resistant to change. Opposition may cause participants to argue with others when they believe they are right. In Opposition, people tend to blame the rules, the system or the way other people are for their problems. People in Opposition may blame their parents, schooling, society or their background for their difficulties in life. However, the fact is, people are unhappy and suffering because they have never learned anything else. People choose to be unhappy and the only way to find happiness is to make the choice to be happy. In order to get started on the road to happiness, participants must commit to following the rules, learn to become acceptant and stop arguing. Acceptance is needed to let go of the need to always be right and to escape opposition. Acceptance is receiving something with a favorable, agreeable and open mind. The goal of Step 3 is for the participants to become adaptable to the circumstances and conditions around them, to understand how their beliefs get in the way of happiness and to learn how the world really operates.

Step 4: Awareness. "You are on the Freedom Ladder: Raising Awareness" is the title of Step 4 (Little & Robinson, 1997). In Step 4, the participants read about how they are entering a stage of uncertainty. They have agreed to follow the rules and to do things that they have never done before. Uncertainty does not last long; however, while in the stage of uncertainty, there are a few things that the participant must do. First, the participants need to understand their limits. Next, the participants must fully assess their present life and become certain of all things currently in their life. Finally, they must become totally aware of all things that make up their lives. The essence of Step 4 is that as the participants become honest, trustworthy and acceptant of rules, they must also begin becoming aware of their lives.

Step 5: Healing Relationships. The title of Step 5 is "You are Going to Hurt Yourself" (Little & Robinson, 1997). Now that the participants have completed Step 4, they are now in the state of Injury. In this state, participants may make mistakes, let others down or cause pain to themselves or others; this happens because they now have an increased awareness about their life. Step 4 may have made the participants more aware of things they have done to hurt others, problems that exist in their relationships, as well as, things they've done to hurt themselves, such as not doing well in school. Step 5 focuses on the start of the process of healing the relationships that have been damaged. The goal of Step 5 is for participants to begin to repair the injury they have caused to themselves and others. In order to do this, they must examine all important relationships in their life and start working to repair them.

Step 6: Helping Others. "Getting to know and Help Others" is the title of Step 6 (Little & Robinson, 1997). Step 6 focuses on helping others and not expecting something in return. The essence of Step 6 is for participants to start helping others to give back to society, and to become a good force in the world. Many participants may not want to help others because they may be perceived as weak or not want to help others because they are angry at the world. Some participants may be apprehensive about helping others because they are afraid of being used or being conned or taken advantage of. Some participants may not want to do something for others, unless there's something in it for them. The goal of Step 6 is to begin understanding and helping other people, especially helping those who can give nothing in return.

Step 7: Identity. The title of Step 7 is "You are no longer what you were" (Little & Robinson, 1997). Step 7 focuses on forming an identity by setting life goals. At this

point in MRT, participants are in a state of non-existence. In non-existence, participants do not have a real sense of identity, prior to this stage, participants identities may have been defined by the roles they played, such as daughter, tough guy or drug user. Now it is possible for participants to realize that they do have some power and control when it comes to their lives. In Step 7, participants take the first steps in the on-going process of forming their identity by creating meaning in their lives. There are two contributors to the formation of one's identity; the things an individual has done in the past, and the things an individual is trying to become in the future. The goal of Step 7 is to make goals, then act and think in accordance with those goals.

Step 8: Consistent goals. The title of Step 8 is "Setting a goal is one thing, doing it is another" (Little & Robinson, 1997). Step 8 focuses on the importance of having an action plan to reach big goals. In the reading for Step 8, participants learn that often times, people focus their energy on getting angry with the world or complaining that life is not fair, when they should be working on their goals. The goal of Step 8 is to stop arguing and complaining about how the world is, and to make plans to be successful in the world as it is. The essence of Step 8 is all about making plans to fulfill goals and understanding that long-term goals can only be reached by planning short-term actions.

Step 9: Commitment. The title of Step 9 is "Don't give up: Coping with Danger" (Little & Robinson, 1997). When participants reach Step 9, they reach a stage called Danger. Participants have set goals, but they face the danger of not reaching those goals, they face the risk of failure. However, if participants are really committed to their goals, the danger state can seem like an adventure, that is exciting and challenging. Participants must rethink their definition of failure; failure does not occur when mistakes are made or

setbacks are encountered. Failure occurs when individuals give up. Everyone will face setbacks; action plans and deadlines may need to be modified. Everyone makes mistakes, but these mistakes must be viewed as learning opportunities. The goal of Step 9 is to never give up, to never give in, to take setbacks in stride and to learn from one's mistakes. The essence of Step 9 is for participants resist the temptation to go back to the way they were and to stay committed to the positive changes they have already made.

Step 10: Maintenance. "Old habits die hard" is the title of Step 10 (Little & Robinson, 1997). In this step, participants may still feel that they are in the Danger stage. Participants may occasionally find themselves slipping into old attitudes, beliefs and behaviors; it is important that they realize that those things are wrong and will ultimately cause them unhappiness. Participants must realize that everyone has problems in the way they think and behavior and that it is important to become aware of and understand what their problem behaviors are. The goal of Step 10 is to become aware of any negative or self-destructive attitudes or beliefs the participants may have. Once participants recognize these attitudes and beliefs, they must change them. The essence of Step 10 is for participants to become more aware of who they are and to maintain the positive changes they have started since beginning MRT.

Step 11: Keeping Commitments. The title of Step 11 is "Don't Panic" (Little & Robinson, 1997). In this step, participants may be feeling a sense of urgency, this is known as the state of Emergency. In this state, participants know that they can be successful, they know they are going to make it, they also feel satisfaction in meeting their goals and setting new ones. Others are going to begin to notice the success of the participants and want to share in the participants' goals. The goal of Step 11 is for

participants to stay firm in their conviction to do the right thing and to treat people the way they want to be treated. Having a conviction to do the right thing involves doing what is right just because it is right. The essence of Step 11 is focused on making a commitment to treat others the right way.

Step 12: Moral Goals. The title of Step 12 is "You're Normal- So what do you do now?" (Little & Robinson, 1997). Participants who reach Step 12 have had to become aware of their attitudes, beliefs and behaviors and have made several changes throughout their time participating in MRT. They have learned to create freedom for themselves by taking full responsibility for their actions. Participants reach a state called Normal once they reach Step 12. There are some people who will admire them for that, while others will despise them. In this state, participants are not overly concerned with what others think about them, but have developed a great concern for their own opinions of themselves. Participants are able to listen to the conscience of their Inner Self. Participants have come to accept that happiness is a condition of being and that the act of achieving goals alone will not make them happy. The key to happiness is setting the right goals and reaching those goals by doing things the right way. Participants must realize that only they know what the right goals for their lives are and what will lead them to happiness. There are several things that participants have learned by now that will lead them to unhappiness; including: setting unreasonable goals, setting goals that are not challenging, becoming addicted to a goal or a life-style, not living for today, avoiding the truth about themselves, and taking shortcuts or unethical means to achieve goals.

The goal for Step 12 is for participants to reassess their Life's Master Goal Plan entirely, with the purpose of becoming the best person they can be. Participants must

constantly reevaluate their Master Goal Plan, and continue to set new goals for themselves. It is also important for participants to view setbacks as learning experiences and to never give up. Participants need to commit to actively telling the truth and being completely trustworthy. It is also important for participants to not allow others to drag them down. Finally, participants must allow their Inner Self to express their abilities and creative potential; so that they can add a positive element to the world they live in. The essence of Step 12 is for participants to realize that happiness depends on the goals they set for themselves and the things they do to achieve their goals.

Steps 13-16 (Little & Robinson, 1997). Steps 13 through 16 do not take place within the group, nor do they require homework. These steps are completely voluntary and provide and outline for individuals to continue to hold themselves accountable and to see the value in helping others. These steps involve a continued commitment to the changes that individuals have made in Step 1 through Step 12. These steps also require individuals to look beyond themselves and place an emphasis on having a positive impact on the world they live in. The goal of Step 13 is for individuals to continually reassess their behavior, attitudes and beliefs. The goal of Step 14 is for individuals to learn to place less emphasis on themselves and to expand their life's direction and goals into a project that involves the welfare of others. The goal of Step 15 is for individuals to help others to increase their ethics and morals and the goal of Step 16 is to constantly reassess the relationship between the individuals' Inner self and the who they have become.

Moral Reconation Therapy Research

Research has been conducted evaluating Moral Reconation Therapy (MRT) within specific populations, including adult offenders, female offenders, juvenile

offenders, substance-abusers, DWI offenders and individuals on probation and parole. Research has found that MRT has had a significant positive impact on over one million participants ("Moral Reconation Therapy," 2009). Adult offenders and juvenile offenders will be discussed in the sections below.

Adult Offenders. Moral Reconation Therapy (MRT) has been used in treating adult offenders more often than in any other population. Several studies have evaluated the effects of MRT; results have found MRT to reduce recidivism rates, increase moral reasoning in participants and produce positive changes, including decreased number of rule violations and disciplinary infractions, increased program completion and produce beneficial changes in personality variables (Black, 2000; Brame, MacKenzie, Waggoner & Robinson, 1996; Little & Robinson, 2006; Little, 2000; Wilson, Bouffard & Mackenzie, 2005). Studies on MRT have found it to be a highly cost-effective treatment for use with offenders. Research conducted by the Washington State Institute for Public Policy found MRT to have the highest cost-benefit for the treatment of adult offenders (Aos, Phipps, Barnoski & Lieb, 1999). The Substance Abuse and Mental Health Services Administration (SAMHSA) listed MRT as an evidence-based program effective in reducing recidivism among adult and juvenile offenders (SAMHSA, 2008).

A comprehensive review of MRT outcome research found that felony drug offenders who completed MRT showed significantly higher levels of moral reasoning as measured by Kohlberg's levels of moral reasoning upon completion of the program (Little, 2000). Other research has found that at a community corrections facility, MRT produces significantly lower numbers of disciplinary infractions in offenders after participating in MRT than prior to treatment (Black, 2000). MRT has also been shown to

produce significantly lower disciplinary infractions among offenders who are MRT completers as compared to offenders not receiving MRT treatment (Brame, MacKenzie, Waggoner & Robinson, 1996).

MRT has also been shown to have a significant impact on reducing recidivism rates among offenders; this is one of the most important and most researched outcomes in the treatment of offenders. A recent study demonstrated a significantly lower re-arrest rates (81% compared to 94%) and re-incarceration rates (61% compared to 82%) rates for offenders treated with MRT, when compared to non-treated offenders, twenty years after treatment (Little, Robinson, Burnette & Swan, 2010). A study measuring re-incarceration rates among offenders, found that offenders treated with MRT had a re-incarceration rate that was 75% lower than offenders not treated with MRT after one year of release and 25-35% lower 2 to 10 years after release (Little & Robinson, 2006).

A meta-analysis of recidivism rates for offenders found that 11% of the 3,373 MRT-treated offenders reoffended after one year compared to 37% of 12, 665 offenders not treated with MRT (Little, 2006). The recidivism rate for MRT-treated offenders after two years was 19% compared to 38% of the control group and after three years, the recidivism rate for MRT-treated offenders was 27% as compared to 40% seen in the control group. This research has found that MRT significantly reduces recidivism after one year and continues to have lasting effects after three years, when compared to non-treatment groups. The meta-analysis cites that many of the studies analyzed were "population studies," in which entire prison populations participated in MRT, other studies were classified as quasi-randomized and finally, some studies selected offenders indicated as being at the highest risk for recidivating. The data from the studies was

found to be generally consistent, and the quality of the research was assumed to be similar.

Moral Reconation Therapy has also been used in the treatment of substance abusers. Research on the effectiveness of MRT on hospital-based substance abusers found that after completion of MRT, participant's Purpose in Life scores increased significantly and sensation seeking scores significantly decreased (Correctional Counseling, Inc., 1993). MRT completers have also been found to have significantly lower anger expression following participation in MRT than prior to completing the program (Miller & Hobler, 1996). MRT has also been shown to produce positive effects on personality variables such as self-esteem, life purpose and anger. Studies have found that following MRT completion among substance abusers, there are significant increases in self-esteem (Sandhu, 1998).

The effectiveness of MRT on female offenders has not been as extensively researched as the effects of MRT on male offenders. The Tennessee Prison for Women implemented the use of MRT in 1998. A study researched the effects of MRT using pre-test and post-test measures and found that MRT produced several beneficial changes in the participants (Burnette, Prachniak, Leonard, Robinson, Swan & Little, 2005). Results from this study indicated that participants who completed MRT reported significantly more purpose in life, showed a significant shift from external locus of control to internal locus of control and reported increased social support from friends, family and significant others. Finally, participants were found to have significantly decreased levels of lower moral reasoning and significantly higher levels of higher moral reasoning. Recidivism data indicates significantly lower rates than national rates. Between 1998 and 2001, 579

program participants were released on parole, by 2005, 34.9% of participants had rearrested, after an average of 33 months since release. Between June 2002 and 2005, an additional 180 program participants were released on parole; 15.5% were found to have been rearrested, after an average of 21 months since release. It was also noted that the majority of re-arrests were for "technical violations," rather than new criminal charges. A study published by the Bureau of Justice Statistics in 2002, found the two-year recidivism rate for female offenders to be 49.9%. These results are consistent with previous MRT research, indicating significantly lower recidivism rates for program participants.

Juvenile offenders. MRT has been used for the treatment of juveniles in educational programs, boot camps, juvenile facilities and schools (Little, 2000). However, there is limited research on the use of MRT with juvenile offenders. One study evaluated the effects of MRT on juvenile offenders, in a therapeutic community program (Burnette, Swan, Robinson, Woods-Robinson & Little, 2003). The participants included thirty-three youth referred by the Department of Children's Services, due to persistent problems with the juvenile justice system, involving substance abuse. Participants were evaluated using pre-test and post-test measures, including the Prison Locus of Control (PLOC), the Life Purpose Questionnaire (LPQ), the Short Sensation Seeking Scale, (SSS) the Multidimensional Scale of Perceived Support, the Defining Issues Test (DIT) and the Problem Oriented Screening Instrument for Teenagers (POSIT). In this study the results of program completers were also contrasted with participants who dropped out of the MRT program. The Prison Locus of Control (PLOC) instrument was used to assess participants' locus of control and results found that program completers had a more internal locus of control, upon entering the program, than participants who eventually

dropped out of the program. However, results also indicated a positive shift in locus of control scores from pre-test to post-test, in both program completers and program dropouts, suggesting that program completion did not have a significant impact on participants' locus of control scores.

The Life Purpose Questionnaire was used to assess the degree to which an individual perceives meaning or purpose in his or her life. Participants with higher scores on the LPQ were more likely to remain in the program than participants with lower scores on the LPQ. Results also found that there were desirable but not significant increases in participants' scores on the LPQ from pre-test to post-test. The Short Sensation Seeking scale (SSS) was used to measure participants' risk-taking behaviors. Results from pre-test to post-test showed that participants and dropouts showed a slight decline in sensation seeking; however, these results were not significant and there were essentially no differences between the groups. The Multidimensional Scale of Perceived Social Support was used to assess the degree to which a participant believes they have support from friend, family and significant others. Participants had significant increases in support from family and significant others from pre-test to post-test, and the increases in support from friends approached significance.

The Defining Issues Test (DIT) was used to measure participant's levels of moral reasoning. There were no significant differences between pre-test and post-test measures or between program completers and dropouts. The Problem Oriented Screening Instrument for Teenagers (POSIT) is used to identify potential problem areas, such as mental health, substance abuse, family relations, peer relations and family skills. Participants reported high levels of problems upon entering the program and a significant

decrease in problem areas upon completing the program. Results from this study indicate positive changes in locus of control, and increases in perceived social support from family and significant others. Recidivism data was not reported.

Overall, pre-test and post-test data indicate that MRT participants demonstrated a positive shift in each area assessed; however, only a few areas were found to be statistically significant. A significant decrease was found in Locus of Control scores for MRT participants, suggesting a more internal locus of control; the same was found to be true for program drop-outs (Burnette, et. al., 2003). It was suggested that MRT program participation, regardless of how limited, was associated with shifts toward a more internal locus of control. Pre-test to post-test comparisons indicate that MRT participants also had significantly higher levels of perceived support from family and friends, than program drop-outs. Finally, MRT participants pre-test scores indicated a high level of problems, as measured by the POSIT, and significant decreases were found across problem areas for MRT participants.

Another study investigated the effects of MRT on juvenile offenders and found significant positive changes in the participants using pre-test and post-test measures, as well as lower recidivism rates than those found in published state rates (Burnette, Swan, Robinson, Woods-Robinson, Robinson & Little, 2004). Participants included twenty-three juvenile offenders residing in a therapeutic community. Participants were evaluated using pre-test and post-test measures, including the Prison Locus of Control (PLOC), the Life Purpose Questionnaire (LPQ), the Short Sensation Seeking Scale, (SSS) the Multidimensional Scale of Perceived Support, the Defining Issues Test (DIT) and the Problem Oriented Screening Instrument for Teenagers (POSIT). Results indicated that

following program completion participants had significantly decreased levels of sensation seeking, using the Short Sensation-Seeking Scale (SSS), and significantly fewer problems, such as problems in mental health, as measured by the Problem Oriented Screening Instrument for Teenagers (POSIT). Desired changes were also found on Scale 2 of the Defining Issues Test, measuring the lowest level of moral reasoning, in which a significant decrease was noted. The lowest level or moral reasoning, as measured by the Defining Issues Test, is associated an individual's belief that something is only wrong, when it is followed by a consequence, and that there are no other factors in determining whether an action is right or wrong. Results that approached significant levels of change included a shift from external locus of control to a more internal locus of control, and increases in levels of higher moral reasoning. Recidivism rates were found be significantly lower for program completers compared to state recidivism rates; after two years MRT program completers had a recidivism rate of 30.38% as compared to 44.4%, an average recidivism rate for five states. This study indicates the benefit of MRT to juvenile offenders. Limitations of this study include a small sample size and the lack of a control group.

At-risk youth. MRT has also been used with at-risk populations in schools (Schwann, 2002). Participants included 19 high school students, referred for being at high-risk of expulsion or failure, due to poor decision making or disciplinary infractions. Results from school-based MRT indicated a 46% reduction in the number of disciplinary referrals, a 67% reduction in the number of out-of-school suspensions and a 33% decrease in absenteeism, when compared to the 17 week period, prior to implementation of MRT.

Purpose of Research

Juvenile delinquency is a continuing problem. In 2009, there were over 1.5 juvenile arrests (Crime in the United States, 2010). There are two main approaches for addressing juvenile delinquency: punishment and rehabilitation and treatment. Although punishment has been the preferred option; rehabilitation and treatment have been found to be most effective in reducing recidivism (Hoge, et al., 2008). Many rehabilitation and treatment programs are based on the theories of cognitive behavioral therapy. Cognitive behavioral therapy focuses on teaching individuals to change maladaptive or dysfunctional thought patterns, into more constructive ones; changes in thoughts result in change in behavior. There are several cognitive behavioral treatment programs designed to teach youth ways to modify their behavior by changing their thought patterns; for example, the Anger Coping Program, Power Coping Program and Anger Replacement Training. These programs are very specific to addressing youth's anger, as the main contributor to the youth's problematic behavior. Moral Reconation Therapy, while similar in its basis on cognitive behavioral theory, focuses on addressing maladaptive thoughts associated with any variety of issues, rather than on one primary emotion, such as anger. MRT can help improve behavior on a variety of levels, specific to each participant's needs.

Several studies have researched the efficacy of Moral Reconation Therapy (MRT) with adult offenders (Black, 2000; Brame, MacKenzie, Waggoner & Robinson, 1996; Little, Robinson, Burnette & Swan, 2010; Little & Robinson, 2006; Little, 2000; Little, 2006; Wilson, Bouffard & Mackenzie, 2005). Results of these studies indicate that MRT is an effective treatment approach for reducing offender recidivism. Although there is

limited research on the efficacy of MRT with juvenile populations, one study has demonstrated positive changes in participants' locus of control and perceived support from family and friends (Burnette, et al., 2003). Another study demonstrates significantly lower two-year recidivism rates for program completers, when compared to a five-state average (Burnette, et al., 2004). Additionally, statistically significant decreases were noted in three areas: sensation seeking, reported problems and on the lowest level of moral reasoning, all of which were desirable changes. MRT has also been implemented with at-risk youth in schools and produced significant reductions in disciplinary referrals, out-of-school suspensions and absenteeism (Schwann, 2002).

Very little research exists on the efficacy of MRT on at-risk youth, and currently no known research exists exploring the effects of MRT on adolescents in group homes. The use of MRT in group homes is relevant due to the convenience of incorporating MRT into existing programs, as well as the benefits seen in participants after program completion, both for the participants and the communities, in which they live. The use of MRT in a group home will be explored in this research. The hypotheses for this research are listed below.

1. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Locus of Control scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be lower (suggesting a more internal locus of control) than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score lower on the Locus of Control scale than participants who complete Step 6 or less.

2. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Social Stress scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be lower (suggesting less clinical levels of social stress) than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score lower on the Social Stress scale than participants who complete Step 6 or less.

3. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Anxiety scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be lower (suggesting less clinical levels of anxiety) than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score lower on the Anxiety scale than participants who complete Step 6 or less.

4. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Depression scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be lower (suggesting less clinical levels of depression) than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score lower on the Depression scale than participants who complete Step 6 or less.

5. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Sense of Inadequacy scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be lower (suggesting a less clinical levels of sense of inadequacy) than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score lower on the Sense of Inadequacy scale than participants who complete Step 6 or less.

6. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Sensation Seeking scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be lower (suggesting less clinical levels of sensation seeking) than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score lower on the Sensation Seeking scale than participants who complete Step 6 or less.

7. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Relations with Parents scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be higher than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score higher (suggesting more adaptive levels of relations with parents) than participants who complete Step 6 or less.

8. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Interpersonal Relations scale on the BASC-

2; more specifically, it is hypothesized that post-test scores will be higher than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score higher (suggesting more adaptive levels of interpersonal relations) than participants who complete Step 6 or less.

9. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Self-Esteem scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be higher than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score higher (suggesting more adaptive levels of self-esteem) than participants who complete Step 6 or less.

10. It is hypothesized that there will be a significant difference between pre-test scores and post-test scores on the Self-Reliance scale on the BASC-2; more specifically, it is hypothesized that post-test scores will be higher than pre-test scores. Furthermore, it is hypothesized that participants who complete Step 7 of MRT or higher will score higher (suggesting more adaptive levels of self-reliance) than participants who complete Step 6 or less.

11. It is hypothesized that participants with higher family protective factors (dual-parent household, post-secondary parent education, greater protective factors on the Family Disagreements questionnaire, no DSS involvement) will experience more positive changes, between pre-test and post-test scores as measured by BASC-2, than participants with higher family risk factors (single parent household, parent education of high school completion or less, greater

risk factors on the Family Disagreements questionnaire, family history of drug use, excessive alcohol use, incarceration, and DSS custody status).

12. It is hypothesized that participants who committed a status or non-status offense will experience more significant levels of positive change, between pre-test and post-test scores measured by the BASC-2, than participants who did not commit a status or non-status offense.

13. It is hypothesized that MRT participants will have lower recidivism rates than the state and national averages for juvenile recidivism, additionally, it is hypothesized that participants who complete Step 7 or higher of MRT will have lower recidivism rates than participants who complete Step 6 or less of MRT.

Methods

Participants

The participants in this study included 15 adolescents, 2 males and 13 females, between the ages of 13 and 17, residing in a group home. The participants' ages ranged from 13 years old to 17 years old, with a mean age of 15.13 years old. The participants were placed in the group home by a court referral, court order, recommendation from a Juvenile Court Counselor, by the Department of Social Services or by the adolescent's parent or guardian. The demographic questionnaire found that 80% of participants identified themselves as Caucasian, with 6.7% indicating their race as Asian, 6.7% indicating their race as Hispanic and 6.6% identifying themselves as biracial.

The group home provided information regarding participants' involvement with the Department of Juvenile Justice. 40% of participants committed a status offense, 33.3% of participants did not commit an offense, 13.3% of participants committed a non-status offense and 13.4% of participants committed both a status and a non-status offense.

The group home also provided information regarding participants' involvement with the Department of Social Services. 73.3% of participants and their families did not have any involvement with the Department of Social Services; 13.3% of participants' families were identified as being under investigation by the Department of Social Services; 6.7% of participants' were identified as receiving service through DSS; and 6.7% of participants' were identified as receiving services through DSS and also currently under investigation.

Results from the demographic questionnaire found that 66.6% of participants indicated living in a single-parent household, 26.7% of participants indicated living with

both parents and 6.7% of participants indicated living with a family member other than his or her parents. Of the participants who indicated living in a single parent household, 40.0% of participants indicated their parents were divorced, 20% indicated that their parents had never been married and were no longer together and 6.7% indicated that their parents were never married, but are still together.

Results from the demographic questionnaire found that 84.6% of participants indicated that their father completed high school or less and 15.4% of participants indicated that their fathers received some training following high school completion. Results from the demographic questionnaire found that 53.3% of participants indicated that their mother completed high school or less, 13.3% of participants indicated that their mothers received some training following high school completion and 33.4% of participants indicated that their mothers completed some college courses or completed college.

Results from the demographic questionnaire found that 13.3% of participants indicated someone living in their household had recently been arrested, 13.3% of participants indicated that someone living in their household had recently had a drinking problem, 6.7% of participants indicated that someone living in their household was a drug user and 6.7% of participants identified someone living in their household as having multiple issues identified above. The remaining 40% of participants indicated that no one living in their household had recently been arrested, had a drinking problem or was a drug user.

Information provided by the group home indicated that 20.1% of participants spent 30 days or less in the program, 33.4% of participants spent between 31 and 60 days

in the program, 46.8% of participants spent 60 or more days in the program. The number of MRT steps completed ranged from 0 to 12; the mean number of MRT steps completed was 7.60. Participants participated in Moral Reconation Therapy (MRT) while residing in a therapeutic group home; MRT is an incorporated aspect of the program at the group home. Participation in MRT is not required while residing at the group home; however, it is strongly encouraged and participation is necessary to progress in the program.

Program Overview. The group home is located in a rural area in the Southeastern region of the United States. It can house up to nine youth at a time and serves as an emergency shelter for youth from seven surrounding counties. The structure of the program includes a point system and level system. Residents must earn points and complete assignments to reach the next level. A total of five levels exist: Orientation, Level A, Level B, Level C and Level D.

Upon intake into the facility, each new resident is placed on "orientation" for the first 48 hours. While on orientation, residents have very limited privileges. In order to move from orientation to Level A, residents must complete an assignment and successfully pass an "orientation group." Once residents reach Level A, they can begin earning points. Each resident earns points for doing basic things each day, such as going to school, completing chores, following the house rules, using appropriate communication, participating in weekly group meetings such as MRT, completion of weekly level-work, and completion of MRT steps. Residents may earn reduced points for not meeting daily/weekly expectations. In order to move up to the next level, residents must complete all the level-work; which is assigned to them by their case-coordinator. Level-work is designed to focus on issues that were specified by either the resident or

parent/guardian upon intake. Residents must also earn a minimum number of points to be promoted to the next level. Privileges increase as residents move up the level system.

Once a resident reaches Level D, he or she is expected to be a positive role model for the other residents. Residents on Level D no longer have to earn points and are automatically granted weekend visits home, contingent on good behavior. Residents on Level D are also allowed more freedom than residents who are on Level A, B or C. If residents do not maintain Level D appropriate behavior, they may be dropped back to Level C.

Measures

Each participant completed a demographics form, the *Children's Perception of Interparental Conflict Scale* (CPIC; Grych, Seid & Fincham, 1992) and the *Behavior Assessment System for Children, Second Edition* (BASC-2; Reynolds & Kamphaus, 2004). Information about each measure will be discussed in the following section.

Demographics Form. The demographics form was used to determine age, ethnicity, sex, family structure, parent's education level, parent's occupation, and drug and alcohol use within the family. Information obtained from the demographics form was used to analyze whether familial factors, including parental marital status, education level, impacted participant's pre-test to post-test scores on the BASC-2. See Appendix A for a copy of the demographics form.

Children's Perception of Interparental Conflict Scale (CPIC). The Children's Perception of Interparental Conflict Scale (referred to as Family Disagreements) was developed to assess children's views on several aspects of martial conflict (Grych et al.,

1992). The CPIC includes 49 items; each item requires the participant to respond with one of the following statements: “True,” “Sometime True,” or “False.” The CPIC includes nine subscales; six of which are designed to measure different aspects of marital conflict: Frequency, Intensity, Content, Perceived Threat, Self-Blame, Triangulation, Resolution, Coping Efficacy and Stability. Three factor analytically derived subscales include: Conflict Properties, Threat, and Self-Blame. Two samples of children between the ages of 9 and 12 years old were used in the development of the CPIC, Sample 1 (N = 222) and Sample 2 (N = 144).

Reliability was measured using internal consistency and test-retest measures (Grych et al., 1992). Results indicated good internal consistency; coefficient alphas for Sample 1 and Sample 2, respectively, are as follows: Conflict Properties, .90 and .89; Threat, .83 and .83; Self-Blame, .78 and .84. An acceptable level of test-retest reliability was found, with coefficient alphas as follows: Conflict Properties, .70; Threat, .68, and Self-Blame, .76, derived from 44 children from Sample 2, two weeks later. Validity was measured by comparing children’s ratings on the CPIC with parent-rated measures of marital conflict and inter-spousal aggression. The Conflict Properties scale was found to be most strongly associated with parent measures, with correlation coefficients ranging from .30 and .39. Threat and Self-Blame were not found to be closely associated with parent measures, with correlation coefficients ranging from .06 and .26. See Appendix B for a copy of the CPIC (labeled Family Disagreements).

Behavior Assessment System for Children, Second Edition. The *Behavior Assessment System for Children, Second Edition* (BASC-2; Reynolds & Kamphaus, 2004) was designed to assess the behavioral and emotional functioning of children and

adolescents between the ages of 2 and 25. The instrument includes three separate forms: a Parent form, a Teacher form, and a Self-Report form. For the purpose of this study the Self-report form for adolescents (SRP-A) was used. The age range for the SRP-A is 12 to 21 years old. The SRP-A has 176 items; the first 69 items require a True/False response, the remaining items are responded to on a 4 point scale, in which the participant responds to the given statement with: “Almost Always,” “Often,” “Sometimes” or “Never”.

The BASC-2 (SRP-A) includes twelve Clinical scales: Attention Problems, Attitude to School, Attitude to Teachers, Atypicality, Anxiety, Depression, Hyperactivity, Locus of Control, Sensation Seeking, Sense of Inadequacy, Social Stress, and Somatization. The BASC-2 (SRP-A) also includes four Adaptive scales; Interpersonal Relations, Relations with Parents, Self-Esteem and Self-Reliance. The BASC-2 provides several validity scales; Consistency Index, F Scale, L Scale, Response Patterned and the V Index. These validity scores can be used to interpret the respondent’s tendency to be overly negative, the respondent’s tendency to be inconsistent in their rating, or the respondent’s tendency to respond in some type of pattern.

The BASC-2 provides raw scores, confidence intervals, standard errors of measurement, and charts for converting raw scores into T-scores and percentile ranks (Reynolds & Kamphaus, 2004). The BASC-2 (SRP-A) used General norm samples and Clinical norm samples, in which, sex and aged based norms were developed. The internal reliability of individual scales on the BASC-2 (SRP) is high with median values near .80, on the clinical and adaptive scales, for both the general and clinical norm samples. The Cronbach alpha for males and females from the general norm sample is .82 for ages 12 to14, and .79 for ages 15-18. The Cronbach alpha for males and females from

the clinical norm sample is .82 for ages 12-18. The median test-retest reliability for individual scales on the SRP-A was .75.

Procedure

Informed consent was obtained from each participant's parent or legal guardian, before the questionnaires were completed (See Appendix C). Informed assent was also obtained from the participants (See Appendix D). Upon intake at the group home, participants completed a short demographic survey, the *Children's Perception of Inter-Parental Conflict Scale* (CPIC) and the *Behavior Assessment System for Children, Second Edition* Self-report form (BASC-2, SRP; Reynolds & Kamphaus, 2004), along with the standard forms required upon intake to the group home. Confidentiality for each participant was maintained; each participant was assigned a participant number, which was placed on the demographics form, Family Disagreements questionnaire (CPIC) and the BASC-2. A database was set up by the researcher, for the group home staff to match each participant with the respective participant number. The researcher did not have access to the database, once identifying information had been added. A copy of the information in the database, excluding identifying participant information, was sent to the researcher once the study was complete. Before discharge from each group home, each participant completed the BASC-2 again, in addition to the standard discharge forms required by the group home. In addition to the questionnaires, the group home also tracked the number of MRT Steps completed by each participant.

Results

A series of paired-samples t-tests were conducted to determine whether significant changes occurred between the pre-test and post-test conditions, on the following BASC-2 scales: Locus of Control, Social Stress, Anxiety, Depression, Sense of Inadequacy, Sensation Seeking, Relations with Parents, Interpersonal Relations, Self-Esteem and Self-Reliance, see Table 1. Additional analyses were conducted to determine if significant differences existed between participants who completed Step 6 or less of MRT and those who completed Step 7 or more of MRT, see Table 2.

Locus of Control. There was a statistically significant [t (14) = 3.29, p = .005 (two-tailed)] decrease on the Locus of Control scale from pre-test (M = 60.27, SD = 12.22) to post-test (M = 51.13, SD = 10.88). The mean decrease on the Locus of Control scale was 9.13 with a 95% confidence interval ranging from 3.18 to 15.09. The eta squared statistic (.44) indicates a large effect size. For individuals who completed Step 6 or less of MRT, no statistically significant differences were found between pre-test and post-test scores.

For individuals who completed Step 7 or higher of MRT, there was a statistically significant [t (9) = 2.68, p = .025 (two-tailed)] decrease on the Locus of Control scale from pre-test (M = 61.20, SD = 3.25) to post-test (M = 52.00, SD = 3.84). The mean decrease on the Locus of Control scale was 9.20 with a 95% confidence interval ranging from 1.46 to 16.93. The eta squared statistic (.44) indicates a large effect size.

Social Stress. The decrease on the Social Stress scale, from pre-test (M = 52.47, SD = 12.42) to post-test (M = 47.53, SD = 9.85), was not found to be statistically significant [t (14) = 1.36, p = .197 (two-tailed)]. No significant differences existed when

comparing pre-test and post-test scores of individuals who completed 6 MRT steps or less and individuals who completed 7 MRT steps or more.

Anxiety. The decrease on the Anxiety scale, from pre-test (M = 53.00, SD = 10.51) to post-test (M = 47.80, SD = 10.03), was not found to be statistically significant [t (14) = 1.52, p = .151 (two-tailed)]. No significant differences existed when comparing pre-test and post-test scores of individuals who completed 6 MRT steps or less and individuals who completed 7 MRT steps or more.

Depression. There was a statistically significant [t (14) = 2.63, p = .020 (two-tailed)] decrease on the Depression scale from pre-test (M = 57.80, SD = 15.34) to post-test (M = 48.00, SD = 10.23). The mean decrease on the Depression scale was 9.80 with a 95% confidence interval ranging from 1.80 to 17.80. The eta squared statistic (.33) indicates a large effect size. No significant differences existed when comparing pre-test and post-test scores of individuals who completed 6 MRT steps or less and individuals who completed 7 MRT steps or more.

Sense of Inadequacy. The decrease on the Sense of Inadequacy scale, from pre-test (M = 55.27, SD = 14.19) to post-test (M = 50.07, SD = 12.27), was not found to be statistically significant [t (14) = 2.02, p = .063 (two-tailed)]. For individuals who completed step 6 or less of MRT, there was a statistically significant decrease on the Sense of Inadequacy scale from pre-test (M = 57.00, SD = 7.56) to post-test (M = 44.00, SD = 3.85), t (4) = 3.16, p = .034 (two-tailed). The mean decrease on the Sense of Inadequacy scale was 13.00 with a 95% confidence interval ranging from 1.59 to 24.41. The eta squared statistic (.53) indicates a large effect size. No statistically significant

differences were found between pre-test and post-test scores for individuals who completed Step 7 or higher of MRT.

Sensation Seeking. The difference on the Sensation Seeking scale, from pre-test (M = 50.47, SD = 7.16) to post-test (M = 50.67, SD = 8.18), was not found to be statistically significant [t (14) = -0.13, p = .896 (two-tailed)]. No significant differences existed when comparing pre-test and post-test scores of individuals who completed 6 MRT steps or less and individuals who completed 7 MRT steps or more.

Relations with Parents. There was a statistically significant [t (14) = -2.80, p = .039 (two-tailed)] increase on the Relations with Parents scale from pre-test (M = 42.47, SD = 3.51) to post-test (M = 46.53, SD = 3.20), The mean increase on the Relations with Parents scale was -4.07 with a 95% confidence interval ranging from -7.90 to -0.24. The eta squared statistic (.36) indicates a large effect size. For individuals who completed Step 6 or less of MRT, no statistically significant differences were found between pre-test and post-test scores.

For individuals who completed step 7 or higher of MRT, there was a statistically significant [t (9) = -2.34, p = .044 (two-tailed)] increase on the Relations with Parents scale from pre-test (M = 38.90, SD = 12.89) to post-test (M = 44.50, SD = 13.11), The mean increase on the Relations with Parents scale was -5.60 with a 95% confidence interval ranging from -11.01 to -0.19. The eta squared statistic (.41) indicates a large effect size.

Interpersonal Relations. The increase on the Interpersonal Relations scale, from pre-test (M = 49.20, SD = 11.92) to post-test (M = 50.93, SD = 12.49), was not found to be statistically significant [t (14) = -0.64, p = .536 (two-tailed)]. No significant

differences existed when comparing pre-test and post-test scores of individuals who completed 6 MRT steps or less and individuals who completed 7 MRT steps or more.

Self-Esteem. The increase on the Self-Esteem scale, from pre-test (M = 44.27, SD = 14.03) to post-test (M = 50.10, SD = 11.01), was not found to be statistically [t (14) = -1.62, p = .129 (two-tailed)]. No significant differences existed when comparing pre-test and post-test scores of individuals who completed 6 MRT steps or less and individuals who completed 7 MRT steps or more.

Self-Reliance. The increase on the Self-Reliance scale, from pre-test (M = 47.13, SD = 10.46) to post-test (M = 49.60, SD = 10.03), was not found to be statistically significant [t (14) = -0.92, p = .375 (two-tailed)]. For individuals who completed step 6 or less of MRT, there was a statistically significant [t (4) = -4.35, p= .012 (two-tailed)] increase on the Self-Reliance scale from pre-test (M= 44.20, SD= 3.79) to post-test (M= 51.40, SD= 4.01). The mean increase on the Self-Reliance scale was -7.20 with a 95% confidence interval ranging from -11.80 to -2.60. The eta squared statistic (.83) indicates a large effect size. No statistically significant differences were found between pre-test and post-test scores for individuals who completed Step 7 or higher of MRT.

Table 1
Overall Pre-test and Post-test BASC-2 Results

BASC-2 Scale	Pre-test	Post-test	Δ	t	df	p	η^2
Locus of Control	60.27	51.13	9.13	3.29	14	.005*	.44
Social Stress	52.47	47.53	4.93	1.36	14	.197	
Anxiety	53.00	47.80	5.20	1.52	14	.151	
Depression	57.80	48.00	9.80	2.63	14	.020*	.33
Sense of Inadequacy	55.27	50.07	5.20	2.02	14	.063	
Sensation Seeking	50.47	50.67	-0.20	-0.13	14	.896	
Relations with Parents	42.47	46.53	-4.07	-2.28	14	.039*	.36
Interpersonal Relations	49.20	50.93	-1.73	-0.64	14	.536	
Self-Esteem	44.07	50.20	-6.13	-1.62	14	.129	
Self-Reliance	47.13	49.60	-2.47	-.917	14	.375	

**p < .05, two-tailed*

Table 2
Pre-test and Post-test BASC-2 Results by MRT Steps Completed

	Pre-test	Post-test	Δ	t	df	p	η^2
6 MRT Steps Completed or Less							
Locus of Control	58.40	49.40	9.00	1.69	4	.167	
Social Stress	52.80	45.80	7.00	1.45	4	.220	
Anxiety	53.20	43.20	10.00	2.22	4	.091	
Depression	58.20	44.80	13.40	1.73	4	.159	
Sense of Inadequacy	57.00	44.00	13.00	3.16	4	.034*	.53
Sensation Seeking	47.40	49.20	-1.80	-5.80	4	.593	
Relation with Parents	49.60	50.60	-1.00	-0.49	4	.651	
Interpersonal Relations	49.60	55.40	-5.80	-1.94	4	.124	
Self-Esteem	44.20	55.80	-11.60	-1.57	4	.191	
Self-Reliance	44.20	51.40	7.20	-4.35	4	.012*	.83
7 or more MRT Steps Completed							
Locus of Control	61.20	51.00	9.20	2.69	9	.025*	.44
Social Stress	52.30	48.40	3.90	.773	9	.459	
Anxiety	52.90	50.10	2.80	.612	9	.556	
Depression	57.60	49.60	8.00	1.88	9	.092	
Sense of Inadequacy	54.40	53.10	1.30	.504	9	.626	
Sensation Seeking	52.00	51.40	0.60	.349	9	.735	
Relation with Parents	38.90	44.50	-5.60	-2.34	9	.044*	.41
Interpersonal Relations	49.00	48.70	0.30	0.08	9	.938	
Self-Esteem	44.00	47.40	-3.40	-0.78	9	.456	
Self-Reliance	48.60	48.70	-1.00	8.49	9	.980	

**p < .05, two-tailed*

In order to determine whether statistically significant correlations exist between the demographic variables, including type of offense committed, level of DSS involvement, parental marital status, father's level of education, mother's level of education and report of recent family problems, Pearson's correlation coefficient was computed, see Table 3. No significant correlations were found between these variables.

Table 3
Pearson Correlation Matrix among Demographic Variables

	DSS Involvement	Parental Marital Status	Father's Education	Mother's Education	Family Problems
Offense Committed	.378	.086	.341	-.193	.115
DSS Involvement		-.216	.286	-.148	.536
Parental Marital Status			-.312	.156	-.360
Father's Education				.274	.000
Mother's Education					-.447

**p < .05, **p < .01*

Offense. In order to evaluate whether differences existed between pre-test and post-test scores, based on type of offense committed, a one-way mixed model ANOVA was planned; however, due to the small sample size, this analysis was not appropriate. Thus, a paired-samples t-test was conducted, see Table 4; although this does not allow for comparison of groups, it does provide data regarding pre-test and post-test differences, based on groups. For individuals who did not commit an offense, there was a statistically significant [t (4) = 7.38, p = .002 (two-tailed)] decrease on the Anxiety scale from pre-test (M = 57.80, SD = 3.65) to post-test (M = 47.00, SD = 3.65). The mean decrease on the Anxiety scale was 10.80 with a 95% confidence interval ranging from 6.74 to 14.86. The eta squared statistic (.94) indicates a large effect size.

For individuals who did not commit an offense, there was also a statistically significant [t (4) = 3.33, p = .029 (two-tailed)] decrease on the Locus of Control scale from pre-test (M = 61.40, SD = 5.96) to post-test (M = 47.00, SD = 3.96), The mean decrease on the Locus of Control scale was 14.40 with a 95% confidence interval ranging from 2.41 to 26.39. The eta squared statistic (.73) indicates a large effect size.

For individuals who committed both a status and a non-status offense, there was a statistically significant decrease on the Locus of Control scale from pre-test (M = 70.00, SD = 14.14) to post-test (M = 47.50, SD = 13.44), t (1) = 45.00, p = .014 (two-tailed). The mean decrease on the Locus of Control scale was 22.50 with a 95% confidence interval ranging from 16.15 to 28.85. The eta squared statistic (1.00) indicates a large effect size. No other statistically significant changes occurred between pre-test and post-test scores, based on offense committed.

Parent marital status. In order to evaluate whether differences existed between pre-test and post-test scores, based on the participants' parental marital status, a one-way mixed model ANOVA was planned; however, due to the small sample size, this analysis was not appropriate. Thus, a paired-samples t-test was conducted, see Table 5; although this does not allow for comparison of groups, it does provide data regarding pre-test and post-test differences, based on groups. For individuals who indicated that parental divorce, there was a statistically significant decrease on the Locus of Control scale from pre-test (M= 65.00, SD= 14.52) to post-test (M= 52.00, SD= 12.12), t (5) = 2.91, p= .034 (two-tailed). The mean decrease on the Anxiety scale was 13.00 with a 95% confidence interval ranging from 1.50 to 24.50. The eta squared statistic (.94) indicates a large effect size. No other statistically significant changes occurred between pre-test and post-test scores, based on parent marital status.

Table 4
Pre-test and post-test BASC-2 results, by offense

	Pre-test	Post-test	Δ	t	df	p	η^2
No offense committed							
Locus of Control	61.40	47.00	14.40	3.34	4	.029*	.73
Social Stress	51.00	43.80	7.20	1.42	4	.229	
Anxiety	57.80	47.00	10.80	7.38	4	.002*	.94
Depression	60.20	44.60	15.60	2.76	4	.051	
Sense of Inadequacy	52.00	42.60	9.40	2.70	4	.086	
Sensation Seeking	47.00	47.40	-0.40	-0.18	4	.868	
Relation with Parents	38.60	46.80	-8.20	-1.87	4	.135	
Interpersonal Relations	53.60	52.80	0.80	.483	4	.654	
Self-Esteem	41.60	52.40	-10.80	-2.08	4	.106	
Self-Reliance	48.20	51.40	-3.20	-1.23	4	.285	
Status offense							
Locus of Control	52.75	50.75	2.00	0.42	3	.705	
Social Stress	45.25	46.00	-0.75	-0.21	3	.850	
Anxiety	46.25	47.00	-0.75	-0.47	3	.671	
Depression	48.00	51.25	-3.25	-1.07	3	.363	
Sense of Inadequacy	47.75	52.00	-4.25	-1.80	3	.169	
Sensation Seeking	52.25	48.75	3.50	1.22	3	.310	
Relation with Parents	43.50	46.00	-2.50	-1.04	3	.374	
Interpersonal Relations	48.50	50.25	-1.75	-0.39	3	.720	
Self-Esteem	52.00	49.25	2.25	0.56	3	.614	
Self-Reliance	49.75	45.50	4.25	.055	3	.622	
Non-status offense							
Locus of Control	61.50	58.50	3.00	0.96	3	.409	
Social Stress	53.75	56.00	-2.25	-0.30	3	.781	
Anxiety	48.75	55.50	-6.75	-1.00	3	.393	
Depression	56.25	51.25	5.00	1.07	3	.363	
Sense of Inadequacy	63.75	58.50	5.25	0.99	3	.396	
Sensation Seeking	50.75	53.00	-2.25	-0.57	3	.610	
Relation with Parents	45.00	47.50	-2.50	-1.04	3	.374	
Interpersonal Relations	48.75	45.50	3.25	0.48	3	.667	
Self-Esteem	47.25	43.50	3.75	0.90	3	.433	
Self-Reliance	41.25	50.50	-9.25	-2.13	3	.123	
Non-Status and Status offense							
Locus of Control	70.00	47.50	22.50	45.00	1	.014*	1.00
Social Stress	68.00	43.00	25.00	2.08	1	.285	
Anxiety	63.00	36.00	27.00	9.00	1	.070	
Depression	74.50	43.50	31.00	5.17	1	.122	
Sense of Inadequacy	61.50	48.00	13.50	2.46	1	.246	
Sensation Seeking	55.00	58.00	-3.00	-3.00	1	.205	
Relation with Parents	45.00	45.00	0.00	0.00	1	1.00	
Interpersonal Relations	40.50	58.50	-18.00	-3.60	1	.172	
Self-Esteem	28.00	59.00	-31.00	-5.17	1	.122	
Self-Reliance	51.00	51.50	-0.50	-0.09	1	.942	

**p < .05, two-tailed*

Table 5
Parent Marital Status: Pre-test and post-test BASC-2 results

	Pre-test	Post-test	Δ	t	df	p	η^2
Married							
Locus of Control	55.75	47.00	8.75	1.90	3	.154	
Social Stress	49.75	44.25	5.50	0.93	3	.421	
Anxiety	50.50	42.75	7.75	2.62	3	.079	
Depression	51.50	44.50	7.00	1.05	3	.373	
Sense of Inadequacy	54.75	43.75	11.00	2.09	3	.128	
Sensation Seeking	49.75	48.00	1.75	0.34	3	.759	
Relation with Parents	49.25	53.25	-4.00	-1.37	3	.264	
Interpersonal Relations	51.50	55.50	-4.00	-1.30	3	.285	
Self-Esteem	52.00	58.00	-6.00	-1.34	3	.274	
Self-Reliance	46.50	47.75	-1.25	-0.17	3	.876	
Divorced							
Locus of Control	65.00	52.00	13.00	2.91	5	.034*	.94
Social Stress	49.83	49.83	0.00	0.00	5	1.00	
Anxiety	52.33	49.67	2.67	0.37	5	.725	
Depression	59.33	46.50	12.83	1.86	5	.122	
Sense of Inadequacy	58.00	52.83	5.17	1.05	5	.342	
Sensation Seeking	50.00	49.83	0.17	0.11	5	.917	
Relation with Parents	36.83	42.17	-5.33	-1.30	5	.250	
Interpersonal Relations	52.50	49.67	2.83	0.58	5	.588	
Self-Esteem	39.67	48.83	-9.17	-1.14	5	.308	
Self-Reliance	46.00	50.83	-4.83	-1.02	5	.356	
Never married or other							
Locus of Control	58.20	53.40	4.80	0.89	4	.423	
Social Stress	57.80	47.40	10.40	1.51	4	.206	
Anxiety	55.80	49.60	6.20	1.01	4	.370	
Depression	61.00	52.60	8.40	1.28	4	.269	
Sense of Inadequacy	52.40	51.80	0.60	0.28	4	.793	
Sensation Seeking	51.60	53.80	-2.20	-1.41	4	.232	
Relation with Parents	43.80	46.40	-2.60	-1.77	4	.152	
Interpersonal Relations	43.40	48.80	-5.40	-1.06	4	.349	
Self-Esteem	43.00	45.60	-2.60	-0.44	4	.686	
Self-Reliance	49.00	49.60	-0.60	-0.23	4	.830	

**p < .05, two-tailed*

Parents level of education. In order to evaluate whether differences existed between pre-test and post-test scores, based on type of offense committed, a one-way mixed model ANOVA was planned; however, due to the small sample size, this analysis was not appropriate. Thus, paired-samples t-tests were conducted, see Table 6 and Table 7; although this does not allow for comparison of groups, it does provide data regarding pre-test and post-test differences, based on groups. No significant differences were found between pre-test and post-test scores, based on parental education levels.

Table 6
Father's level of education: Pre-test and post-test BASC-2 results

	Pre-test	Post-test	Δ	T	df	p	η^2
Some high school, did not graduate							
Locus of Control	59.56	50.89	8.67	2.22	8	.057	
Social Stress	51.89	47.67	4.22	0.76	8	.468	
Anxiety	52.22	49.33	2.89	0.57	8	.585	
Depression	54.44	48.33	6.11	1.35	8	.215	
Sense of Inadequacy	56.78	52.00	4.78	1.41	8	.197	
Sensation Seeking	53.67	53.11	0.56	0.25	8	.806	
Relation with Parents	41.22	46.22	-5.00	-1.84	8	.103	
Interpersonal Relations	50.22	51.22	-1.00	-0.23	8	.822	
Self-Esteem	48.11	51.11	-3.00	-0.62	8	.555	
Self-Reliance	49.33	51.44	-2.11	-0.50	8	.630	
High school graduate, no college							
Locus of Control	54.25	48.00	6.25	1.27	3	.295	
Social Stress	47.25	43.75	3.50	0.56	3	.617	
Anxiety	51.50	44.25	7.25	2.02	3	.137	
Depression	53.75	44.75	9.00	1.40	3	.255	
Sense of Inadequacy	48.00	44.00	4.00	0.75	3	.506	
Sensation Seeking	46.25	46.25	0.00	0.00	3	1.00	
Relation with Parents	49.00	52.75	-3.75	-1.35	3	.270	
Interpersonal Relations	53.00	55.50	-2.50	-1.51	3	.229	
Self-Esteem	45.75	53.25	-7.50	-1.80	3	.170	
Self-Reliance	46.50	49.50	-3.00	-0.70	3	.532	

$*p < .05$

Table 7
Mother's level of education: Pre-test and post-test BASC-2 results

	Pre-test	Post-test	Δ	t	df	p	η^2
Some high school, did not graduate							
Locus of Control	63.60	51.40	12.20	1.84	4	.140	
Social Stress	58.40	45.80	12.60	1.92	4	.128	
Anxiety	61.60	48.00	13.60	2.27	4	.086	
Depression	63.80	50.20	13.60	1.64	4	.176	
Sense of Inadequacy	57.40	50.60	6.80	1.49	4	.210	
Sensation Seeking	52.40	55.00	-2.60	-1.77	4	.152	
Relation with Parents	39.60	46.00	-6.40	-1.36	4	.246	
Interpersonal Relations	45.40	53.20	-7.80	-1.50	4	.209	
Self-Esteem	39.40	51.40	-12.00	-1.43	4	.226	
Self-Reliance	49.60	49.80	-0.20	-0.70	4	.947	
High school graduate, no college							
Locus of Control	49.60	45.40	4.20	1.47	4	.215	
Social Stress	44.00	46.20	-2.20	-0.80	4	.471	
Anxiety	46.60	44.20	2.40	1.08	4	.342	
Depression	43.60	43.40	0.20	0.25	4	.815	
Sense of Inadequacy	49.40	47.20	2.20	0.42	4	.700	
Sensation Seeking	51.20	51.20	0.00	0.00	4	1.00	
Relation with Parents	50.80	52.40	-1.60	-0.78	4	.481	
Interpersonal Relations	54.80	56.80	-2.00	-0.52	4	.632	
Self-Esteem	55.80	57.00	-1.20	-0.47	4	.663	
Self-Reliance	49.00	51.00	-2.00	-0.28	4	.791	
Some college or college graduate							
Locus of Control	66.75	55.75	11.00	1.94	3	.148	
Social Stress	51.50	48.25	3.25	0.33	3	.766	
Anxiety	49.00	49.25	-0.25	-0.03	3	.981	
Depression	63.00	48.25	14.75	1.78	3	.173	
Sense of Inadequacy	58.00	49.75	8.25	1.67	3	.193	
Sensation Seeking	49.75	46.25	3.50	1.73	3	.182	
Relation with Parents	38.75	43.25	-4.50	1.73	3	.182	
Interpersonal Relations	51.25	47.00	4.25	0.80	3	.481	
Self-Esteem	40.00	47.00	-7.00	-0.72	3	.522	
Self-Reliance	45.25	51.75	-6.50	-1.37	3	.263	

*$p < .05$

Recent family problems. In order to evaluate whether differences existed between pre-test and post-test scores, based on participants' report of recent family problems, a one-way mixed model ANOVA was planned; however, due to the small sample size, this analysis was not appropriate. Thus, paired-samples t-tests were conducted, see Table 8; although this does not allow for comparison of groups, it does provide data regarding pre-

test and post-test differences, based on groups. For individuals who did not report recent family problems (including arrests, drug use, drinking problems), there was a statistically significant decrease on the Locus of Control scale from pre-test (M= 62.89, SD= 4.02) to post-test (M= 52.11, SD= 3.49), t (8) = 3.288, p= .011 (two-tailed). The mean increase on the Locus of Control scale was 10.78 with a 95% confidence interval ranging from 3.22 to 18.34. The eta squared statistic (.57) indicates a large effect size. No other statistically significant changes existed from pre-test to post-test scores, for individuals who reported no recent family problems. No statistically significant changes existed from pre-test to post-test scores, for individuals reported recent family problems (including arrests, drug use, drinking problems).

Table 8
Recent family problems: Pre-test and post-test BASC-2 results

	Pre-test	Post-test	Δ	t	df	p	η^2
None reported							
Locus of Control	62.89	52.11	10.78	3.29	8	.011*	.57
Social Stress	52.00	49.33	2.67	0.59	8	.571	
Anxiety	51.89	49.22	2.67	0.56	8	.589	
Depression	57.44	47.33	10.11	2.13	8	.066	
Sense of Inadequacy	59.11	52.78	6.33	1.60	8	.149	
Sensation Seeking	49.67	49.22	0.44	0.18	8	.859	
Relation with Parents	39.89	45.56	-5.67	-2.03	8	.077	
Interpersonal Relations	50.11	49.33	0.78	0.21	8	.838	
Self-Esteem	42.78	48.33	-5.56	-1.10	8	.304	
Self-Reliance	44.11	47.00	-2.89	-0.68	8	.515	
Recent drug/alcohol use and/or arrest							
Locus of Control	56.33	49.67	6.67	1.31	5	.249	
Social Stress	53.17	44.83	8.33	1.32	5	.245	
Anxiety	54.67	45.67	9.00	1.86	5	.122	
Depression	58.33	49.00	9.33	1.42	5	.214	
Sense of Inadequacy	49.50	46.00	3.50	1.26	5	.263	
Sensation Seeking	51.67	52.83	-1.17	-0.91	5	.402	
Relation with Parents	46.33	48.00	-1.67	-1.27	5	.259	
Interpersonal Relations	47.83	53.33	-5.50	-1.42	5	.214	
Self-Esteem	46.00	53.00	-7.00	-1.12	5	.315	
Self-Reliance	51.67	53.50	-1.83	-0.67	5	.531	

$*p < .05$

Family disagreement ratings. In order to evaluate the internal consistency of the Family Risk Factors and the Family Protective Factors, a Cronbach alpha was calculated. Relative internal consistency was found for each, with Cronbach alphas of .79 and .72, respectively. In order to determine whether significant correlations existed between participants' scores on the CPIC and pre-test BASC-2 scores and CPIC scores and post-test BASC-2 scores, Pearson's correlation coefficient was calculated. Statistically significant correlations were found between BASC-2 pre-test scores and CPIC scores. Statistically significant correlations were found on the CPIC Content and Coping scales, see Table 9. A moderate positive correlation (r = .612, p = .026) was found between participants' ratings on the CPIC Content scale and the pre-test BASC-2 Depression scale, suggesting that as the content of parents' arguments intensified, so did participants' ratings of depressive symptoms. A moderate negative correlation (r = -.664, p = .013) was found between participants' ratings on the CPIC Content scale and the pre-test BASC-2 Relations with Parents scale, suggesting that as the content of parents' arguments intensified, lower ratings of positive relations with parents were reported. A moderate negative correlation (r = -.575, p = .040) was found between participants' ratings on the CPIC Content scale and the pre-test BASC-2 Interpersonal Relations scale, suggesting that as the content of parents' arguments intensified, lower ratings of positive relations with others were reported.

A moderate negative correlation (r = -.645, p = .017) was found between participants' ratings on the CPIC Coping scale and the pre-test BASC-2 Locus of Control scale, suggesting that participants' who indicated positive coping skills also indicated a more internal locus of control. A moderate negative correlation (r = -.586, p = .035) was

found between participants' ratings on the CPIC Coping scale and the pre-test BASC-2 Depression scale, suggesting that participants' who indicated positive coping skills also indicated fewer depressive symptoms. A moderate positive correlation (r = .585, p = .036) was found between participants' ratings on the CPIC Coping scale and the pre-test BASC-2 Interpersonal Relations scale, suggesting that participants who indicated positive coping skills also reported higher ratings of positive relations with others.

Statistically significant correlations were found between BASC-2 post-test scores and CPIC scores. Statistically significant correlations were found on the following CPIC scales: Frequency, Content, Perceived Threat, Triangulation and Coping, see Table 10. A moderate positive correlation (r = .603, p = .029) was found between participants' ratings on the CPIC Frequency scale and the post-test BASC-2 Anxiety scale, suggesting that as the frequency of parents' arguments intensified, so did participants' ratings of anxious symptoms. A moderate negative correlation (r = -.721, p = .005) was found between participants' ratings on the CPIC Frequency scale and the post-test BASC-2 Self-Esteem scale, suggesting that as the frequency of parents' arguments intensified, lower ratings of self-esteem were reported.

A moderate positive correlation (r = .600, p = .030) was found between participants' ratings on the CPIC Content scale and the post-test BASC-2 Depression scale, suggesting that as the content of parents' arguments intensified, so did participants' ratings of depressive symptoms. This finding is highly consistent with the correlation coefficient found between the CPIC Content scale and the pre-test BASC-2 Depression scale. A moderate negative correlation (r = -.783, p = .002) was found between participants' ratings on the CPIC Content scale and the post-test BASC-2 Relations with

Parents scale, suggesting that as the content of parents' arguments intensified, lower ratings of positive relations with parents were reported. This finding is highly consistent with the correlation coefficient found between the CPIC Content scale and the pre-test BASC-2 Relations with Parents scale. A moderate negative correlation (r = -.730, p = .005) was found between participants' ratings on the CPIC Content scale and the post-test BASC-2 Interpersonal Relations scale, suggesting that as the content of parents' arguments intensified, lower ratings of positive relations with others were reported. This finding is highly consistent with the correlation coefficient found between the CPIC Content scale and the pre-test BASC-2 Interpersonal Relations scale.

Moderate positive correlations were found between participants' ratings on the CPIC Perceived Threat scale and the post-test BASC-2 Locus of Control (r = .650, p = .016), Anxiety (r = .609, p = .027) and Depression (r = .612, p = .026) scales, suggesting that as the participants' ratings of perceived threat intensified, increased levels of external locus of control, anxiety and depression were reported. A moderate negative correlation (r = -.580, p = .038) was found between participants' ratings on the CPIC Triangulation scale and the post-test BASC-2 Self-Esteem scale, suggesting higher ratings of triangulation were associated with lower ratings of self-esteem. A moderate negative correlation (r = -.632, p = .020) was found between participants' ratings on the CPIC Coping scale and the post-test BASC-2 Locus of Control scale, suggesting that participants who indicated positive coping skills also indicated a more internal locus of control. This finding is highly consistent with the correlation coefficient found between the CPIC Coping scale and the pre-test BASC-2 Locus of Control scale. A moderate positive correlation (r = .643, p = .018) was found between participants' ratings on the

CPIC Coping scale and the post-test BASC-2 Relations with Parents scale, suggesting that participants who indicated positive coping skills also reported higher ratings of positive relations parents.

Table 9
Pearson Correlation Matrix among CPIC Scores and BASC-2 Pre-test Scores

	Frequency	Intensity	Content	Perceived Threat	Self-Blame	Triangulation	Resolution	Coping	Stability
Locus of Control	.299	.249	.482	.066	.259	-.262	-.211	-.645*	-.100
Social Stress	-.120	-.114	.425	.073	.155	-.237	-.015	-.417	-.141
Anxiety	-.039	-.265	.171	.087	.215	-.217	-.012	-.478	-.131
Depression	.211	-.277	.612*	.117	.297	-.215	-.211	-.586*	-.227
Sense of Inadequacy	.035	-.004	.262	.087	-.063	-.251	.006	-.390	.104
Sensation Seeking	-.175	.020	-.128	.087	-.078	.124	-.090	-.047	-.329
Relations with Parents	.551	-.203	-.664*	-.259	-.467	-.039	.294	.585*	.340
Interpersonal Relations	.073	.065	-.575*	-.222	-.243	-.043	-.018	.197	.145
Self-Esteem	-.144	-.144	-.343	.165	-.225	.266	.123	.437	-.140
Self-Reliance	-.231	-.229	-.389	-.241	.192	.041	-.014	.184	-.088

**p < .05, **p <.01*

Table 10
Pearson Correlation Matrix among CPIC scores and BASC-2 Post-test Scores

	Frequency	Intensity	Content	Perceived Threat	Self-Blame	Triangulation	Resolution	Coping	Stability
Locus of Control	.508	.553	.469	.650*	.046	.318	-.508	-.632*	-.132
Social Stress	.341	.417	.324	.529	-.102	.041	-.316	-.490	.080
Anxiety	.603*	.337	.312	.609*	.100	.364	-.492	-.544	-.086
Depression	.366	.244	.600*	.612*	.273	.435	-.319	-.360	-.277
Sense of Inadequacy	.250	.248	.342	.368	-.054	.215	-.183	-.281	.103
Sensation Seeking	-.217	.034	-.317	.270	-.314	.010	-.209	-.354	-.322
Relations with Parents	-.444	-.318	-.783**	-.338	-.473	.050	.376	.643*	.329
Interpersonal Relations	-.487	-.308	-.730**	-.313	-.343	-.225	-.257	.232	.219
Self-Esteem	-.712**	-.509	-.552	-.383	-.195	-.580*	.503	.309	.082
Self-Reliance	.089	.365	-.287	.082	-.331	-.006	-.413	-.190	-.400

**p < .05, ** p < .01*

In order to evaluate whether differences existed between pre-test and post-test scores, based on participants' ratings of higher family risk factors or higher family protective factors, calculated using scores from the Children's Perspective of Interparental Conflict Scale (CPIC), a paired-samples t-test was conducted, see Table 11. For individuals who indicated high levels of family conflict on the Family Disagreements questionnaire (by providing high ratings in the areas of frequency, intensity, content, perceived threat, self-blame and triangulation), no statistically significant changes existed between pre-test and post-test scores on scales from the BASC-2.

For individuals who indicated low levels of family conflict and high scores on the Resolution, Coping Efficacy and Stability (Family Protective Factors) scales of the Family Disagreements questionnaire, there was a statistically significant decrease on the Locus of Control scale from pre-test (M = 57.43, SD = 4.57) to post-test (M = 46.00, SD = 3.40), t (6) = 2.622, p = .039 (two-tailed). The mean decrease on the Locus of Control scale was 11.43 with a 95% confidence interval ranging from 0.77 to 22.09. The eta squared statistic (.53) indicates a large effect size.

For individuals who indicated high Family Protective Factors, there was a statistically significant decrease on the Anxiety scale from pre-test (M = 54.71, SD = 4.32) to post-test (M = 43.03, SD = 4.06), t (6) = 2.54, p = .044 (two-tailed). The mean decrease on the Anxiety scale was 11.29 with a 95% confidence interval ranging from 0.41 to 22.16. The eta squared statistic (.52) indicates a large effect size.

For individuals who indicated high Family Protective Factors, there was a statistically significant decrease on the Sense of Inadequacy scale from pre-test (M = 56.14, SD = 5.57) to post-test (M = 47.14, SD = 3.21), t (6) = 2.558, p = .043 (two-

tailed). The mean decrease on the Sense of Inadequacy scale was 9.00 with a 95% confidence interval ranging from 0.39 to 17.61. The eta squared statistic (.52) indicates a large effect size. No other statistically significant changes occurred between pre-test and post-test scores, based on Family Disagreement ratings.

Table 11
Family Disagreement Factors: Pre-test and post-test BASC-2 results

	Pre-test	Post-test	Δ	t	df	p	η^2
Greater family risk factors							
Locus of Control	63.83	57.67	6.17	1.25	5	.266	
Social Stress	52.17	49.33	2.83	0.44	5	.676	
Anxiety	51.83	51.50	0.33	0.05	5	.959	
Depression	62.17	52.83	9.33	1.37	5	.229	
Sense of Inadequacy	55.50	51.17	4.33	1.09	5	.327	
Sensation Seeking	50.67	49.17	1.50	7.00	5	.515	
Relation with Parents	38.67	43.00	-4.33	-2.23	5	.076	
Interpersonal Relations	48.17	47.00	1.17	0.29	5	.787	
Self-Esteem	43.17	46.67	-3.50	-0.52	5	.625	
Self-Reliance	46.17	51.00	-4.83	-1.35	5	.236	
Greater family protective factors							
Locus of Control	57.43	46.00	11.43	2.62	6	.039*	.53
Social Stress	52.14	43.71	8.43	1.59	6	.163	
Anxiety	54.71	43.43	11.29	2.54	6	.044*	.52
Depression	53.00	43.00	10.00	1.74	6	.132	
Sense of Inadequacy	56.14	47.14	9.00	2.56	6	.043*	.52
Sensation Seeking	51.43	52.57	-1.14	-0.43	6	.685	
Relation with Parents	50.29	54.43	-4.14	-1.14	6	.297	
Interpersonal Relations	51.71	58.71	-7.00	-1.82	6	.119	
Self-Esteem	45.71	57.14	-11.43	-2.14	6	.076	
Self-Reliance	50.43	49.14	1.29	0.30	6	.776	

$*p < .05$

Length of time in program. In order to determine whether a statistically significant correlation existed between the length of time participants spent in the program and the number of MRT steps completed, Pearson's correlation coefficient (*r)* was computed. The correlation was calculated by keeping the variables continuous; results indicated that the length of time spent in the program and the number of MRT steps completed were

found to be highly correlated, $r = .802$, $p = .000$ (two-tailed). Categorical variables were then created for length of time in the program (30 days or less, 31 to 60 days, 60 days or more), and number of MRT steps completed (6 or less, 7 or more). Of the 15 participants, 5 completed Step 6 of MRT or less, two of whom spent between 31 and 60 days in the program; ten participants completed Step 7 of MRT or higher, three of whom spent between 31 and 60 days in the program. Seven of the ten participants, who completed Step 7 of MRT or higher, spent 61 or more days in the program. While the length of time spent in the program and number of MRT steps completed are highly correlated, upon further examination, the number of participants who spent between 31 and 60 days in the program, completed Step 6 or less of MRT or Step 7 or higher of MRT in similar quantities. Additionally, seven of the fifteen participants spent 61 or more days in the program, all of whom completed Step 7 or MRT or higher, yet no statistically significant changes from pre-test to post-test were found.

In order to evaluate whether differences existed between pre-test and post-test scores, based on the length of time the participant spent in the program, a one-way mixed model ANOVA was planned; however, due to the small sample size, this analysis was not appropriate. Thus, a paired-samples t-test was conducted, see Table 12; although this does not allow for comparison of groups, it does provide data regarding pre-test and post-test differences, based on groups. For individuals who spent between 31 and 60 days in the program, there was a statistically significant decrease on the Locus of Control scale from pre-test ($M = 65.60$, $SD = 4.43$) to post-test ($M = 45.80$, $SD = 3.63$), $t(4) = 8.733$, $p = .001$ (two-tailed). The mean increase on the Locus of Control scale was 19.80 with a

95% confidence interval ranging from 13.51 to 26.10. The eta squared statistic (.95) indicates a large effect size.

For individuals who spent between 31 and 60 days in the program, there was a statistically significant decrease on the Anxiety scale from pre-test (M = 57.80, SD = 5.19) to post-test (M = 41.00, SD = 4.06), t (4) = 3.637, p = .022 (two-tailed). The mean increase on the Anxiety scale was 16.80 with a 95% confidence interval ranging from 3.97 to 29.63. The eta squared statistic (.77) indicates a large effect size.

For individuals who spent between 31 and 60 days in the program, there was a statistically significant decrease on the Depression scale from pre-test (M = 62.04, SD = 8.03) to post-test (M = 43.00, SD = 1.64), t (4) = 2.855, p = .046 (two-tailed). The mean increase on the Depression scale was 19.40 with a 95% confidence interval ranging from 0.54 to 38.26. The eta squared statistic (.67) indicates a large effect size.

For individuals who spent between 31 and 60 days in the program, there was a statistically significant decrease on the Sense of Inadequacy scale from pre-test (M = 56.80, SD = 5.48) to post-test (M= 44.80, SD= 2.89), t (4) = 3.315, p = .030 (two-tailed). The mean increase on the Sense of Inadequacy scale was 12.00 with a 95% confidence interval ranging from 1.95 to 22.05. The eta squared statistic (.73) indicates a large effect size.

No other statistically significant changes existed from pre-test to post-test scores, for individuals who spent between 31 and 60 days in the program. No statistically significant changes existed from pre-test to post-test scores, for individuals who spent 30 days or less in the program. No statistically significant changes existed from pre-test to post-test scores, for individuals who spent 61 or more days in the program.

Table 12
Time in program: Pre-test and post-test BASC-2 results

	Pre-test	Post-test	Δ	t	df	p	η^2
30 days or less in program							
Locus of Control	47.00	46.33	0.67	0.25	2	.826	
Social Stress	46.67	46.67	0.00	0.00	2	1.00	
Anxiety	49.00	45.33	3.67	1.12	2	.380	
Depression	44.33	44.33	1.00	1.73	2	.225	
Sense of Inadequacy	53.00	44.00	9.00	1.49	2	.274	
Sensation Seeking	49.33	53.33	-4.00	-1.00	2	.423	
Relation with Parents	59.00	58.33	0.67	1.00	2	.423	
Interpersonal Relations	54.67	59.00	-4.33	-1.00	2	.423	
Self-Esteem	57.67	58.33	-0.67	-0.27	2	.802	
Self-Reliance	47.33	56.33	-9.00	-4.32	2	.050	
31 to 60 days in program							
Locus of Control	65.60	45.80	19.80	8.73	4	.001*	.95
Social Stress	56.60	40.00	16.60	2.75	4	.051	
Anxiety	57.80	41.00	16.80	3.64	4	.022*	.77
Depression	62.40	43.00	19.40	2.86	4	.046*	.67
Sense of Inadequacy	56.80	44.80	12.00	3.32	4	.030*	.73
Sensation Seeking	52.00	49.80	2.20	0.71	4	.518	
Relation with Parents	40.60	49.00	-8.40	-1.89	4	.131	
Interpersonal Relations	49.40	55.80	-6.40	-1.22	4	.290	
Self-Esteem	37.60	54.80	-17.20	-2.56	4	.062	
Self-Reliance	50.80	47.00	3.80	0.84	4	.447	
61 days or more in program							
Locus of Control	62.14	57.00	5.14	1.39	6	.215	
Social Stress	52.00	53.29	-1.29	-0.27	6	.799	
Anxiety	51.29	53.71	-2.43	-0.53	6	.616	
Depression	60.29	53.57	6.71	1.24	6	.263	
Sense of Inadequacy	55.14	56.43	-1.29	-0.45	6	.669	
Sensation Seeking	49.86	50.14	-0.29	-0.71	6	.870	
Relation with Parents	36.71	39.71	-3.00	-1.91	6	.105	
Interpersonal Relations	46.71	44.00	2.71	0.70	6	.511	
Self-Esteem	42.86	43.43	-0.57	-0.11	6	.918	
Self-Reliance	44.43	48.57	-4.14	-0.99	6	.363	

$*p < .05$

Recidivism. In the current study, ten participants (66.7%) committed an offense (status, non-status or both) prior to intake into the program. Of the 10 participants, recidivism data was available for 8 participants, with length of time since leaving the group home ranging from 6 months to 14 months.

Of the ten offenders in this study, four committed a status offense prior to intake into the program. Recidivism data was available for all four participants; ten months or more after leaving the program, recidivism data indicates that none of the four participants had reoffended.

Of the ten offenders in this study, six committed a non-status or a non-status and a status offense, prior to intake into the program. Recidivism data was available for four of six of the participants, ranging from 6 months to 10 months. After four months, three out of four participants had not reoffended.

Of the ten offenders in this study, three completed Step 6 or less of MRT and seven completed Step 7 or MRT or higher; participants who completed Step 6 of MRT or less did not reoffend. One individual who completed Step 7 or higher or MRT reoffended.

Recidivism data was available for 80% of individuals with involvement with the Department of Juvenile Justice. The 6 to14 month recidivism rate for participants was 12.5%. The North Carolina Sentencing and Policy Advisory Committee (2011) reported recidivism rates on juveniles between July 1, 2006 and June 30, 2007. The sample included 6,639 juveniles. 71.1% of the juveniles committed minor offenses, similar to the offenses committed by participants in the current study. The overall recidivism rate for juveniles who had committed a minor offense was found to be 54.5%, with an average of 11 months until the first recidivistic event. The results of a Chi Square Goodness of Fit analysis indicate that the recidivism rates in the current study are significantly lower than those reported by the North Carolina Sentencing and Policy Advisory Committee, X^2 (1, N=8) = 4.50, p = .034.

Discussion

Juvenile delinquency is a current and ongoing concern; however, cognitive behavioral therapies have been found to teach offenders how to change their thought patterns, in order to change behaviors; changed thoughts and behaviors are likely to lead to reduced deviant or criminal behavior (Hoge, et al., 2008). Several cognitive behavioral therapies have been found to be effective in treating offenders; Moral Reconation Therapy is one such therapy. Research on the effects of MRT on juvenile offenders has suggested positive changes in the areas of locus of control, perceived support from family and friends, sensation seeking, reported problems, moral reasoning, in addition to reduced recidivism rates (Burnette, et al., 2003; Burnette, et al., 2004). The current study explored the effects of MRT in previously researched areas, as well as additional areas. The current study evaluated the effects on MRT on a variety of areas, as measured by the BASC-2.

Hypothesis One

The first hypothesis, pertaining to Locus of Control, was confirmed, in that participants' ratings indicated a more internal locus of control, from pre-test to post-test. While comparisons between individuals that completed step 7 or higher and those that completed fewer than step 7 could not be directly compared, the results indicated participants who completed Step 7 of MRT or higher demonstrated more significant results than participants who completed Step 6 or less of MRT. The positive change in locus of control was consistent with previous research on the effects of MRT on juvenile offenders. MRT participants appear to feel more in control of their choices and lives, following MRT, than they did prior to MRT. Participants demonstrated positive changes

in the area of Locus of Control, under the following conditions: if a status and non-status offense were committed, or no offense at all; if parents were divorced; had higher protective factors (as measured by the CPIC); if time spent in the program was between 31 and 60 days, or if no recent family problems were reported.

Hypothesis Two

The hypothesis pertaining to changes from pre-test to post-test scores, in the area of Social Stress, was not confirmed. No significant changes were noted from pre-test to post-test, in any condition.

Hypothesis Three

The hypothesis pertaining to changes from pre-test to post-test, in the area of Anxiety, was confirmed, only when participants had not committed an offense, had higher protective family factors (as measured by the CPIC) or spent between 31 and 60 days in the program, but did not necessarily complete Step 7 of MRT or higher.

Hypothesis Four

The hypothesis pertaining to changes from pre-test to post-test scores, in the area of Depression, was confirmed, only when participants spent between 31 and 60 days in the program, but did not necessarily complete Step 7 of MRT or higher.

Hypothesis Five

The hypothesis pertaining to changes from pre-test to post-test scores, in the area of Sense of Inadequacy, was confirmed, only when participants had higher protective family factors or spent between 31 and 60 days in the program, but did not necessarily complete Step 7 of MRT or higher. The changes in the areas of Anxiety, Depression and Sense of Inadequacy are consistent with previous research, indicating MRT participants

report fewer problems following MRT, than prior to MRT (Burnette, et al., 2003; Burnette, et al., 2004).

Hypothesis Six

The hypothesis pertaining to changes from pre-test to post-test scores, in the area of Sensation Seeking was not confirmed. Scores on the Sensation Seeking scale essentially remained the same from pre-test to post-test, under each varying condition.

Hypotheses Seven, Eight, Nine and Ten

In evaluating the hypothesis related to the adaptive scales on the BASC-2, the hypothesis pertaining to changes from pre-test to post-test on the Relations with Parents scale was confirmed, only when participants had completed Step 7 or higher of MRT. This is consistent with previous research that indicates that following program completion, MRT participants report higher levels of perceived family support (Burnette, et al., 2003). The hypotheses pertaining to changes from pre-test to post-test, in the areas of Self-Reliance was confirmed, but only when participants completed Step 6 of MRT or less. The hypotheses pertaining to changes from pre-test to post-test, in the areas of Interpersonal Relations and Self-Esteem were not confirmed; no significant changes were found between pre-test to post-test in any of the measured conditions.

Hypothesis Eleven

The hypothesis pertaining to familial risk and protective factors was partially confirmed. For participants who indicated parental divorce, there was a positive shift in the area of Locus of Control. No significant changes were found based on parental level of education. A positive shift was also noted in the area of Locus of Control, for participants who indicated no recent family problems. With regards to participants who

indicated greater protective family factors (as measured by the CPIC), the hypothesis was confirmed. Participants with greater protective family factors were found to have experienced statistically significant positive changes in the areas of Locus of Control, Anxiety and Sense of Inadequacy.

Hypothesis Twelve

The hypothesis pertaining to benefits to offenders over non-offenders was partially confirmed. Participants who had committed both a status and non-status offense demonstrated a decrease on the Locus of Control scale. Participants who had not committed an offense also demonstrated decreases on the Locus of Control and Anxiety scales.

Hypothesis Thirteen

The hypothesis pertaining to recidivism rates was confirmed, in that MRT participants had significantly lower recidivism rates than the state average for juvenile offenders who had committed minor offenses. It should be noted that recidivism rates for this study were calculated with time since leaving the program ranging from 6 to 16 months and the average length of time until a recidivistic event for the state average was found to be 11 months.

Overall Results

Overall results of this study indicate that participants experienced significant changes between pre-test and post-test scores, in the areas of Locus of Control, Depression and Relations with Parents. Significant changes between pre-test and post-test scores on the Locus of Control scale was seen in individuals who completed Step 7 of MRT or higher; committed both a status and a non-status offense or who did not commit

any offense at all; indicated parental divorce, indicated greater family protective factors on the CPIC, reported no recent family problems and spent between 31 and 60 days in the program, at the group home. Participants who committed a status and non-status offense had the highest pre-test scores on the Locus of Control scale, indicating an external locus of control; post-test scores on the Locus of Control scale were found to be lower than post-test scores from the overall sample.

The research on MRT indicates that individuals experience the most significant changes once Step 7 is complete. However, the current study has found that significant changes existed for participants who completed Step 6 or less, in the areas of Sense of Inadequacy and Self-Reliance. When comparing pre-test scores for participants who completed Step 6 or less to participants who completed Step 7 or more, participants who completed Step 6 or less had more clinical scores on the Sense of Inadequacy and Self-Reliance scales, but demonstrated more positive changes than participants who completed Step 7 or more. Participants who completed Step 7 or more of MRT, demonstrated a significant increase on the Relation with Parents scale; however, both pre-test and post-test scores were lower (less adaptive) than the pre-test scores of participants who completed Step 6 or lower.

Significant changes were seen between pre-test and post-test scores, in the area of Anxiety, for participants who had not committed an offense (status or non-status), prior to intake into the program. For participants with greater protective scores on the CPIC, significant changes were found on the Anxiety scale and the Sense of Inadequacy scale. For participants who spent between 31 and 60 days in the program at the group home,

significant pre-test and post-test changes were found on the Anxiety, Depression and Sense of Inadequacy scales.

No statistically significant changes were found between pre-test and post-test scores on the Social Stress scale of the BASC-2. Although a decrease was found between pre-test (52.47) and post-test (47.53) scores, the change was not statistically significant. It should be noted that both pre-test and post-test were within the acceptable level and were not indicated as areas of concern. However, results indicate that participants likely felt slightly less tension or stress in their personal relationships following program completion.

No significant changes were found between pre-test and post-test scores on the Sensation Seeking scale of the BASC-2; in fact, pre-test and post-test scores were found to be nearly identical. It should be noted that the pre-test (50.47) and post-test (50.67) scores were not rated as areas of concern. Burnette et al. (2004) found significant positive changes in the area of sensation seeking; it is likely that the pre-test scores were rated as areas of concern and that following treatment, the scores were found to be in the acceptable range. The participants in the Burnette et al. (2004) study were reported to have had substance abuse issues, which is often highly associated with maladaptive sensation seeking behaviors. The participants in the current study entered the program with acceptable levels of sensation seeking behaviors, and therefore, maintained appropriate levels of these behaviors throughout their stay in the group home.

No significant changes were found between pre-test and post-test scores on the Interpersonal Relations scale of the BASC-2. Pre-test (49.20) and post-test (50.93) scores were rated in the acceptable range, suggesting no concern. There was a slight increase

from pre-test to post-test; however, the change was not found to be statistically significant. No significant changes were found between pre-test and post-test scores on the Self-Esteem scale of the BASC-2. Pre-test (44.07) and post-test (50.20) scores were rated in the acceptable range, suggesting no concern. Pre-test and post-test scores indicate that the participants in this study entered the program with healthy levels of interpersonal skills and feelings of self-esteem. Participants left the program with more adaptive levels in each of these areas; however, these changes were not found to be statistically significant.

Overall, it does appear that many of the participants in this study experienced positive changes, as indicated by pre-test and post-test scores on the BASC-2. The most significant change seen was in the area of Locus of Control. This change can be beneficial in reducing recidivism, as participants are more aware of how the choices they make, impact the outcomes of situations. The change in Locus of Control appears to be highly correlated with the principles taught in Moral Reconation Therapy (MRT). Participants who completed Step 7 or higher of MRT showed more significant changes on the Locus of Control scale; significant changes were also seen on the Relations with Parents scale. Significant changes were also noted on other BASC-2 scales, including: Anxiety, Depression, Sense of Inadequacy, Relations with Parents and Self-Reliance. However, the changes varied significantly based on several factors, including CPIC scores, parental marital status, length of time spent in the program, type of offense committed and history of family problems. The recidivism data available also indicated a significantly lower rate for program participants, than for juvenile offenders who had committed minor offenses, as reported by the state.

Limitations

The sample size of this study is the greatest limitation, with only 15 participants, it is important to take the sample size into account when interpreting significant results from this study. The sample did not include an equal number of males and females. The sample also included participants with varying levels of involvement with the Department of Juvenile Justice and the Department of Social Services. Additionally, previous research evaluating the effects of MRT on juveniles has focused on juveniles incarcerated for substance abuse. The current study is exploratory in nature, in the evaluation of MRT on juveniles residing in a therapeutic group home, for juveniles who have committed a status offense, non-status offense or no offense at all.

It is also difficult to determine whether the changes, between pre-test and post-test scores, are a direct result of the individual's participation in MRT or if the changes are impacted by other factors, such as the program at the group home. A control group was needed in order control for other factors that may have impacted outcomes, such as program participation at the group home. A group home with similar demographics and programming would have been ideal in this study, to function as a control group.

It should be noted that the participants in this study willingly completed the pre-test and post-test questionnaires. It should also be noted that the group home reported that there were a few adolescents in the program who were unwilling to complete the questionnaires. Therefore, it appears that the participants in this study could be described as compliant, compared to adolescents in the group home who chose not to participate. This may help explain why nearly each of the pre-test BASC-2 scales was rated in the acceptable range. It is possible that the adolescents who did not participate may have

rated any number of BASC-2 scales in the “At-Risk” or “Clinically Significant” range. It is also possible that the adolescents who chose not to participate in this study experienced significant positive changes during their time in the program, while participating in MRT. It is unclear if participation in pre-test and post-test questionnaires was optional for participants in previous studies (Burnette et al., 2003; Burnette et al., 2004); it is suspected that if participation was optional, then incentives for study participation were offered.

Another limitation is the fidelity, in which MRT was administered and completed by participants, is also unknown. Another limitation of the study is that recidivism data was not available for all participants. Additionally, the recidivism data available ranged from 4 months to 14 months.

Directions for Future Research

Future research should further explore the effects of MRT on adolescents in group home settings, utilizing control groups, to provide additional measures of reliability. Future research should also continue to look at the effects of MRT on participant recidivism, in order to determine whether the implementation of MRT within a group home setting is a cost-effective, evidence-based treatment option. Other areas for future research may include analysis between variables, including type of offense committed, family factors (e.g. parents’ marital status, level of education, and parent-child relationship), along with individual factors, as these variables may significantly impact the outcome of a study, and provide areas of focus for future interventions. Future research may include conducting studies on juvenile males and females, independently, as the effect of MRT has been studied on adult male and female offenders; however, the

majority of current research on juveniles consists primarily of male participants. As such, future research may also include studies specifically analyzing the effects of MRT on at-risk juvenile females or female juvenile offenders.

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Appendix A

Demographic Questionnaire

Some questions about you:

1. Age:_____

2. Sex (circle one):
    a. Male
    b. Female

3. Race (circle one): Asian Black Hispanic Native American White Other

4. Grade _____

5. Whose idea was it for you to come here? (please circle one)
    a. Mine
    b. Parents/Legal guardian
    c. Juvenile Court counselor recommended it
    d. Court Referral/Court Order
    e. Other: _____

6. Why are you are you currently placed in this program? (please circle one)
    a. I committed a non-status offense (simple assault, vandalism, drug abuse violations)
    b. I committed a status offense (truancy, runaway, ungovernable/uncorrigible)
    c. I keep getting in trouble, so my parent/Juvenile Court Counselor/other thought this would be a good idea.
    d. I don't get along with my family (or a member of my family). We fight a lot.
    e. I cannot be in my home because of some type of abuse.
    f. Other (*explanation optional*)

    _____

7. How far do you plan to pursue your education? (circle the answer that best fits)
    a. Graduate high school
    b. Associates degree from community college
    c. Vocational degree
    d. Some education at a university level but no degree
    e. Bachelors degree from a university
    f. Masters degree
    g. Doctorate degree

Some questions about your family:

8. Are you parents…
    a. Married
    b. Divorced
    c. They were never married, but still together
    d. They were never married, not together

9. Before you came here, who were you living with? (circle all that apply)
    a. Mother (biological or adoptive)
    b. Father (biological or adoptive)
    c. Siblings
    d. Step-mother
    e. Step-father
    f. Grandparents
    g. Aunt/Uncle
    h. Other family
    i. Friends
    j. Other: _____

10. Has anyone living in your household (circled above) recently… (circle all that apply)
    a. Been arrested
    b. Been in jail/prison
    c. Used drugs
    d. Had a drinking problem

11. What was the highest level of education attained by your parents? (circle one)

Mother	Father	
1	1	Some grade school
2	2	Completed grade school
3	3	Some high school
4	4	Completed high school
5	5	High school & some training but not college
6	6	Some college
7	7	College
8	8	Some graduate work
9	9	Graduate degree (M.D., Ph.D., M.A.)

12. What is/was your father's occupation? _____

13. What is/was your mother's occupation? _____

Appendix B

Family Disagreements

I live with
_____both my mom and my dad
_____only one of my parents
_____another relative (e.g., grand-mother, aunt)

In every family there are times when the parents don't get along. When their parents argue or disagree, kids can feel a lot of different ways. We would like to know what kind of feelings you have when your parents have arguments or disagreements. If your parents don't live together in the same house with you, think about times that they are together when they don't agree or about times when both of your parents lived in the same house, when you answer these questions.

T = True ST = Sort of True F = False
Please circle the response that best describes each situation.

1. I never see my parents arguing or disagreeing.
T ST F
2. When my parents have an argument they usually work it out.
T ST F
3. My parents often get into arguments about things I do at school.
T ST F
4. My parents get really mad when they argue.
T ST F
5. When my parents argue I can do something to make myself feel better.
T ST F
6. I get scared when my parents argue.
T ST F
7. I feel caught in the middle when my parents argue.
T ST F
8. I'm not to blame when my parents have arguments.
T ST F
9. They may not think I know it, but my parents argue or disagree a lot.
T ST F
10. Even after my parents stop arguing they stay mad at each other.
T ST F
11. My parents have arguments because they are not happy together.
T ST F
12. When my parents have a disagreement they discuss it quietly.
T ST F
13. I don't know what to do when my parents have arguments.
T ST F
14. My parents are often mean to each other even when I'm around.
T ST F

15. When my parents argue I worry about what will happen to me.
T ST F
16. I don't feel like I have to take sides when my parents have a disagreement.
T ST F
17. It's usually my fault when my parents argue.
T ST F
18. I often see my parents arguing.
T ST F
19. When my parents disagree about something, they usually come up with a solution.
T ST F
20. My parents' arguments are usually about something I did.
T ST F
21. The reasons my parents argue never change.
T ST F
22. When my parents have an argument they say mean things to each other.
T ST F
23. When my parents argue or disagree I can usually help make things better.
T ST F
24. When my parents argue I'm afraid that some-thing bad will happen.
T ST F
25. My mom wants me to be on her side when she and my dad argue.
T ST F
26. Even if they don't say it, I know I'm to blame when my parents argue.
T ST F
27. My parents hardly ever argue.
T ST F
28. When my parents argue they usually make up right away.
T ST F
29. My parents usually argue or disagree because of things that I do.
T ST F
30. My parents argue because they don't really love each other.
T ST F
31. When my parents have an argument they yell a lot.
T ST F
32. When my parents argue there's nothing I can do to stop them.
T ST F
33. When my parents argue I worry that one of them will get hurt.
T ST F
34. I feel like I have to take sides when my parents have a disagreement.
T ST F
35. My parents often nag and complain about each other around the house.
T ST F
36. My parents hardly ever yell when they have a disagreement.
T ST F
37. My parents often get into arguments when I do something wrong.
T ST F

38. My parents have broken or thrown things during an argument.
T ST F
39. After my parents stop arguing, they are friendly toward each other.
T ST F
40. When my parents argue I'm afraid that they will yell at me too.
T ST F
41. My parents blame me when they have arguments.
T ST F
42. My dad wants me to be on his side when he and my mom argue.
T ST F
43. My parents have pushed or shoved each other during an argument.
T ST F
44. When my parents argue or disagree there's nothing I can do to make myself feel better.
T ST F
45. When my parents argue I worry that they might get divorced.
T ST F
46. My parents still act mean after they have had an argument.
T ST F
47. My parents have arguments because they don’t know how to get along.
T ST F
48. Usually it’s not my fault when my parents have arguments.
T ST F
49. When my parents argue they don’t listen to anything.
T ST F

Appendix C

Consent Form

The purpose of this research project is to measure internal changes that occur in individuals during their time in this program. If you choose to allow your child (or minor under your custody) to participate, he/she will complete a questionnaire and demographics survey upon intake and discharge from the program. The entire exercise will last approximately 60 minutes each time.

Please be aware that you may discontinue your child's voluntary participation at any time without penalty. Your child's individual responses will be kept strictly confidential—he/she will be assigned a "participant number," and the data will be recorded only by it. Your data, combined with others, will provide information regarding internal changes that may occur within your child during his/her time in this program.

This research project is by Ashley Evans and is being conducted under the direction of Dr. Candace Boan-Lenzo of the Psychology Department and it has received the approval of Western Carolina University's Institutional Review Board (IRB). If you have any questions about your child's participation or about the study in general, you may contact me directly at (864) 350-5976 or ajevans1@catamount.wcu.edu. You may also contact Dr. Candace Boan-Lenzo (227-3451 or cboan@email.wcu.edu) or the chair of the IRB (227-3323) with questions.

CONSENT:
I, _____, state that I agree to allow my child (or minor under my custody) _____, to participate in a research study being conducted by Ashley Evans and directed by Dr. Candace Boan-Lenzo of the Psychology Department. I acknowledge that the researcher has informed me of the purpose of the study; that my child's participation is voluntary; that I may withdraw my child from participation at any time without penalty; and that all data will remain strictly confidential. The researcher has agreed to answer any of my questions about the research that could influence my decision to participate. I understand that my child will be filling out several surveys. I understand that the study involves no risk to my child. I understand that I will receive a copy of the consent form. I freely and voluntarily consent to allow my child (or minor under my custody) participate in the research project.

_____

Signature of Parent or Legal Guardian Date

_____

Signature of Investigator Date

Further research may be conducted in order to evaluate recidivism rates of youth who have participated in this program. This research would be conducted in cooperation with the Department of Juvenile Justice (DJJ) and this agency. By signing below, I am giving permission for the researcher to access my child's (or minor under my custody) activity in the legal system as tracked by the DJJ. The information obtained in this research would be strictly confidential, in which the same participant number will be used from the current research and the researcher will not have access to any identify information. The information further research would seek to obtain would include information such as the occurrence of an offense, when the offense occurred (relative to the individual's discharge from this program) and the severity of the offense.

_____

Signature of Parent or Legal Guardian Date

_____

Signature of Investigator Date

If you would like to receive an overall summary of the results at the conclusion of the study, write your name and email address here:

_____

Appendix D

ASSENT TO PARTICIPATE IN RESEARCH

Western Carolina University

My name is Ashley Evans and I am from the Psychology Department at Western Carolina University. I am conducting a research study about the thoughts and feelings experienced by youth just like you. I am asking you to take part in this research study because I am trying to learn more about the changes you might go through during your time in the program. This will take 60 minutes of your time within your first couple days in the program and 60 minutes of your time before you leave the program. You do not have to answer the questions all in one sitting; it is OK to complete them at your own pace, as long as you finish within 5 days of arriving here.

If you agree to be in this study, you will be asked to complete a questionnaire and a survey. Some of the questions ask about some sensitive issues, they may be personal or may make you feel uncomfortable. Be assured that no one will be able to know how you responded to the questions and your name will never be used. You do not have to answer any question you don't want to or you can stop participating at any time.

Please talk about this study with your parents (or legal guardian) before you decide whether or not to participate. I will also ask your parents to give their permission for you to participate. Even if your parents say "yes" you can still decide not to participate. You may also change your mind before or during the survey. No one will be upset with you if you don't want to participate or if you change your mind later and want to stop.

You may ask me any questions you may have about this study by calling me at 864-350-5976.

By signing below, you are agreeing to participate with the understanding that your parents have given permission for you to take part in this project. You are participating in this study because you want to. You are your parents will be given a copy of this form after you have signed it.

Print Name

Signature **Date**

THE WESTERN CAROLINA UNIVERSITY INSTITUTIONAL REVIEW BOARD HAS REVIEWED THIS PROJECT FOR THE PROTECTION OF HUMAN PARTICIPANTS IN RESEARCH.