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DRUMMING AWAY DRUGS: AN INNOVATIVE ALTERNATIVE TOWARDS DRUG REHABILITATION

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DRUMMING AWAY DRUGS: AN INNOVATIVE ALTERNATIVE
TOWARDS DRUG REHABILITATION

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THESIS
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A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science in the
College of Agriculture, Food, and Environment
at the University of Kentucky

By

John C. Hill

Lexington, Kentucky

Director: Dr. Bryan Hains, Associate Professor of Community and Leadership Development

Lexington, Kentucky

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ABSTRACT OF THESIS

DRUMMING AWAY DRUGS: AN INNOVATIVE ALTERNATIVE TOWARDS DRUG REHABILITATION

Drug use poses a serious threat to the quality of life for many Kentuckians and their families. Recent statistics indicate drug offenders account for a significant portion (in one year, 52,597 arrests were made for drug violations statewide) of individuals within the criminal justice system, directly affecting the economic vitality within our state (Bunn & Slavova, 2012; Federal Bureau of Investigation, 2012). These statistics signify an overwhelming need for effective prevention efforts and innovative treatment alternatives. This study provides an innovative alternative treatment for drug offenders that infuses social and emotional coping strategies using percussion as a context. During the innovative program participants were able to express, recognize, articulate and evaluate themselves and their peers' emotional coping strategies while developing peer camaraderie. They did so while being introduced to rudimentary drumming skills, fusing emotional intelligence with the art of drumming. The hypothesis is that this innovative program will enhance participant emotional intelligence to express, learn an effective coping skill, and establish camaraderie with their peers.

KEYWORDS: Risk factors, Distress, Coping Skills, Emotional Intelligence, Drumming

John C. Hill

December 15, 2014

DRUMMING AWAY DRUGS: AN INNOVATIVE ALTERNATIVE TOWARDS DRUG REHABILITATION

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Chapter I - Introduction

Background and Setting

There is a serious drug problem in the Commonwealth of Kentucky. National crime report data (2011) reflected the highest number of arrests were associated with drug abuse violations (estimated at 1,531,251 arrests), and the second highest included driving under the influence (estimated at 1,215,077) (Bunn & Slavova, 2012; Federal Bureau of Investigation, 2012). In the state of Kentucky 52,597 arrests were made for drug violations and 26,050 arrests were made for driving under the influence (Koyagi, 2009). Furthermore, in 2010, hospital charges incurred as a result of drug overdose were $68,572,368 in the state of Kentucky, with only fifteen percent of the total being paid by the patient (Bunn & Slavova, 2012; Federal Bureau of Investigation, 2012). This indicates that drug offenders account for a substantial population of offenders within the criminal justice system, potentially putting the financial burden on local agencies and tax payers.

These statistics infer that current rehabilitation efforts are limited in their success. Most contemporary treatments incorporate generalized behavior modification techniques, for the masses. However no single treatment is appropriate for every individual. The continued growth and popularity of cognitive behavioral therapies in drug rehabilitation has created a trend due to availability and public interest (Mennin, Ellard, Fresco, & Gross, 2013). Cognitive behavioral therapy is a treatment method that examines the relationships between thoughts, feelings and behaviors (NAMI, 2012).

The idea behind cognitive behavioral therapy is to explore the individual's patterns in thinking and behaving, and ultimately redirecting thoughts and behaviors through the development of insight (NAMI, 2012). However, cognitive behavioral therapy has limitations such as: being narrow in scope (targeting thought processes in hopes of changing behavior), it can be confrontational (challenging one's thoughts), and it relies heavily upon a therapeutic alliance (Kingdon, Hansen & Turkington, 2007). A therapeutic alliance is defined broadly as, the relationship developed between a therapist and patient (Martin, Garske & Davis, 2000). This involves the counselor helping the client understand the relationship between thoughts and behaviors, recognizing irrational thoughts, focusing on client's assumptions, and helping the client create rational replacements for irrational thoughts (Pucci, 2009). Thus, cognitive behavioral therapy indicates the importance of a therapeutic relationship.

For this reason, matching treatment settings, interventions, and services to an individual's particular risk factors and needs are critical to his or her success in overall functioning. In order for a treatment to be effective it must not only address an individual's drug abuse but any negative social, psychological, medical, vocational, or legal stimuli as well. Latessa and Lowenkamp, (2005) observed that offenders are less likely to reoffend when dynamic risk factors where the primary target as opposed to static risk factors. Dynamic risk factors are the individual attitudes, beliefs, and behaviors that account for deviant acts, which can be changed. Static risk factors are those that cannot be changed such as age, gender, or ethnicity (Latessa & Lowenkamp, 2005).

Specific examples of common risk factors include anti-social behaviors, deficiency in problem solving, impulsiveness, lack of coping skills, and drug use.

Targeting specific individual risk factors can diminish criminal behavior. This also includes fostering an environment that focuses on pro-social behaviors. Directly teaching social, emotional, and cognitive competence can help create change within offenders. Thus, targeting dynamic risk factors may require treatment providers to offer additional therapeutic interventions (Latessa & Lowenkamp, 2005).

Statement of Problem

Overall, Kentucky has the third highest drug overdose mortality rate in the United States, with rates quadrupling from 1999 to 2010 (Drug Abuse Data for Kentucky, 2013). These devastating statistics suggest an overwhelming need for prevention efforts and more progressive treatment alternatives. Therefore, alternative strategies and applications need to be explored that lower the number of drug abuse violations. More specifically, supplemental programs used in conjunction with drug courts that target individual eustress, positive stressors, and distress, negative stressors, by implementing unique coping strategies may be a salient alternative.

My hypothesis is that drumming focused on developing emotional intelligence can be utilized among Fayette County Drug Court participants as an alternative pro-social coping mechanism for distress. Furthermore, I propose that the intervention will enhance individual emotional intelligence, provide a drumming skill that participants will engage in outside of group, and individuals will establish a community among each other while learning the drumming techniques.

Chapter II - Review of Literature

Many theoretical models of addiction are grounded on the philosophy that acute and chronic stresses are major contributors in motivation towards abusing addictive substances (Sinha, 2001). Distress can be defined as an individual's negative emotional appraisal to specific stimuli (Lazarus, 2006). While stress is mostly associated with negative affect and distress, it can also include positive affect called eustress (Sinha, 2008). Prolonged and acute negative stressors can increase the intensity and persistence of distress, ultimately increasing maladaptive behaviors such as addiction (Sinha, 2008). Furthermore, data indicates that distress caused by social and individual risk factors may lead to continued abuse (relapse) of mood alternating substances (Chen & Kandel, 1995). The inability of emotional regulation of an addict can lead to ineffective coping strategies (relapse), which are frequently accompanied by guilt or shame (Nehra, Sharma, Mushtaq, Sharma, Sharma, & Nehra, 2012). In addition, individuals with poor coping skills are at an increased risk of continued abuse (Sinha, 2001).

The Commonwealth of Kentucky has attempted to address participant coping skills and behaviors with cognitive behavioral therapy methods. Cognitive behavioral therapy (CBT) is a form of treatment that focuses on replacing flawed behaviors, coping skills, and emotions with pro-social ones. This is operationalized by challenging the individual's cognitive schema with the overall goal of behavior change – where pro-social coping skills are learned and utilized (Duckworth & Freedman, 2012). Cognitive behavioral therapy can be simplified into the idea that thoughts are appraised through emotions, which directly affects behavior.

The problem with cognitive behavioral therapy is that it suggests targeting how an individual interprets a thought, and not how to manage stress and other emotions. More specifically, cognitive behavioral therapy assumes that an individual's thoughts are wrong and need to be corrected. Research indicates that abstinence from drug use increases irritability, anxiety, emotional distress, and aggressive behaviors among drug addicted individuals, which ultimately leads to impulsive behaviors, such as continued drug use (Sinha, 2001).

According to Riley & Schutte, (2003) low emotional intelligence was a significant factor in predicting alcohol and drug related problems. Emotional intelligence can be defined as the ability to manage, regulate, and recognize one's own emotions and interpret others' emotions (Salovey & Mayer, 1989). Additional data established a correlation between low emotional intelligence and ineffective coping strategies of cannabis users (Nehra et al., 2012). Bridging the gap between emotional intelligence and pro-social coping skills can ultimately help individuals regulate emotional states and remain sober. Additionally, developing a coping skill that assists in emotional regulation may be a very important factor in decreasing impulsive behaviors and articulating one's emotions.

Theoretical Framework

Goleman's (2003) theory of emotional intelligence provides a foundation for this study. Goleman's (2003) mixed model of emotional intelligence depicts five characteristics of emotional intelligence that encompasses interpersonal awareness and social competence. According to Goleman's (2003) model, the five characteristics of

emotional intelligence include self-awareness, self-regulation, motivation, empathy and social skills. These characteristics are the foundation for understanding one's personal emotions and recognizing the emotional states of others (Salovey & Mayer, 1989).

Self-awareness.

Self-awareness refers to an individual's ability to identify one's emotions and their effect on others. Self-awareness is important because it promotes honesty within one's self. In addition, self-awareness is the ability to be aware of one's emotions, to understand emotions, and express emotions. This characteristic of emotional intelligence is considered a subset of interpersonal intelligence, meaning knowledge of one's own emotional states (Salovey & Mayer, 1989).

Self-regulation.

Self-regulation is one's ability to redirect impulses and moods. More specifically, self-regulation refers to one's ability to recognize emotions to regulate behavior. Self-regulation is crucial in creating an environment that is fair and trusting. This characteristic can contribute to personal and pro-social behaviors (Salovey & Mayer, 1989).

Motivation.

Motivation refers to one's desire and ambition to achieve beyond one's own expectations and others. Motivation is rooted in an individual's strong desire to achieve. In addition, this characteristic describes one's persistent drive to accomplish. This is

important because motivation helps foster an optimistic attitude and commitment to others (Goleman, 2003).

Empathy.

Empathy is the ability to understand the emotional makeup of other people. In addition, empathy includes sensing how to give feedback and when to refrain. Individuals who have empathy are attuned to others' body language, and interpret messages that are non-verbal. Empathy is important because it promotes sensitivity and encouragement among individuals (Goleman, 2003).

Social skills.

Social skills refer to how an individual manages relationships with others and how they build rapport. This characteristic includes being friendly with a purpose, finding common ground, and effective collaboration. All of these features can lead to one's ability to effectively manage relationships. Social skills are specifically important in the art of persuasion and enhancing motivation (Goleman, 2003).

Emotions.

Emotions can be defined as organized responses, crossing the boundaries of many psychological subsystems, which typically arise in response to an event (Salovey & Mayer, 1989). Furthermore, an emotional appraisal is the process of evaluating events or objects as significantly affecting a person's concerns, desires or values in a negative or positive way. The reactions to an emotional appraisal can affect an individual's thinking and behavior, ultimately affecting social interaction and relationships (Parrott, 2001).

Influence of Music

Historically, music has been used to both manage and express emotions as a therapeutic intervention (Carmichael & Atchinson, 1997). Langer (1957) argues that music is the language of emotions, and claims that music has always served different functions in private and social life. Furthermore, music is thought to impact us whether intentionally or not, and invades our emotional territory (Yehuda, 2011). Lundqvist (2009) investigated the ability of music to induce genuine emotions in individuals, and suggests that music is an elicitor of authentic emotion.

According to Kemper and Danhauer (2005) music (both played and listened to) can be beneficial in reducing stress, anxiety, and depression among other conditions. Carmichael and Atchinson (1997) revealed that music in play therapy among children (mostly from parental conflict and disruptive home life) resulted in an outlet for emotional expression, reduction in anxiety, and lowered aggressive behaviors after 8-10 sessions. Therefore, music can be a positive experience, which has a potential for improving stress emotions (Yehuda, 2011). Thus, it is hypothesized that music can be utilized as a reward for many distressful stimuli amongst individuals. It is conceivable that music both performed and listened to have the inherent abilities to evoke emotions, and allow for an expressive outlet for emotions.

Rhythm

Percussion is the largest category of musical instruments and can easily been found in all cultures throughout the world. Rhythm constitutes one of the basic structural

elements of music, and is most often supported by percussion instruments. In addition, percussion instruments provide a level of physical activity and stimulation for individuals at any level (Wood, 2012). Furthermore, Wood (2012) suggests that drumming is a powerful tool for wellness and creates a relationship between rhythm and life.

Drumming

Data supports the idea that drumming has specific therapeutic qualities. These qualities include: reduction of stress and tension, enhanced communication, group cohesion, and increased emotional processing (Blackett & Payne, 2005). This foundational research indicates that drumming among drug-addicted individuals may be therapeutically beneficial if used in conjunction with other therapeutic modalities. In addition, the non-verbal qualities, group cohesion, creativity, and communication may present a positive alternative group experience that is relished among participants (Blackett & Payne, 2005).

Current research on limitations of cognitive approaches to behavioral changes has continued to support a unique intervention. This intervention is called The DRUMBEAT (Discovering Relationships Using Music, Beliefs, Emotions, Attitudes & Thoughts) program and focuses on increasing social competence. It is an Australian therapeutic approach to treating young indigenous boys and girls for mental health issues, and involves the use of hand drumming. Social competence is targeted by exploring communication skills, problem solving skills, empathy, and tolerance through participation in a drum circle (Faulkner, 2011).

The increased emotional processing that occurs throughout a drumming session has been verified through individual participant accounts obtained by Moore and Ryan (2006). Moore and Ryan (2006) observed that individuals cherished the group cohesion that developed, along with a sense of pride as a community. For the purposes of this paper community is defined as, community of interest and the ability to relate to one another.

The idea of the drumming sessions as it relates to community is that it gives those individuals the power to define themselves, as opposed to being defined by others. The development of community is just as important as the individual because it is a positive response to the shared beliefs or emotions within a community (Bhattacharyya, 2004). Thus, solidarity encourages a safe and non-judgmental environment that empowers individuals to openly express emotional states in a percussive format. Overall, participants have defined themselves, created a community that emphasizes the importance of each individual, and establishes an environment free of judgment.

Guiding Research Question

The purpose of this study was to determine if participants could enhance their emotional intelligence and learn a new coping skill, using drumming as a context.

1. Can an alternative therapeutic program, focusing on developing emotional intelligence through the context of drumming, enhance drug-addicted participant coping strategies?

Research Hypotheses.

1. Participating in this process will enhance participants' self-concept of the five categories of emotional intelligence.

2. Participants will learn drumming and use it outside of group as a coping mechanism for distress.

3. Participants will establish community while learning drumming skills and engaging in emotional exercises.

Chapter III - Methodology

Overview of Research Design

In order to accurately answer the proposed research question, the researcher

utilized qualitative design and analysis. A qualitative design was important because it

allowed the researcher to understand the in-depth, holistic process rather than statistical

trends. Qualitative research design assists in understanding individual meaning and

complexity of a situation. This design involved collecting data within the participant's

setting, organizing themes from data, and the researcher making interpretations of the

meaning of the data (Creswell, 2009). This study was contingent upon the researcher's

observations and interviews and serves the purpose of determining the effectiveness of

the intervention (Patton, 2001). Therefore, it was pertinent to examine this intervention

utilizing a qualitative research design.

Research Setting

This study was conducted within the Fayette County Drug Court Program in

Lexington, Kentucky. Kentucky first developed drug court in 1993 for nonviolent

offenders, and Fayette County Drug Court was established in 1996 (Mateyoke-Scrivner,

Webster, Staton, & Leukefeld, 2004). The goals for drug courts are to reduce drug abuse

and associated criminal behavior by involving and supervising offenders in a

programmatic and treatment services (Belenko, 1998). Drug courts differ from many

other criminal justice models in that the programs add a community-based treatment

component to them (Johnson, Hubbard, & Latessa, 2000). Community-based treatment

refers to the practice of an individual receiving treatment as the person transitions back into the community. This feature of drug courts is what makes the program different from other traditional forms of community corrections, such as probation or parole.

Sample Population

Purposive sampling was utilized within this study. Purposive sampling is a technique that involves deliberately selecting settings, people, or activities that provide information relevant to research goals and questions (Maxwell, 2004). Due to the nature of this study, participants were individuals who had been convicted of felony or misdemeanor charges. Additionally, participants were identified by program staff as having a drug use disorder. During the time of the study, participants were enrolled in the Fayette County Drug Court Program, (an alternative to other court mandated groups) in Lexington, KY. They self-selected and volunteered to participate in the intervention.

The participant group was capped at 10 individuals, due to space constraints and the individualization of the intervention. The sample population originally consisted of seven Caucasian males. Two participants were removed from the program. One was removed because he absconded from the Fayette County Drug Court Program and maintained fugitive status. The other individual voluntarily resigned. Following IRB approval, participants were given an approved description of the research procedures (Appendix A).

Role of the Researcher

In this study, the researcher was a participant observer, meaning that he was both the program researcher and instructor. As such it was important and practical that I examined this study within the implied environment. As a participant observer, I was able to witness both participant behavior and non-verbal communication. This assisted in me fully understating the complexities of the sessions (Creswell, 2009). Finally, it is important to note that the researcher worked within the research setting, and may have previously interacted amongst the sample population.

Researcher Perceptivity

In an effort to provide transparency it is important to know the researcher's background. I am a Caucasian male who grew up in the Midwest United States. I began learning music at age 11 and began studying percussion at age 12. I found a passion for drumming at a young age and have continued my studies into adulthood. I have been a member (drummer) of numerous concert bands, pep bands, marching bands, and a drum and bagpipe corps. In addition, I have competed in several state solo and ensemble competitions.

I obtained a bachelor's degree in secondary education social studies and as a result, was once a licensed teacher in the state of Indiana. I soon began work as a teacher at an alternative school for students in grades 6 through 12. Shortly after, I worked in the mental health field where I supervised at risk youth in a school setting. I than began my career as case worker for a local Drug Court Program supervising drug addicted felony

offenders. After obtaining a master's degree in criminal justice, I was promoted within the Drug Court Program as a Recovery Coordinator. I am currently in this role and am responsible for providing and facilitating psycho educational classes for drug addicted felony offenders while I am nearing the completion of my studies in Certified Alcohol and Drug Counseling (CADC).

My background in music, education, and drug rehabilitation provide me with unique insight as a researcher for this study. I have an extensive drumming background which makes me highly qualified to teach rudimentary drum techniques. I also have an education degree which enhances my ability to manage and facilitate the group intervention, and my degree in criminal justice assists me in understanding criminal thinking. In addition, as a recovery coordinator I have established rapport with a majority of the Drug Court clientele. In contrast, my current position at the Fayette County Drug Court may promote a bias in my research findings.

Intervention design

This intervention consisted of a researcher-designed and presented program. Throughout the program I taught the basics of reading rhythms, stick control, tempo, dynamics, and various drumming techniques including: rhythm patterns with accents, flams, ruffs, stroke rolls (5,9,13,17, double stroke), stick patterns and dynamics. These techniques were used as a method to showcase participants' emotions. In addition to basic percussion skills, participants were introduced to Parrott's (2001) classification of emotions. This was used as a guide to help participants articulate their emotions throughout each session (Appendix B).

A second objective of the intervention included teaching the fundamentals of Goleman's (2003) emotional intelligence. Goleman's (2003) five characteristics of emotional intelligence include: self-awareness, self-regulation, motivation, empathy, and social skills. These lessons were used to assist in increasing participants' self-concept of the five categories of emotional intelligence throughout the ten-week intervention (Appendix C).

Questionnaire

The pre-post questionnaire was founded on Goleman's (2003) theory of emotional intelligence. This questionnaire incorporated a 5-point Likert type scale with nominal categories ranging from "Strongly disagree" to "Strongly agree". The questionnaire was reviewed by an expert panel to ensure content validity. The expert panel consisted of three university professors, each experts in the following areas; community development, emotional intelligence, leadership and effective evaluation strategies for community development. Additionally, the questionnaire was piloted for face validity among current Fayette County Drug Court participants not participating in the study (Appendix C).

Measurement of Emotional Awareness and Intensity

In order to document participant emotional awareness a measurement for emotional intensity and emotional identification was developed. This measurement was developed using Parrott's (2003) six primary categories of emotions. Parrott (2001) describes six primary emotions: love, joy, surprise, anger, sadness, and fear. However, he discusses the concept that emotions are not limited to these six, but have subcategories,

which include secondary and tertiary emotions. This is important as Parrott (2001) suggests humans are born with six primary emotions, while the subcategorical emotions are socially contrived. He argues that emotions are aroused by environmental demand, constraint, or resource, in conjunction with a person's motives or beliefs. This is accomplished by an appraisal process that integrates the two sets of variables by indicating the significance of the individual's perceived well-being (Lazarus, 1998) (Appendix D).

Parrot's (2001) classification of emotions is a great tool for emotional identification however, it fails to measure emotional intensity. That is why it was imperative that the researcher develop a tool that assisted individuals in identifying the intensity of their emotions. The measurement of emotional intensity for this study was developed using Parrott's (2001) classification of emotions and the James-Lange scale of emotional intensity. Arousal, or emotional intensity, is measured on a scale from low to high, and is significant in that it essential to the appraisal process of emotions. Emotional arousal enhances Goleman's (2003) characteristics of self-awareness and self-regulation in that individuals recognize the intensity of their emotions when coping with social and environmental influences.

Alternative Intervention Design

    Session 1.

During the first session, participants completed a questionnaire based on the tenants of emotional intelligence. I then discussed emotions as they relate to the group,

and performed my emotional state through improvised drumming. My performance was used as a base for engaging participants. I asked participants to define what emotion I performed based on Parrott's (2001) classification of emotions. I then articulated specific drumming techniques to help enhance interpretation *(self-awareness)*.

Consecutive Sessions.

Part I.

Each session began by instructing participants to journal their individual stressors and emotional thoughts prompted by guided questions supported by Goleman's (2003) emotional intelligence. Participants were then asked to demonstrate their current emotional state using their improvised percussive skills and referencing Parrott's (2001) classification of emotions. Group members were required to identify what emotions they interpret through drumming. The performer was then given the opportunity to verbalize their emotion.

Part II.

After an individual's performance, observers were asked to identify the performer's emotional state. The performer was asked to verify their emotional state and plot their emotion accordingly on my model. Once the performer has plotted their emotional state, group members were asked what factors led to their selection, and how the performance could be improved or more clearly articulated. Percussive interventions were then adapted to the individuals for that day. The sessions were learner-directed and

tenets of Goleman's (2003) emotional intelligence were adjusted by me based on the groups' self articulated needs.

For example, an individual may express (play) anger on the drum. If he or she lacks self- awareness then Parrott's (2001) classification of emotions will be introduced. The participant will then express their current emotion. Other participants will be instructed to observe and interpret the performance. If the performer is not confident in playing, other members will be prompted for guidance along with my approach. All participants will be instructed to learn the technical drum skills as a group. Finally, each session ended with journal recordings of their individual group interactions and emotional thoughts guided by an informal interview process conducted by me, as it pertains to the individuals for that day.

Intervention Implementation.

Group sessions were conducted for one hour (9:00am-10:00am). Sessions were scheduled for ten Fridays (due to researcher time restraint) beginning on May 23, 2014 and ending on August 22, 2014. Each session began with a check-in and journal recordings of their individual stressors and emotional thoughts prompted by me. Participants were then required to perform their emotional state, interpret peer performances as they relate to emotional state, and implement drumming exercises throughout the ten weeks.

The journals provided the necessary self-reported qualitative data that informed the researcher about the participants' subjective experience of group drumming and documented its place within the context of the rehabilitation setting. I also kept a journal for informal discussion and reflection. Attendance was also recorded for both researcher and drug court purposes. Finally, the researcher provided the participants with the necessary drum sticks and practice pads.

Data Collection

In order to appropriately answer the proposed research question, multiple data were collected throughout the 10-week intervention. The researcher used multiple data collection methods to identify different strengths and limitations of the intervention (Maxwell, 2004). Points of data collection included pre and post questionnaires, emotional identification and intensity chart, and participant and researcher journals.

Pre-post Questionnaire.

The pre and post questionnaires at the beginning and end of the unit were developed according to the tenants of Goleman's (2003) emotional intelligence. The instrument was evaluated by an expert panel, consisting of three university professors, each experts in the following areas; community development, emotional intelligence, leadership and effective evaluation strategies for community development. It was then piloted using drug court participants not associated with this study. In order to measure individual self-concept associated with emotional intelligence, a nominal Likert scale was developed (strongly disagree, disagree, neutral, agree, and strongly agree). Nominal scales measure the self-concept change (Bartholomew, 2004).

Individual Emotional Identification Graph.

The emotional identification and intensity chart was developed using Parrott's (2001) classification of emotions. The individual emotional data collected at the beginning and end of the sessions were guided using a classification of emotions chart adapted from Parrott's (2001) classification of emotions. This diagram used Parrott's (2001) six primary emotions combined with arousal, and requires the individual to rate his or her emotion on an intensity scale. Overall, the individual identified his primary emotion then plotted the intensity of that emotion on the diagram. The researcher then documented participant emotional change.

Participant Journals.

Participants maintained journals in which they recorded their daily responses to researcher prompts. In addition, participants were encouraged to record their observations during their experience. Finally, participants were expected to document their daily distress and current emotional states. Participants documented their experiences at the beginning and ending of each session.

Researcher Journal.

The researcher maintained a journal in which he recorded social discussions, from non formal interviews, verbal and non-verbal cues, daily observations, and his own impressions. These field notes were reviewed in order to accurately recall past events, participant quotes, and his reflections about the personal meaning and significance of what he observed (Patton, 2001).

The informal interview prompts started at the beginning of each session and offered maximum flexibility, allowing the researcher to move in different directions with conversations (Patton, 2001). These questions were intended to elicit behaviors, experiences, and activities that occur inside and outside of the study sessions.

The informal interview prompts were guided by Goleman's (2003) mixed model on theory of emotional intelligence. Reflections were guided by prompts adapted to the individuals for each particular session. Each session focused on one or more characteristics of emotional intelligence. These prompts required participants to reflect on their experiences during each session. Prompts included but were not limited to:

- Did you previously know how to drum?

- Did drumming help you effectively express your emotions?

- Did drumming help you manage your emotions?

- How do you think your emotional expression affected others?

- Was it difficult to identify others' emotions?

- How were you motivated by drumming today?

- Did you learn a new technique today?

- Are you drumming outside of sessions?

- Do you enjoy learning drumming with your peers? Why?

Data Analysis

Multiple methods of analysis were used to evaluate data from this study. The analysis includes examining the pre and post questionnaires, individual emotional identification graphs, participant journals, and the researcher journal. Personal identifiers were eliminated and participants were given a number to maintain confidentiality and for tracking purposes.

Pre-post Questionnaire.

The first research hypothesis *participating in this process will enhance participants' self-concept of the five categories of emotional intelligence*, was analyzed using comparative analysis between the pre and post questionnaires. The pre questionnaires provided baseline data associated with an individual's self concept of the five categories of emotional intelligence. Self-concept refers to the set of cognitions and feelings that each individual has about him or her (Gall, Gall & Borg, 2003).Upon

intervention completion participants completed a post questionnaire to measure change in self concept of the five categories of emotional intelligence.

Individual Emotional Identification Graph.

A comparative analysis was conducted between the individual emotional identification graph completed at the beginning and end of sessions. Each graph illustrated the six primary categories of emotions on a scale of intensity. Participants selected their current emotional state and the intensity of that emotion. Intensity was represented with an emotion within the same primary category on a scale of low to high. These graphs were compared to determine emotional change and change of intensity (self-awareness). This datum was supplemental in identifying change in the category of self-awareness as it pertained to the first hypothesis.

Participant Journals.

Data was analyzed through inductive qualitative analysis. Inductive qualitative analysis involves discovering patterns, themes, and categories among data (Patton, 2001). Themes were identified through hypothesis coding (first cycle) and thematic analysis (second cycle) methods. Hypothesis coding was used to assess the researcher-generated hypotheses. Thematic analysis was then used to assess the categories for analysis.

Coding Hypotheses of Participant Journals.

The second researcher hypothesis *participants will learn drumming and use it outside of group as a coping mechanism for distress*, was analyzed using hypothesis coding (first cycle) and process coding (second cycle) of participant journals. Process

coding was appropriate because it identified action, communication, and change that occurred throughout the ten-week interventions (Saldana, 2012). This datum was then thematically identified to determine the use of drumming skills outside of group as a coping mechanism for distress.

The third researcher hypothesis *participants will establish community while learning drumming skills and engaging in emotional exercises*, was analyzed using hypothesis coding(first cycle) and process coding(second cycle) of participant journals. Themes that emerged from coding were then compared to the qualitative inquiries of establishing community among group members while learning skills and engaging in emotional exercises.

Researcher Journal.

Data was analyzed through inductive qualitative analysis. Coding directly came from the researcher journal entries, and supports a portion of the data analysis (Maxwell, 2004). The researcher journal was analyzed using holistic coding (first cycle) and thematic analysis (second cycle) of the researcher journal. Holistic coding was used to identify basic themes in the data by identifying them as a whole rather than line by line (Saldana, 2012). Thematic analysis was appropriate because it assisted the researcher in identifying implicit meaning of the data (Saldana, 2012).

Coding Hypotheses of Researcher Journal.

The second researcher hypothesis *participants will learn drumming and use it outside of group as a coping mechanism for distress,* was analyzed using hypothesis

coding (first cycle) and process coding (second cycle) of participant journals. Hypothesis coding was appropriate because it assessed a researcher-generated hypothesis (Saldana, 2012). Process coding was appropriate because it identified action, communication, and change that occurred throughout the ten-week interventions (Saldana, 2012). This datum was then thematically identified to determine if drumming skills were being learned, and used outside of group as a coping mechanism for distress.

The third researcher hypothesis *participants will establish community while learning drumming skills and engaging in emotional exercises,* was analyzed using hypothesis coding (first cycle) and process coding (second cycle) of participant journals. Hypothesis coding was appropriate because it assessed a researcher-generated hypothesis (Saldana, 2012). Process coding was appropriate because it identified action, communication, and change that occurred throughout the ten-week interventions (Saldana, 2012). This datum was then thematically identified to determine the establishment of community among group participants.

Informal Interviews.

The researcher informal interviews were designed to offer maximum flexibility, allowing the researcher to move in different directions with conversations (Patton, 2001). These questions were intended to elicit behaviors, experiences, and activities that occur inside and outside of the study sessions. The informal interview prompts were guided by Goleman's (2003) mixed model on theory of emotional intelligence. Participant reflections were guided by prompts adapted to the individuals for each particular session. Each session focused on one or more characteristics of emotional intelligence in addition

to drumming techniques. These prompts required participants to reflect on their experiences during each session. This was appropriate because it did not require scheduling time with research participants, and was helpful in building rapport with participants (Patton, 2001).

Qualitative Trustworthiness

Data were triangulated for each hypothesis to reduce the risk of chance associations and of systematic biases of a specific method. Triangulation is the process of using more than two methods to collect data in order to promote credibility (Maxwell, 2004). Furthermore, triangulation allowed for a more secure understanding of the issues being investigated (Maxwell, 2004). However, the trustworthiness of this study is further strengthened by the strategies of: credibility, transferability, dependability, and confirmability.

Credibility was established through the implementation of the pre and post questionnaires, model of emotions and intensity, and participant journals. This allowed a majority of the results to be generated from the perspective of participants (Shenton, 2004). This study was specific to drug addicted individuals participating in a court ordered program. The sample population was capped at 10 participants willing to be research subjects for a period of 10 interventions (10 consecutive weeks). In addition, a majority of the data was generated directly from participant journals, which enhanced the transferability of this study. Transferability can be considered based on the following; restrictions in the type of people who participated in the interventions, the number of

participants, data collection methods, the number and length of the data collection

sessions, and the time period in which the data was collected (Shenton, 2004).

Dependability can be determined based on the research design and execution, and

evaluating the process of inquiry undertaken. More specifically, the researcher developed

methods within a study that can be replicated to obtain similar results (Shenton, 2004).

Dependability was enhanced in this study by conducting a pilot test of the pre and post

questionnaire, working closely with a panel of experts to ensure accuracy, and methods

were articulated accurately in order to replicate the study in the future. Confirmability

was established through the results and experiences of the participants rather than the

inclinations of the researcher. Confirmability was achieved in this study through the use

of participant journal entries within the results and the acknowledgment of researcher

perceptivity. Data was triangulated to promote confirmability and researcher perceptivity

was acknowledged (Shenton, 2004).

Limitations of the Study

The limitations of this study are understood to be that a single drug court from

one county within one state was chosen. Therefore, findings may not be generalizable to

other drug courts across the state or even the country. Furthermore, interventions and

hypotheses were established on the psychodynamic theory of addiction. This theory

suggests that drug addicted individuals are "self-medicating," have underlying

psychological problems, use maladaptive psychological coping strategies, and abuse

drugs to resolve internal conflict (Blatt, McDonald, Sugarman, & Wilber, 1984).

Chapter IV - Results

The researcher hypotheses were designed to answer the overall research question, *Can an alternative therapeutic program, focusing on developing emotional intelligence through the context of drumming, enhance drug-addicted participant coping strategies?* The following results include measurement for self-concept associated with emotional intelligence, change in intensity of emotions from the beginning to the end of the sessions, and thematic categories associated with the second and third researcher hypotheses. In order to maintain anonymity, all participants were identified by a designated number.

Hypothesis 1

Participating in this process will enhance participants' self-concept of the five categories of emotional intelligence. Self-concept refers to the set of cognitions and feelings that each individual has of him or herself (Gall, Gall & Borg, 2003). Measurement included the five tenants of Goleman's (2003) emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skills. Participants' self-concepts were collected using pre and post questionnaires and analyzed using a comparative analysis. The following tables (1-5) display results between the pre questionnaire (baseline) and post questionnaire (completed perception).

Self-Awareness.

Table 1 illustrates self-concept in the category of self-awareness. This included the following statements: *I can identify my emotions at any given time (question #2), and I understand how my emotions affect others (question #6).*

Table 1

Emotional Intelligence Questionnaire (Self-Awareness)

Participant #	Question #2 Pre	Question #2 Post	Question #6 Pre	Question #6 Post
1	N	N	SA	A
2	A	A	A	A
3	SA	D	A	A
4	A	SA	SA	A

Note. Participants were asked to respond to Likert-style questions with the following prompts: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA)

Question 2 displayed no change among two respondents (neutral), one respondent revealed change from strongly agree (pre) and disagree (post), and one respondent revealed change from agree (pre) and strongly agree (post). Question 6 displays no change among two respondents (agree), and two respondents revealed change from strongly agree (pre) and agree (post). Overall, there was a 50% change in self-concept of self-awareness responses.

Self-Regulation

Table 2 illustrates self-concept in the category of self-regulation. This includes the following statements: *I can effectively manage my emotions (question #4), and it is difficult for*

me to engage in safe and effective coping skills (question #10).

Table 2

Emotional Intelligence Questionnaire (Self-Regulation)

Participant #	Question #4 Pre	Question #4 Post	Question #10 Pre	Question #10 Post
1	N	N	N	SD
2	N	N	D	D
3	D	SD	D	N
4	N	SA	D	N

Note. Participants were asked to respond to Likert-style questions with the following prompts: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA)

Question 4 displayed no change among two respondents (neutral), one respondent revealed change from disagree (pre) and strongly disagree (post), and one respondent revealed change from neutral (pre) and strongly agree (post). Question 10 displays change among three respondents. These three changes included; neutral (pre) and strongly disagree (post), disagree (pre) and neutral (post), and disagree (pre) and neutral (post). One respondent revealed no change (disagree). Overall, there was a 62.5% change in self-concept of self-regulation.

Motivation

Table 3 illustrates self-concept in the category of motivation. This includes the following statements: *I am a highly motivated person (question #3), and I have an optimistic (positive) attitude (question #9).*

Table 3

Emotional Intelligence Questionnaire (Motivation)

Participant #	Question #3 Pre	Question #3 Post	Question #9 Pre	Question #9 Post
1	SA	SA	SA	A
2	N	N	D	N
3	SA	SA	A	A
4	A	A	A	A

Note. Participants were asked to respond to Likert-style questions with the following prompts: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA)

Question 3 displayed no change among all four respondents. Question 10 displays no change in two respondents (agree), one respondent revealed change from strongly agree (pre) and agree (post), and one respondent revealed change from disagree (pre) and neutral (post). Overall, there was a 25% change in self-concept of motivation.

Empathy.

Table 4 illustrates self-concept in the category of empathy. This includes the following statements: *I am sensitive to the emotions of others (question #5), and I understand the emotions of others (question #8).*

Table 4

Emotional Intelligence Questionnaire (Empathy)

Participant #	Question #5 Pre	Question #5 Post	Question #8 Pre	Question #8 Post
1	A	N	A	N
2	A	SA	A	A
3	N	D	N	D
4	SA	A	SA	N

Note. Participants were asked to respond to Likert-style questions with the following prompts: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA)

Question 5 displayed change among all four respondents. The four responses included; agree (pre) and neutral (post), agree (pre) and strongly agree (post), neutral (pre) and disagree (post), and strongly agree (pre) and agree (post). Question 8 displays change among three respondents. The three respondents included; agree (pre) and neutral (post), neutral (pre) and disagree (post), and strongly agree (pre) and neutral (post). One respondent revealed no change (agree). Overall, there was an 87.5% change in self-concept of empathy.

Social Skills

Table 5 illustrates self-concept in the category of social skills. This includes the following statements: *I can easily persuade others (question #1), and I can easily connect (build rapport) with others (question #7).*

Table 5

Emotional Intelligence Questionnaire (Social Skills)

Participant #	Question #1 Pre	Question #1 Post	Question #7 Pre	Question #7 Post
1	A	A	A	N
2	A	A	A	SA
3	A	N	A	A
4	SA	SA	SA	SA

Note. Participants were asked to respond to Likert-style questions with the following prompts: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA)

Question 1 displayed no change among three respondents. One respondent revealed change from agree (pre) and neutral (post). Question 7 displays no change among two respondents, one respondent revealed change from agree (pre) and neutral, and one respondent revealed change from agree (pre) and strongly agree (post). Overall, there was a 37.5% change in self-concept of social skills.

Overall, the pre and post questionnaires indicated changes in the groups' self-concept in the five categories of emotional intelligence. The changes that occurred were most visible in the categories of self-awareness, self-regulation, and empathy. These categories represent change in at least half of the responses.

Changes in Emotional Intensity

Individuals were asked to rate their emotion on an intensity scale, using Parrott's (2001) six primary emotions combined with arousal. Overall, the individual identifies his

primary emotion and plotted the arousal of that emotion on the diagram to measure

change of emotions, or change of intensity of emotions. Participants were asked to plot

their identified emotion prior to being exposed to the intervention and after completion.

The groups' responses illustrate the majority of participants experienced changes in

emotion and in intensity of emotions after completing the intervention.

Table 6

Measurement of Changes or Change of Intensity of Emotions

	Change of Emotion	Intensity of Emotion	No Change
Number of Responses	16	15	15

A majority of individual responses showcase changes of emotion from the

primary categories of anger and fear and into the category of joy. In addition, fifteen

individual responses highlighted a change in intensity of emotions. The intensity of

emotions of all fifteen responses increased within the primary category of joy   However,

there were a total of fifteen responses when the individual did not experience change in

emotion or change in intensity of emotion. All fifteen responses expressing no change in

emotion or intensity of emotion, were selected in the category of joy (Table 6).

Overall, these results support participant increased self-awareness throughout the

study. In addition, this supports the individual's self-concept within the category of self-

awareness.

Hypothesis 2

Participants will learn drumming and use it outside of group as a coping

mechanism for distress. A majority of individual journal responses showcase the use of

drumming outside of the group as a coping mechanism. Participants were prompted to discuss if they had used drumming outside of the group, the following responses were given: "yes, by tapping on the desk at school and because I am bored" (Participant 1), "yes, I beat rhythms on my car as I drive" (Participant 2), "sometimes I catch myself tapping my hands to a beat" (Participant 3), "yes, caught myself drumming on the steering wheel" (Participant 4), and "No" (Participant 5). Participant reflective journals convey that a majority of participants utilized drumming outside of group sessions.

When participants were asked if they considered drumming to be an effective coping skill for distressful stimuli, the following responses were given: "yes it can be because it's a way to take your mind off what is stressing you out and calm you down" (Participant 1), "yes, it takes your mind off things" (Participant 2), "I firmly believe drumming can be used as a coping mechanism. It releases stress, and gives someone a hobby, and skills to improve upon" (Participant 3), "Yes, I do because in a roundabout way it gives you an opportunity to vent by exerting physical force out on the drum, creating loud noise, thereby helping release negative energy, hence calm after the storm" (Participant 4). Participant journal responses signify an acceptance among the group that drumming can be used as an effective coping skill for distress.

Finally, when participants were asked if they would continue drumming in the future, the following responses were given: "yes I do, I would be happy to because it makes me feel at ease" (Participant 1), "yes, it is soothing and rewarding" (Participant 2), "No, don't know" (Participant 3), and "Maybe" (Participant 4). The continuation of drumming in the future for research participants varied among the group. However, it is

important to note the rationale for those that were likely to continue drumming was based on coping.

Hypothesis 3

Participants will establish community while learning drumming skills and engaging in emotional exercises. Participant journal responses revealed a theme of community. More specifically, solidarity among participants was represented within individual journal reflections. Solidarity can be defined as the fellowship, unity, cohesion or camaraderie that is developed among group members (Bhattacharyya, 2004). Examination of participant journals indicated enjoyment among group members due to the camaraderie that transpired. When asked to describe experiencing a sense of community, the following responses were given: "Yes, because we are playing together and communicating. We play in unison. It's like we are linked together" (Participant 1), "Sure, we are all laughing about how we have no rhythm" (Participant 2), "I feel bonding because we all played in sync" (Participant 3), "feeling more bonded with the others learning the same activity, since none of us have any skills in playing an instrument" (Participant 4), "a small sense of community because we were all interested in seeing where this drumming class is going, and because it's something new to all of us" (Participant 5), "I definitely feel a sense of community, especially when our beats get in synced up, and our speed seemed to be add and flow together" (Participant 6), "yes, because we have to play as a group so everyone is on the same page" (Participant 7). These individual responses showcase the development of community among group participants

In addition, when participants were prompted to explain why they experienced a sense of community, the following responses were written: "I definitely felt a bond because we were working together and communicated" (Participant 1), "yes, because we are all without rhythm" (Participant 2), "I felt a sense of bond because we were communicating to help each other learn the notes" (Participant 3), "yes, things are becoming more familiar, comfortable environment, friendly, and unique" (Participant 4), and "briefly, when our rhythm synced up, but like I said, my mind was elsewhere. (Participant 5).

When participants were asked to describe if and why they enjoy drumming with their peers, the following reasons were documented in individual journals: "yes, because I feel like it's bringing us together and we are forming something like a friendship" (Participant 1), "yes, I feel closer to this group because we all work together on a common objective each week" (Participant 2), "yes, smaller group, having a good time learning something new, and everybody is equal" (Participant 3), "yes, because it gives me a sense of community" (Participant 4), and "the camaraderie" (Participant 5). Overall, these responses indicate an increased sense of community through the context of drumming, and characteristics of community being developed throughout the duration of the intervention.

Overall Thematic Categories

In relation to all three hypotheses, several themes emerged within the participant journals. Analysis of individual participant journals revealed three major thematic

categories including: self-regulation (lack of coping skills), motivation and community. It is important to note that the following results are presented using the participant's voice. Throughout the sessions participants were encouraged to reflect on their emotions, distressful stimuli, coping skills, and their overall group experience. The following themes transpired within the participant and researcher journals.

Self-regulation.

Upon analysis, the categories of emotional intelligence that emerged were self-regulation and motivation. Self-regulation refers to an individual's ability to redirect impulses or regulate behavior (Goleman, 2003). Examination of participant journals indicated a lack of pro-social coping skills. The following responses illustrate a majority of participants were deficient in the emotional intelligence category of self-regulation. When prompted to explain how you deal with distress, the following responses were given: "talking to people, studying, and working my bum off" (Participant 1), "confrontation" (Participant 2), "I am taking it day by day…" (Participant 3), "handling it by being passive, withdrawing, and isolating" (Participant 4), "I just see it as an opportunity" (Participant 5), and "I was saying fuck it, get high and do what I want" (Participant 6). All of these participant responses signify the lack of pro-social coping skills among the group.

Motivation.

Motivation refers to an individual's strong desire to achieve (Goleman, 2003). Participant journals revealed a strong sense of motivation. When participants were prompted to describe how drumming motivated them, the following responses were given

which reflect motivation: "I am motivated to do better at drumming and working together" (Participant 1), "I was motivated by having a team with an assigned beat to play with" (Participant 2), "it's just a neat class so yeah, I was motivated coming into it" (Participant 3), "It was the most challenging session so far, which motivated me" (Participant 4).

When participants were asked to describe their motivation, the following responses were given which reflect motivation: "I felt like a couple of us were leading the group, we were taking turns and working together" (Participant 1), "Going faster and everyone had their own part in the song" (Participant 2), "I was motivated by others also having a desire to learn" (Participant 3), "I liked finally feeling like I am effective at this and can fulfill my part without disruption/problem" (Participant 4), and "we were all depending on one another to keep the beat going" (Participant 5).

As a participant observer, I documented motivation that was observed throughout the duration of the intervention. The following depicts these occurrences: "One participant was struggling, but was motivated to continue until he was flawless," "most participants said they were listening to one another in order to learn the rhythms better," "several participants were motivated to learn their individual parts, and to make it sound perfect together," and "I observed several participants showing motivation through giving suggestions." These are all observations that highlight participants' motivation to become more proficient with drumming techniques.

In addition, I documented extrinsic motivation that was observed throughout the duration of the intervention: "one participant said 'this is exciting to hear each other and

it makes me want to increase the tempo' and I could hear their motivation being expressed through suggestions," "during the lesson clients were giving each other tips on performing better," "when participants were in sync, I noticed people smiling and wanting to continue," participants felt comfortable giving suggestions to one another and on playing style," "One participant began to get upset and volunteered to sit out…However, others began to encourage him and motivate him to continue playing." These observations signify motivation among participants in order to develop their drumming skills more proficiently as a group.

Community.

Researcher journal responses revealed a theme of community. When describing the sessions throughout the ten weeks, the following observations were made: "I am noticing people helping each other, giving suggestions, laughing out loud, and expressing the joy they have coming to this group." In addition, the researcher documented, "a participant told me today that he 'dreads coming to group the night before, when I wake up I am still upset, but when I get here I have so much fun with the rest of these guys' and he ends up not only changing his emotion, but enjoys connecting with his peers." These observations signify community among group members.

Chapter V – Conclusions and Recommendations

Analysis revealed that research participants were able to enhance their emotional intelligence through the context of drumming. This was demonstrated through examining the pre and post questionnaires, individual emotional identification graphs, and participant journal responses. All individuals reported having no previous drumming knowledge, and that they learned drumming skills. In addition, all participants embodied a lack of self-regulation skills. Furthermore, all participants reported establishing a sense of community while engaging in the emotional exercises throughout the intervention. While it is impossible to completely attribute individual changes to the intervention, it was made clear that developing emotional intelligence through the context of drumming can enhance drug addicted participant coping strategies.

Hypothesis one examined if participating in this process would enhance participants' self-concept of the five categories of emotional intelligence. The pre and post questionnaires revealed changes in the participants' overall self-concept of emotional intelligence. This was evident in the percentage change within each category of emotional intelligence. There was an 87% change in self-concept of empathy, 62.5% change in self-concept of self-regulation, 50% change in self-awareness, 37.5% change in self-concept of social skills, and 25% change in self-concept of motivation.

These results are practically significant because they reveal changes in the areas of emotional intelligence that can negatively affect drug addicted individuals the most. The category of empathy is important because a lack of empathy in an individual can relate to antisocial behaviors, a dynamic risk factor that can be changed (Latessa &

Lowenkamp, 2005). The category of self-regulation is significant because the inability of emotional regulation of an addict can lead to ineffective coping strategies (relapse), (Nehra, Sharma, Mushtaq, Sharma, Sharma, & Nehra, 2012). The category of self-awareness is important because of the current use of cognitive behavioral therapy among drug courts in the state of Kentucky. Cognitive behavioral therapy focuses more on how an individual should interpret a thought, instead of educating the individual on identifying emotions and accepting them. In addition, individuals with poor coping skills are at an increased risk of continued abuse (Sinha, 2001). For this reason, targeting these individual dynamic risk factors and categories of emotional intelligence was important.

Hypothesis two examined if participants would learn drumming and use it outside of group as a coping mechanism for distress. The groups' responses on the individual emotional identification graphs, illustrated a majority experienced changes in emotion and in intensity of emotions after completing the intervention. All participants reported using a form of drumming outside of the group as a method to cope with distress. This was important because this study provided drug addicted individuals a new coping skill that was also used at their convenience.

Hypothesis three examined the establishment of community while learning drumming skills and engaging in emotional exercises. The establishment of community was evident throughout participant journals and the researcher journal. The camaraderie that formed also transpired into improved motivation and social skills for some. In addition, the solidarity that developed created a safe and fun environment for the research participants.

In conclusion, it is evident that an alternative therapeutic program focusing on developing emotional intelligence through the context of drumming can enhance drug addicted participant coping strategies. This was evidenced by individual changes in self-concept of emotional intelligence, individual emotional identification graphs that depicted change in emotions or intensity of emotions throughout the sessions, participant journal records, and researcher journal. This study was important because it was progressive, unique, effective, and gained interest among individuals with similar backgrounds and conditions as those who participated in the study.

Future Studies

This pilot study had favorable outcomes related to the researcher question and hypotheses. However, this study has several areas of improvement that must be made. First, participants within this study lacked diversity. All research participants were of the same race and gender. In addition, the sample never reached it maximum capacity, and only four participants completed the pre and post questionnaires It is recommended that the sample represent a more diverse population, and maintain maximum capacity for the intervention. In order to assess the extent to which findings may be true of people in other settings, similar projects employing the same methods, but conducted in different environments could be of great value.

This study was limited in its time and duration due to researcher constraints. It is recommended that the sessions be conducted for an hour and a half, and that the duration of the intervention be a minimum of fifteen weeks. This would allow more time during sessions to focus on more advanced drumming techniques. In addition, the lengthened

sessions would provide adequate time for participants to complete journals entries without feeling hurried.

This study was also limited in resources. Participants were not provided drums to learn the drumming techniques. This can hinder the learning of more advanced drumming skills, and more obviously the lack of sounds being produced. Data supports the idea that drumming has specific therapeutic qualities. These qualities include: reduction of stress and tension, enhanced communication, group cohesion, and increased emotional processing (Blackett & Payne, 2005). Therefore, it is recommended that participants each be equipped with their own drum and sticks in order to advance this study.

The qualitative analysis of the pre and post questionnaires revealed changes, but may still need to be altered. I recommend that the pre and post questionnaires implement reverse wording in order to address over inflation of individual self-perceptions of emotional intelligence. Another way to address this issue would be to utilize a retrospective survey, instead of a pre/post questionnaire. In a retrospective survey, the participant is asked what they knew prior to the intervention, and what their knowledge is after the intervention. This would help provide a more accurate depiction of change in self-concept of individuals.

It would be beneficial to assess the development of solidarity, and comprehend why the camaraderie is cherished among group members. Examining the establishment of community among group members would prove very beneficial in sustaining this innovative alternative towards drug rehabilitation. It may also improve the self-concept of individuals in categories of motivation and social skills.

Finally, it would be significant if participants in a future study were able to perform for the local community. This would not only enhance the participants' group cohesion, but also require them to work on social skills and increase motivation. In addition, research participants would find greater meaning and purpose in this study if they were given the opportunity to demonstrate their newly learned skills to the local community.

Appendix A

Informed Consent
Drumming Away Drugs: An innovative Alternative Towards Drug Rehabilitation

You are being invited to take part in a research study that focuses on looking at developing emotional intelligence through the context of drumming to enhance drug addicted participant coping strategies. You are being invited to take part in this research study because you are participating in the Fayette County Drug Court Program. If you volunteer to take part in this study, you will be one of about 10 people to do so.

The person in charge of this study is John C. Hill of the University of Kentucky, Department of Community and Leadership Development. By doing this study I hope to learn about how the intervention of drumming and emotional intelligence process affects the perceptions, emotions and awareness of participants. In addition, I am also interested in the broader perspective of how distress affects the daily lives of participants, and the coping mechanisms in which they currently utilize.

Research procedures will include pre and post questionnaires, self-awareness emotional scale, behavioral observation, guided prompts, and reflection journal. As such, you will be asked to release your reflection journal to the research facilitator for analysis. To the best of my knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. You may get personal benefit from taking part in this study; however, your willingness to take part may help society as a whole better understand this research topic.

You are not required to participate in this study. Your participation is voluntary. You do not have to answer any question you do not wish to answer. However, we appreciate your assistance and hope that you will decide to participate. Your identity will be kept confidential to the extent provided by law. You will not be personally identified in these written materials. You have the right to withdraw from the study at any time without consequence. There are no risks or benefits associated with your participation, and no compensation is offered for participation. If you have any questions please contact **John C. Hill at 163 W. Short St. Suite 450, Lexington, KY 40507, (859) 246-2501**. For questions regarding your rights as a research participant, please contact the University of Kentucky Office of Research Integrity at (859) 257-9428.

_____   _____
Signature of study participant   Date

_____
Printed name of participant

Appendix B

Lesson Unit

Drumming

1. Participants will differentiate between down and up beats, specify rhythm
    and rest values, and distinguish tempos.

2. Participants will study rhythm patterns and differentiate dynamics.

3. Participants will be introduced to drumsticks. Participants will learn how
    to manipulate drum sticks.

4. Participants will exhibit proficiency in Rhythm values and tempo by
    recognizing previously learned rhythm patterns.

5. Participants will distinguish between accented notes within rhythm
    patterns.

6. Participants will be introduced to flams and ruffs. Participants will learn
    how to manipulate drum sticks to perform the notes properly.

7. Participants will be introduced to double stroke rolls. Participants will
    learn how to manipulate drum sticks to perform 5, 9, 13, 17 stroke rolls.

8. Participants will be introduced to sticking and stick control. Participants
    will learn how to manipulate drum sticks to perform the proper stroke with
    the proper hand.

9. Participants will exhibit proficiency in rhythm patterns which include accents and different dynamic levels by recognizing previously learned objectives.

10. Participants will exhibit proficiency in rhythm patterns which include accents, flams, ruffs, stroke rolls, stick patterns, and different dynamic levels tempo by recognizing previously learned objectives.

Appendix B

Lesson Unit

Emotional Intelligence

1. Participants will differentiate between intrapersonal and interpersonal intelligence.

2. Participants will develop strategies to help them become aware of their emotions.

3. Participants will classify their emotions into Parrott's 6 primary categories. Participants will estimate intensity of emotions.

4. Participants will identify emotions that have negatively affected them in the past.

5. Participants will describe effective and ineffective coping skills from the past and for the future.

6. Participants will differentiate between intrinsic and extrinsic motivation.

7. Participants will identify how to improve optimism.

8. Participants will identify empathy and its' importance.

9. Participants will identify strategies to improve empathy.

10. Participants will identify social skills and methods to improve social intelligence.

Appendix C

Directions

Please rate how much you personally agree or disagree with these statements-how much they reflect how you feel or think personally. Use the following scale: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), Strongly Agree (SA)

1. I can easily persuade others.

2. I can identify my emotions at any given time.

3. I am a highly motivated person.

4. I can effectively manage my emotions.

5. I am sensitive to the emotions of others.

6. I understand how my emotions affect others.

7. I can easily connect (build rapport) with others.

8. I understand the emotions of others.

9. I have an optimistic (positive) attitude.

10. It is difficult for me to engage in safe and effective coping skills.

Appendix D

<u>**Joy**</u>	Content	Relaxed	Cheerful	Excited	Ecstatic
<u>**Anger**</u>	Irritated	Mad	Upset	Enraged	Furious
<u>**Fear**</u>	Anxious	Uneasy	Scared	Fearful	Petrified
<u>**Sadness**</u>	Unhappy	Disappointed	Upset	Distressed	Depressed
<u>**Surprise**</u>	Startled	Surprised	Shocked	Amazed	Astonished
<u>**Love**</u>	Liking	Caring	Sympathetic	Loving	Passionate

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