6-2017

TESTING THE EFFECTIVENESS OF MENTAL HEALTH CRISIS INTERVENTION TEAM TRAINING: A COLLABORATIVE PARTNERSHIP AMONG COUNTY SERVICES AND LAW ENFORCEMENT OFFICERS

Peter A. Caro

TESTING THE EFFECTIVENESS OF MENTAL HEALTH CRISIS INTERVENTION TEAM TRAINING: A COLLABORATIVE PARTNERSHIP AMONG COUNTY SERVICES AND LAW ENFORCEMENT OFFICERS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

---

by

Peter Arias Caro

June 2017

TESTING THE EFFECTIVENESS OF MENTAL HEALTH CRISIS INTERVENTION TEAM TRAINING: A COLLABORATIVE PARTNERSHIP AMONG COUNTY SERVICES AND LAW ENFORCEMENT OFFICERS

A Project

Presented to the

Faculty of

California State University,

San Bernardino

---

by

Peter Arias Caro

June 2017

Approved by:

Dr. Erica Lizano, Faculty Supervisor, Social Work

Dr. Janet Chang, Research Coordinator

ABSTRACT

The Crisis Intervention Team (CIT) training program is a community partnership that provides education, understanding, interventions, relationships, and protection for responding officers, individuals in crisis and the community. The purpose of this study is to assess the effectiveness of CIT training amongst law enforcement officers in reducing stigmatizing attitudes and opinions on mental illnesses. The study uses a dependent means *t*-test to test the study participant's attitudes and opinions on mental illnesses using a pre/post-test survey. A modified version of the Attitudes to Severe Mental Illness Scale was used to measure attitudes, beliefs, and opinions of mental illness. This modified version was developed based on CIT course material. The ultimate goal of this study was to gain insight within the law enforcement community as to whether or not CIT training is raising awareness on the issue of mental health. Findings from this study suggest that after participation, those in the CIT training reported lower levels of non-stigmatizing opinions and attitudes in two of the four factors being analyzed.

ACKNOWLEDGEMENTS

I would like to thank all the participants and both agencies that helped make this research possible. Thank you to my internship supervisor, Tiffany Ross, for the continuous support, professional development, encouragement, wisdom, and knowledge throughout the course of this master's program. I would also like to thank the staff at the W.E.T. program that also helped shape and guide my understanding of the social work profession. And finally, I also want to acknowledge Dr. Erica Lizano. Thank you Dr. Lizano for your inspiration, dedication, patience and continuous encouragement through this process.

DEDICATION

To my beautiful wife, Noemi Caro, without your support, encouragement, love, understanding and patience, none of this would have ever been possible. You have always believed in me, especially in times when I didn't believe in myself. This journey would have never been possible without your support and scarifies.

To my beautiful children, Emma Sky and Noah Jude Caro, both of you fill my life with love, joy and happiness. Know that I do everything for both of you and that one day, I hope that you will do the same for your children. Always remember that your Daddy loves you and will continue to do everything possible to help reach both of your dreams one day.

To my parents, Silvester and Maria Caro, words cannot express my gratitude for your sacrifice, understanding, and love you have gave me growing up. Father, thank you for showing me what it is to be a hardworking, loving, devoted husband and father. Mother, thank you for showing me to never give up on my dreams, to continue to fight for what I believe in and continuous support both in the military and at school.

To my sister, Melinda Vasquez, you were the first in our entire family to graduate from a university and show me that anything is possible if you try. Thank you and your family for your continuous support.

Para mi suegro y suegra, Jose y Teresa Vega, gracias por su apoyo, ánimo y sacrificio que hicieron en ayudarme a lograr esta meta. Les agradezco a

los dos por siempre estar al pendiente de mis niños. Sé que sin su ayuda esto no fuera posible

TABLE OF CONTENTS

ABSTRACT iii

ACKNOWLEDGEMENT iv

LIST OF TABLES vii

CHAPTER ONE: INTRODUCTION

Problem Statement 1

Purpose of the Study 3

Significance of the Study for Social Work 4

CHAPTER TWO: LITERATURE REWIEW

Introduction 6

CIT Training Throught Law Enforcement Agencies 6

Theories Guiding Conceptualization 12

Summary 12

CHAPTER THREE: METHODS

Introduction 14

Study Design 14

Sampling 15

Interventions 16

Data Collection and Instruments 17

Analysis 18

Procedures 18

Protection of Human Subjects 19
Summary 19
CHAPTER FOUR: RESULTS
Introduction 20
Descriptive Statistics 20
Inferential Statistics 23
CHAPTER FIVE: DISCUSSION
Introduction 25
Discussion 25
Limitations 27
Recommendations for Social Work Practice,
Policy, and Research 28
Conclusion 29
APPENDIX A: DEMOGRAPHICS 30
APPENDIX B: ASMI MEASUREMENT SCALE 32
APPENDIX C: SURVEY 35
APPENDIX D: INFORMED CONSENT 38
APPENDIX E: CIT NATIONAL CURRICULUM 40
REFERENCES 42

LIST OF TABLES

Table 1. CIT Training Content.....…….....….16

Table 2. Demographics Characteristics of Study Sample.....…….....….22

Table 3. Dependent *t*-Test Statistical Analysis.....…….....……24

CHAPTER ONE

INTRODUCTION

Problem Statement

Most often, law enforcement officers are the first resource the community calls upon when faced with emergencies or public nuisances. Their commitment to their community ensures the safety, protection and service to the best of their ability. In many instances, law enforcement officers are also the first to respond to individuals suffering from any number of mental health crises. This can pose an issue if police officers are not properly equipped or experienced in dealing with individuals suffering from mental health issues. It can reflect poorly on the reputation of police officers that can then cause negative attitudes towards law enforcement within the public's perception.

Police officers often must decide whether individuals suffering from mental health illnesses should be arrested and taken through the criminal justice system or referred to mental health professionals. If not properly addressed, mental illnesses can lead to the criminalization of the mentally ill. For this reason, it is of great importance that law enforcement agencies and mental health professionals work together to ensure both public safety and officer safety when responding to situations of mental health crisis.

With positive change underway, these steps continue to help reduce the negative stigma of mental illness and its association to criminalization. But more

can always be done. According to National Association of Mental Illness (NAMI, 2015), about 70 percent of adolescent youth in the juvenile justice system have a mental health condition. Most often, individuals suffering from mental illnesses that are incarcerated or confined to solitary confinement only have their symptoms intensified causing greater distress (NAMI, 2015). As advocacy groups began to focus on the issues of police brutality, abusive treatment of inmates with mental illness, and violent removals from cells, law enforcement agencies began to be scrutinized on the level of training in identifying an individual with a mental health crisis.

Today, most law enforcement agencies have added training developed to address individuals with a mental health crisis. One of the most widely used models law enforcement agencies have adopted is the Crisis Intervention Team training model (CIT). The CIT model originated from Memphis, Tennessee following a fatal shooting of a man with mental illness and substance abuse by a police officer (Watson & Fulambarker, 2012). The aftermath of the tragedy sparked a community task force made up of mental health professionals, law enforcement, and mental health advocates to develop a training program to provide intervention strategies and alternatives to assist in directing individuals with mental illnesses.

Purpose of the Study

The purpose of this research study is to assess the effectiveness of CIT training within a public social service agency in the United States that has collaborated with their local law enforcement agency. The need for effective community services and support, components of prevention and early intervention, education and training in mental health services are essential to any community. In 2004, the voters of California passed a bill providing new funding to public mental health services known as the Mental Health Services Act or MHSA (RCDMH, 2013). This gave public agencies across the state of California needed funding to shift aggressively in making new improvements to help its consumers of mental health. It also paved the way to begin collaboration with many law enforcement agencies and their county's behavioral health-MHSA department. The ultimate goal for MHSA is to reduce incarcerations, school failures, unemployment, and homelessness for individuals with severe mental illness.

As for CIT training, it is comprised of specialized training provided by mental health clinicians, consumer and family advocates, and law enforcement officer trainers. The original Memphis CIT courses consist of a 40-hour, 5-day training program where CIT officers learn about mental health illnesses and symptoms, co-occurring disorders, legal issues, de-escalation tactics, and practical skills/scenario based trainings (Watson & Fulambarker, 2012). The current public social service agency that was examined for this study provides a

modified version of the CIT training in collaboration with their local law enforcement agency. The first modified version includes a 2-day, 16-hour course of CIT training. The second version includes a 3-day, 24-hour course. Both versions cover the same course material with the exception of the second version that offers a third day for practical application through scenario/skill building training.

The current study examined CIT training and its effectiveness in helping law enforcement officers raise their level of awareness about mental illnesses by conducting a pre-and post-test survey. The research design consisted of a quantitative, pre-and posttest-design, which allowed for the same group of participants to be evaluated. The selected design was ideal for the purpose of this research study. A convenience sample population was selected due to the study's limited timeframe and further details are discussed in chapter three.

Significance of the Study for Social Work

The significance of the current research study was to gain insight within the law enforcement community as to whether or not CIT training was raising awareness on the issue of mental health. As social workers, our core values are what set us apart within the community of helping professionals. Service to our community, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence all play a significant role to the current

research study in social work by investigating the attitudes and opinions of mental illness within a law enforcement agency (NASW, 2008).

Several empirical studies suggest that CIT training has helped reduce arrest, provide added knowledge in resource tools to direct individuals with mental illnesses, and increase public and officer safety (Canada, Angell, & Watson 2012; Watson, Ottati, Draine, & Morabito, 2011). Although not enough research has determined CIT as an “Evidence Based” practice, overall, research has indicated a step towards promising and best practices as the examination of CIT continues (Watson & Fulambarker, 2012). As mentioned before, the current study examines the effectiveness of CIT training delivered to law enforcement officers within the United States. More specifically, this research project studies the effectiveness of CIT training amongst law enforcement officers in reducing stigmatizing attitudes and opinions on mental illnesses. It was hypothesized that once completing CIT training, law enforcement officers would have a greater awareness on mental illnesses, which would help reduce stigma around mental illness.

CHAPTER TWO

LITERATURE REWIEW

Introduction

The following chapter will examine and analyze relevant research conducted on CIT training. Empirical articles include topics of program effectiveness when responding to mental health crisis, awareness of mental health crisis amongst 911 dispatch calls, alternative tactics when responding to a mental health crisis, cross-cultural CIT training, and level of comfort and confidence amongst law enforcement officers when responding to mental health crisis. The chapter will also address the importance of how the Sequential Intercept Model can assist in conceptualizing the idea of decriminalizing individuals suffering from mental illnesses.

CIT Training Throughout Law Enforcement Agencies

As more police involvement with individuals affected by mental illnesses increases, the question arises if proper training dictated the correct response. Currently, CIT training is among the leading programs developed to increase awareness of both officers and individuals with mental illnesses in contact. CIT training has been adopted nationwide throughout the law enforcement community. Current research conducted by Watson, Ottati, Draine, and Morabito (2011) examined the use and availability of mental health resources in four

different districts in the city of Chicago. Statistical data was gathered from both CIT trained officers and non-CIT trained officers to measure the effectiveness in providing resources to individuals with mental illnesses. Findings showed that officers who were CIT trained provided a greater direction to mental health services when responding to crisis compared to their non-CIT counter partners.

Some of the limitations analyzed in the study conducted by Watson et al. (2011) on the CIT model were the inability to employ a randomized sample selection and a pre and post test research design to examine the effectiveness of CIT trained Chicago officers. These observations can potentially skew the data collected by only having willing participants share their interactions. It can be argued that police officers recently trained in CIT would recall more resource referrals than police officers that have completed the course over a year. Based on these limitations, the current study at hand will take into consideration implementing a random sample and a pre and post survey to determine the effectiveness of CIT training.

While CIT training is significant to patrol/field law enforcement officers, research supports the benefits of dispatchers receiving the same level of training (Teller, Munetz, Gil, & Ritter, 2006). Teller et al. (2006) examined dispatch logs prior to CIT training and dispatch logs after CIT training. Results indicated the same amount of calls were logged but with an increased level of mental disturbances mentioned after completion of CIT training. Researchers attributed

the increase of mental disturbances reported as awareness and being better prepared to assess callers involved with mental health distress.

Teller et al. (2006) also revealed trained CIT officers were more likely to anticipate added resources when responding to mental crisis disturbance. CIT officers arranged for transportation, recognized symptoms of mental illnesses and knowledge of options for treatment as part of their training. The study suggested future research to consider the effects of the circumstances surrounding the call. Although the idea for future research in examining the effects of the circumstance surrounding the call may reveal other significant findings, the fact of the matter is, the study may deviate from the relevance of CIT training and the importance of implementing the model to all law enforcement officers.

Another related empirical study by Canada, Angell, and Watson (2012), explored the perceptions of CIT training and experiences of stakeholders within the Chicago Police Department. Interviews were conducted on volunteer officer participants to examine how CIT and non-CIT officers responded to calls involving persons with mental illnesses. Three categories were analyzed, assessment, response tactics, and disposition. Canada et al. (2012), found that CIT trained officers identified more options beyond arrest when deciding the outcomes of calls. Their findings also suggested that CIT training influences the ability to resolve interactions with individuals in mental health crisis with less physical force and linking individuals with appropriate resources.

Again, limitations found by Canada et al. (2012), were identified as not being generalizable outside Chicago Police Department, given the small sample size of 20 officers, and the sampling method employed. Another limitation noticed while analyzing the study is how interviews were conducted. Researchers used informal, non-structures interview methods that can cause each interview to vary from the other. This would impose different data collected if participants did not provide similar interview responses or interactions. As continual research is present in regards to CIT training, analyzing past research studies will allow this research to minimize limitations and continue to document progress in CIT methods.

While CIT training has been supported across the nation with promising results, other researchers have helped adopt the CIT model across the Atlantic Ocean in Liberia, West Africa. Mental health advocates and researchers Kohrt et al. (2015) helped develop a CIT model that would lay the ground work for law enforcement officers and mental health professionals to work together to better serve the people suffering from mental illness in Liberia. Workshops, professional trainings, assessments and practical applications were all analyzed pre and post completion to determine the success rates in preventing violence against mental health service users by law enforcement officers.

Ultimately, the program was a success in establishing the frameworks of CIT training amongst Liberian law enforcement and has continued to raise awareness in mental health. The program adopted the name of Mental Health

Crisis Intervention Team to emphasize the importance of mental health. Although previous studies have listed CIT effectiveness as not being generalizable, cross-cultural research as this only strengthens the concept of CIT being labeled in the future as evidence based practice (Canada et al., 2012).

Other empirical research examines the effects of CIT training on self-efficacy and social distance among law enforcement. Bahora, Hanafi, Chien, and Compton (2008) collected data by administering a pre-survey vignette and a post-survey vignette to officers completing CIT training. Self-efficacy was defined as a person overcoming barriers and coping with their challenges with a level of confidence whereas social distance was defined as the level of comfort when dealing with an individual with mental illness. Findings revealed that after participating in CIT training, officers' self-efficacy increased with regards to better addressing individuals with schizophrenia, depression, alcohol, and cocaine use. As for social distance, the study revealed a decrease on all four categories.

Some of the limitations interpreted during the study by Bahora et al. (2008) include sample size, self-reporting surveys, and particular language used on the survey. The language aspect of the limitation stood out the most from this study. As the general theme of the previous articles commented on sample size, this was the first article that addressed using statements to show confidence rather than explicitly saying it. The survey used the term "confidence" when assessing for self-efficacy that would indicate a shortcoming in self-confidence if reported low by law enforcement officers. The survey wording described during

this research article will help mitigate biases when creating a survey/vignette for the current projected research.

As continuous research promotes the success of CIT training across various police departments, no single CIT program is the same. A recent study conducted by McGuire and Band (2011) examined the critical elements of CIT training. The two researchers set out to define critical elements learned from CIT training through literature reviews. Another method utilized was expert survey to assess agreement and perceived degree of implementation by law enforcement officers. After analyzing all data received across 29 states, researchers found a preliminary list of 36 elements of CIT training that experts agreed as important. These elements were then group into three categories: philosophy and collaboration, law enforcement, and mental health services.

Two noted limitations of the study were the over-representation of criminal justice experts that participated in the survey and only a few selected experts that participated in the literature review. The over-representation of one selected group may have caused a bias in identifying key elements in CIT training and further studies should suggest a wider diverse pool of participants. This could help minimize the possibility of biases in selecting critical elements. The same should go for selecting experts to review the literature. Overall, the research analyzed provided good guidance in future research as to what CIT trainers across California consider critical elements.

Theories Guiding Conceptualization

The theory used to conceptualize the framework for this study has focused on the Sequential Intercept Model (SIM) as an approach to address the decriminalization of individuals suffering from mental illnesses. The SIM provides a schema for the criminal justice system and mental health system to work together by intercepting individuals with mental illnesses through a sequence of five filters; this prevents these individuals with mental illnesses from entering or reentering into the criminal justice system (Munetz & Griffin, 2006). Under this framework, law enforcement and emergency services are the first intercept in providing interventions like CIT training that result in lower arrest rates and frequent referrals to treatment (Munetz & Griffin, 2006). The SIM has helped guide the study to continue to raise awareness on decriminalization of people with mental illnesses.

Summary

This study explored the attitudes and opinions of law enforcement officers and the effectiveness of CIT training in helping reduce stigma amongst individuals suffering from mental illnesses. The Sequential Intercept Model also discussed the theoretical concept in guiding the study by helping raise awareness through a series of interceptions that begin with CIT training. Overall, the study aims to add additional research on CIT training and hopes to validate

the reduction of mental health stigma once law enforcement officers complete CIT training.

CHAPTER THREE

METHODS

Introduction

The purpose of this study was to assess the effectiveness of CIT training in law enforcement officers and determine if CIT training reduces officer's attitudes and opinions about mental health stigma and if CIT training can be utilized as a resource tool. The chapter describes in detail how this study was conducted. The sections include study design, sampling procedures, data collection and instruments, procedures, protection to human subjects, and data analysis.

Study Design

The objective of this study was to examine the attitudes and opinions of law enforcement officers about mental illness. It was hypothesized that upon completing CIT training, law enforcement officers would have a greater awareness on mental illnesses and reduced stigma. Using a between-subjects design, quantitative data was gathered in this study to answer the central study question. A quantitative design permitted responses to be answered in an attempt to collect a higher response rate rather than being left blank if having to write short answer.

Due to the limited amount of time and the difficulty in a posttest survey that would allow an officer to practice CIT training out in the field, the study will focus on attitudes and opinions versus practice application. One limitation of using between-subjects design is how the survey questions presented may influence the outcome, also known as the order effect. This may cause participants to become primed from taking the pre-survey and may influence the outcome of the post-survey. Though all measures will be taken to counterbalance the order effect, it still cannot be eliminated.

Sampling

Participants for this study were collected using a convenience sampling method. Each month, CIT training courses for law enforcement officers are conducted at specified training locations throughout the country. The average class size for a CIT course ranges from 50 to 55 law enforcement officers from different backgrounds i.e. corrections, patrol, dispatchers, and supervisors. Prior to the beginning of the CIT course training, a formal announcement of the current research study and their options to participate was presented verbally and on the informed consent form. A total of 49 out of 50 participants agreed to partake in the study yielding a response rate of 98%.

Intervention

During the two day, sixteen-hour course, law enforcement officers partake in multiple training modules conducted by a county behavioral health licensed clinician and a CIT certified law enforcement officer trainer. The modules are presented via PowerPoint, Video clips, family peer panel, and community resource partners. Active discussion and participation is elicited from law enforcement officers to gain an interactive experience. After each module, law enforcement officers are giving amble time for questions and are invited to share any experiences they have encountered in field. These training modules cover topics from history of CIT to emotional health of law enforcement officers. For complete training content see Table 1.

Table 1. CIT Training Content

Training Modules: Day 1
Module 1: Introduction to CIT - History and Purpose
Module 2: Stigma and Perception on Mental Illness
Module 3: 5150 and the Legal Process
Module 4: Psychotropic Medication and Substance Use
Module 5: Major Depression and Anxiety
Module 6: Schizophrenia and Bipolar
Module 7: Family Peer Panel
Training Modules: Day 2
Module 1: Community Resource Partners: Vet Center, Community Response Evaluation and Support Teams, Crisis Stabilization Unit
Module 2: Posttraumatic Stress Disorder

Module 3: Suicide and Suicide by Cop
Module 4: Emotional Health for Law Enforcement
Module 5: Developmental Disabilities
Module 6: Excited Delirium
Module 7: Peer Specialist Panel

Data Collection and Instruments

Demographic information was collected within the survey and it included: gender, age, ethnicity, length in service, education, and whether the participant is a patrol officer, corrections, dispatcher, supervisor, or other (see Appendix A). The study utilized a modified version of the Attitudes to Severe Mental Illness scale (ASMI, Appendix B) to measure attitudes, beliefs, and opinions (dependent variables) of mental illness. A modified version of the ASMI scale was developed based on CIT course material. The word “severe” was deleted throughout the survey questions to generalize the term mental illness as a whole.

The ASMI survey (Appendix C) was administered pre and posttest to evaluate the effectiveness of CIT training (independent variable) in raising awareness on mental illnesses. The scale is divided into four sections (Factors A-D): A: Stereotyping, B: Optimism, C: Coping and D: Understanding. High scores on Factors B, C, and D indicate non stigmatizing attitudes and opinions on mental illness. High scores on Factor A indicate stereotypical and unfavorable attitudes. The scale has been found to have very good internal consistency with a value of Cronbach’s alpha being high (a= 0.88) in other studies (Madianos et

al., 2012). The current study found the internal consistency with a value of Cronbach's alpha score of (a= 0.71) for Factor A, (a= 0.74) for Factor B, (a= -0.10) Factor C, (a= 0.80) in Time 1 and (a= 0.60) for Factor A, (a=0.60) for Factor B, (a= 0.31) for Factor C, (a= 0.82) for Factor D in Time 2. No incentives were used to facilitate participation.

Analysis

The study analysis consisted of a dependent means *t*-test that allowed for the sample population to be evaluated on a pre/post test survey. A dependent means *t*-test is used when looking for significant differences between the means of participants that are measured on the same dependent variable (attitudes, beliefs, and opinions) and under two different conditions (pre/post CIT training) (Weinbach & Grinnell, 2015). One of the advantages in utilizing a dependent means *t*-test is the elimination of differences that can develop between two separate sampling groups. This has allowed any significant findings to be more likely detected and has increased the power of the design. Participants were given a survey to collect quantitative data used to analyze the means between the pre/post survey groups.

Procedures

Prior to the arrival of the participants, the survey had been placed face down with a label that read, "Do not flip over." Once all participants were

accounted for and sitting at their desks, a formal announcement of the current research study and their options to participate was presented. The survey took no longer than 10-15 minutes to read and complete and was collected right after completion. Each individual survey included an informed consent form. Once participants concluded the CIT training course, a posttest survey was administrated and participants were free to leave.

Protection of Human Subjects

All participants were given an informed consent form that included a brief summary and purpose of the study, confidentiality description, and information regarding whom to contact should anyone have any questions or concerns after completing the survey. To ensure participants remained anonymous, participants were asked to simply mark “X” on the informed consent (Appendix D) to indicate their wiliness to partake in the study. All surveys remained anonymous and were entered into a database, which was in a computer that was password protected.

Summary

Chapter three addressed how the study was conducted. The study design, sampling procedures, interventions, data collection and instruments, analysis, procedures, and protection to human subjects that helped determine CIT training’s effectiveness in raising awareness in mental illness amongst law enforcement’s attitudes and opinions were discussed.

CHAPTER FOUR

RESULTS

Introduction

This chapter will present on the findings of the statistical analyses conducted. The chapter will include a detailed report of the sample, descriptive statistics, and results of the inferential statistics that were conducted. The first section will outline the results of the descriptive statistics that include gender, age, race and ethnicity, education level, length in service, and law enforcement position. The next section will report on the inferential statistics of survey Time 1 and survey Time 2 in the categories of stereotyping, optimism, coping, and understanding.

Descriptive Statistics

The sample size for this study had 49 participants, as presented in Table 2. Of the 49 participants, 40 of the participants identified as male (81.6%) and 9 as female (18.4%). The ages of the participants where categorized in increments of 4 years, ranging from 21 years old to 59 years old. This included 4 participants (8.2%) ranging from ages 21-24, 12 participants (24.5%) ranging from ages 25-29, 11 participants (22.4%) ranging from 30-34, 5 participants (10.2%) ranging 35-39, 4 participants (8.2%) ranging from 40-44, 6 participants (12.2%) ranging

from 45-49, 5 participants (10.2%) ranging from 50-54, and 2 participants (4.1%) ranging from 55-59.

Participants were also asked about their race and ethnicity. Of the 49 participants, 29 identified as White/Caucasian (59.2%), 15 identified as Hispanic/Latino (30.6%), 2 identified as Black/African American (4.1%), 1 identified as Asian (2%), and 2 preferred not to say/other (4.1%). When asked about the participant's level of education, 18 of the participants (36.7%) completed High School Degree/ GED, 8 participants (16.3%) completed an Associate's Degree, 16 participants (32.7%) completed a Bachelor's Degree, and 7 participants (14.3%) completed a Master's Degree.

When participants were asked about their length in service, 1 participant (2%) responded to Under 12 months, 19 participants (38.8%) responded to 1-3 years, 4 participants (8.2%) responded to 4-6 years, 7 participants (14.3%) responded to 7-9 years, 1 participant (2%) responded to 10-12 years, 4 participants (8.2%) responded to 13-15 years, 4 participants responded (8.2%) responded to 16-18 years, 1 participant (2%) responded to 19-21 years, 2 participants (4.1%) responded to 22-25 years, and 6 participants (12.2%) responded to 26+ years. The majority of the participants (71.4%) identified as Patrol Officers, followed by (18.4%) Correctional Officers, and (10.2%) as Other.

Table 2. Demographic characteristics of study sample.

Variables	N	(%)
Respondent Gender		
Male	40	81.6%
Female	9	18.4%
Total	49	100%
Respondent Age		
21-24	4	8.2%
25-29	12	24.5%
30-34	11	22.4%
35-39	5	10.2%
40-44	4	8.2%
45-49	6	12.2%
50-54	5	10.2%
55-59	2	4.1%
Total	49	100.0%
Race and Ethnicity		
White/Caucasian	29	59.2%
Hispanic/Latino	15	30.6%
Black/African American	2	4.1%
Asian	1	2.0%
Prefer not to say / Other	2	4.1%
Total	49	100.0%
Participant level of Education		
High School / GED	18	36.7%
Associate's Degree	8	16.3%
Bachelor's Degree	16	32.7%
Master's Degree	7	14.3%
Total	49	100.0%
Length in Service		
Under 12 months	1	2.0%
1-3 yrs	19	38.8%
4-6 yrs	4	8.2%
7-9 yrs	7	14.3%
10-12 yrs	1	2.0%
13-15 yrs	4	8.2%
16-18 yrs	4	8.2%
19-21 yrs	1	2.0%

22-25 yrs	2	4.1%
26+ yrs	6	12.2%
Total	49	100.0%
Respondent Position		
Patrol	35	71.4%
Corrections	9	18.4%
Other	5	10.2%
Total	49	100%

Inferential Statistics

The analysis conducted was done using SPSS software version 21. A dependent *t*-test analysis was used to examine the means between four factors in a survey that explored the attitudes, beliefs, and opinions on mental illnesses. Forty-nine of the 50 participants completed the pre/posttest survey and scores were collectively compared to measure any significant findings in the following factors: Stereotyping, Optimism, Coping, and Understanding. Table 3 presents the statistical results of the dependent *t*-test analysis.

The mean score for Stereotyping in Time 1 was 15.42 with a standard deviation of 4.39. In Time 2, the mean score for Stereotyping was 16.47 with a standard deviation of 3.85. The mean score for Optimism in Time 1 was 18.88 with a standard deviation of 3.75. In Time 2, the mean score for Optimism was 19.29 with a standard deviation of 3.10. The mean score for Coping in Time 1 was 18.24 with a standard deviation of 1.84. In Time 2, the mean score for Coping was 19.65 with a standard deviation of 2.13. And, the mean score for

Understanding in Time 1 was 14.76 with a standard deviation of 5.61. In Time 2, the mean score for Understanding was 18.31 with a standard deviation of 4.64.

Analysis concluded that there were no significant findings between Time 1 and Time 2 when comparing means in the Stereotyping factor (p = 0.21) and the Optimism factor (p = 0.55). In comparing means to the Coping factor from Time 1 and Time 2, this area revealed a significant finding (p = 0.01*).* The Understanding factor also determined a significant finding, when comparing Time 1 and Time 2 (p = 0.01).

Table 3. Dependent *t*-Test statistical analysis

	Time 1						
	N	Minimum	Maximum	Mean	Std. Deviation		
Stereotyping	49	6	29	15.42	4.39		
Optimism	49	8	24	18.88	3.75		
Coping	49	14	22	18.24	1.84		
Understanding	49	1	24	14.76	5.61		
	Time 2					*t*-test	
	N	Minimum	Maximum	Mean	Std. Deviation	Mean Difference	P
Stereotyping	49	7	25	16.47	3.85	-1.05	0.21
Optimism	49	14	24	19.29	3.10	-0.41	0.55
Coping	49	13	22	19.65	2.13	-1.41	0.001
Understanding	49	4	24	18.31	4.64	-3.55	0.001

CHAPTER FIVE

DISCUSSION

Introduction

The purpose of this chapter is to discuss the significance of the results. This chapter will present the limitations of the study, recommendation for social work practice, policy, and research. Lastly, the chapter will conclude with final thoughts on CIT training and mental health stigma.

Discussion

The purpose of this study was to assess the effectiveness of CIT training amongst law enforcement officers in reducing stigmatizing attitudes and opinions on mental illnesses. In Factor A, the Stereotyping component described questions of commonly negative beliefs and attitudes of people who suffer from mental illnesses (Madianos et al., 2012). The study results indicated that although there did seem to be a reduction in stigmatizing stereotyping beliefs from Time 1 to Time 2, the findings were not statistically significant. The same can be inferred for Factor B, the Optimism component that described positive beliefs and attitudes in which recovery is viewed as possible (Madianos et al., 2012). A possible reason why both Factor A and Factor B resulted in no significant findings can be attributed to the CIT course hours offered to the study participants. As previously mentioned, the national curriculum CIT training course

is meant to be offered as a 40-hour, 5-day course (Watson & Fulambarker, 2012). The current study examined the result of participants partaking in a 16-hour, 2-day course. This course only allowed for 40% of the original CIT training time to be delivered. Having to modify and condense the course structure may have been why Factors A and B were found not to change significantly after the training.

Although Factors A and B were found to have no significant change in the data analyzed, it is noteworthy to mentioned that Factors C and D where found to change significantly. Factor C, the Coping component, describes various coping interventions a person with mental illness can adopt to effectively manage their illness and stigma that is associated with (Madianos et al., 2012). The findings suggest that after completing the CIT training course, law enforcement officers have an increase awareness of coping skills in individuals living with mental illness. Developing this awareness of coping strategies, can begin to shatter the misconception that individuals with mental illnesses are broken. The other significant finding included the Understanding component. This component addresses the stigma of mental illness indirectly, asking the participant to understand how individuals with mental illness think and feel (Madianos et al., 2012). Once again, findings suggest that after completing the CIT training course, law enforcement officers would develop a higher level of empathy and understanding for individuals with mental illnesses.

It is important to note that although the present study found both significant and non-significant findings, much can be learned from the results. When it comes to exploring the attitudes, beliefs, and opinions of mental illness amongst law enforcement officers, it can be inferred that there is still much ambivalence in the topic of mental illness. That is, having both positive and negative opinions and beliefs on mental illnesses can suggest that stigmatizing beliefs are much more complicated to understand.

Limitations

Because of the complexity and sensitive topic amongst both participating agencies, several steps had to be taken to protect the identity of all subjects partaking in the survey. This made it impossible to test individual change before and after the training. This limited the amount of information that could be analyzed to explore several correlations on an intrapersonal level from Time 1 to Time 2. Instead, the current study was only limited to explore the difference between the entire group's mean. Future research should try to include both intrapersonal and the entire group changes before and after training. Another limitation of the present study was the sample population. Because the sample population was limited to one location, the results found cannot be generalized across agencies. The results are specific to this sample and future research should try to expand and include multiple law enforcement agencies.

Recommendations for Social Work Practices, Policy and Research

It was this researcher's hope that the present study would confirm that CIT training provided to law enforcement officers would decrease stigmatizing beliefs in individuals with mental illness and help raise awareness. Instead, results indicated both positive and negative outcomes that suggest attitudes, beliefs, and opinions can be very ambiguous and difficult to understand. One benefit of the study helped outline the need to change/modify the current CIT training course to continue to help raise awareness in mental health. It is in our core values of the "social work profession to promote social justice and social change with and behalf of clients" (NASW, 2008). Advocating to change/modify the current CIT course curriculum across various police departments would promote these values and continue to help minimize stigmatizing beliefs that may be held by officers about mental illness.

Recommendations for future CIT training courses would suggest a pilot program of the national curriculum (see Appendix E) 40-hour, 5-day training to compare results. Previous research that adopted the national curriculum model have had promising outcome to even suggest moving towards evidence-based practice if continuous research is maintained (Canada et al., 2012, Watson et al. 2011). Having the ability to analyze the pilot program can help researchers and law enforcement leaders to further explore other factors that may reveal imperative correlations. These factors include correlations between demographic characteristics and survey participants, multiple CIT training courses from the 2-

day and 3-day curriculum, and other law enforcement agencies who participant in a 5-day, 40-hour CIT course. One final recommendation is to incorporate two to three small vignettes to also analyze possible themes in the written section.

Conclusion

The purpose of this study was to gain insight into the effectiveness of CIT training in hopes to raise awareness of mental health issues amongst law enforcement officers. This study indicated both significant and non-significant results that helped validate certain areas as well as identified room for improvement. Overall, the study also aimed to add to the existing research on CIT training in order to continue to promote awareness and shatter stigmatizing beliefs on mental health

APPENDIX A

DEMOGRAPHIC

Survey Demographics

Gender

- ○ Male
- ○ Female

Age

- ○ 18-20 yrs
- ○ 21-24 yrs
- ○ 25-29 yrs
- ○ 30-34 yrs
- ○ 35-39 yrs
- ○ 40-44 yrs
- ○ 45-49 yrs
- ○ 50-54 yrs
- ○ 55-59 yrs
- ○ 60+ yrs

Race / Ethnicity

- ○ White / Caucasian
- ○ Hispanic / Latino
- ○ Black / African American
- ○ Asian
- ○ Prefer not to say
- ○ Other, please specify _____

Education

- ○ High School Diploma / GED
- ○ Associate's Degree
- ○ Bachelor's Degree
- ○ Master's Degree
- ○ Doctoral Degree
- ○ Other, please specify _____

Length in service

- ○ Under 12 months
- ○ 1-3 yrs
- ○ 4-6 yrs
- ○ 7-9 yrs
- ○ 10-12 yrs
- ○ 13-15 yrs
- ○ 16-18 yrs
- ○ 19-21 yrs
- ○ 22-25 yrs
- ○ 26+ yrs

Law Enforcement Position

- ○ Patrol Officer Rank_____
- ○ Corrections Rank_____
- ○ Dispatcher Rank_____
- ○ Other, please specify _____ Rank_____

APPENDIX B

ASMI MEASUREMENT SCALE

Attitudes to Severe Mental Illness Scale (ASMI): 1
Modified for current study – removed severe on questionnaire

Factor A: Stereotyping	Don't know	Disagree	Somewhat disagree	Somewhat Agree	Agree
If someone has experienced mental illness, he/she will suffer for the rest of his/her life	0	1	2	3	4
People with mental illness are failures	0	1	2	3	4
In spite of any efforts they are making, people with mental illness will never be like other people	0	1	2	3	4
People with mental illness have to take medication for the rest of their lives	0	1	2	3	4
Mental illness makes someone look ill	0	1	2	3	4
People with mental illness are not like any other people	0	1	2	3	4
Mental illness is easily recognizable	0	1	2	3	4
People with mental illness are not able to acquire new skills	0	1	2	3	4
People with mental illness are dangerous	0	1	2	3	4
Mental illness is caused by bad luck	0	1	2	3	4
Psychiatric medication causes addiction	0	1	2	3	4
Factor B: Optimism					
A person with mental illness is able to work	0	1	2	3	4
A person with mental illness can be trained in an occupation	0	1	2	3	4
People with mental illness don't differ from other people	0	1	2	3	4
People with mental illness can cope with life difficulties	0	1	2	3	4
To be taking psychiatric medication does not make an individual different from others	0	1	2	3	4
People with mental illness can recover nowadays	0	1	2	3	4
Factor C: Coping					
People with mental illness must not give up	0	1	2	3	4
A person with mental illness must seek help from a specialist	0	1	2	3	4

Attitudes to Severe Mental Illness Scale (ASMI): 2

Modified for current study – removed severe on questionnaire

It is better to be friends with people with the same problem when you are suffering from mental illness	0	1	2	3	4
It is better to hide the problem to avoid life difficulties	0	1	2	3	4
The friends should not abandon a person when he/she is suffering from mental illness	0	1	2	3	4
It is better for a person with mental illness to avoid other people	0	1	2	3	4
It is not right to hide the problem from family and friends when you are suffering from mental illness	0	1	2	3	4
Factor D: Understanding					
People suffering from mental illness feel that they cause burden on their families	0	1	2	3	4
People with mental illness usually feel inferior	0	1	2	3	4
People with mental illness are usually treated differently by others	0	1	2	3	4
Other people blame individuals with mental illness for the suffering of the family	0	1	2	3	4
A person from mental illness usually feels responsible for his/her problem	0	1	2	3	4
It is difficult for other people to understand a person suffering from mental illness	0	1	2	3	4

* High scores on Factors B, C, and D items indicate non stigmatizing attitudes and opinions.

* High scores on Factor A items indicate stereotypical beliefs and unfavorable attitudes. As a result, these items are reversely scored by subtracting their rating from 5.

*Reliability: Scale has been found to have very good internal consistency with a value of Cronbach's alpha being high (a=.088)

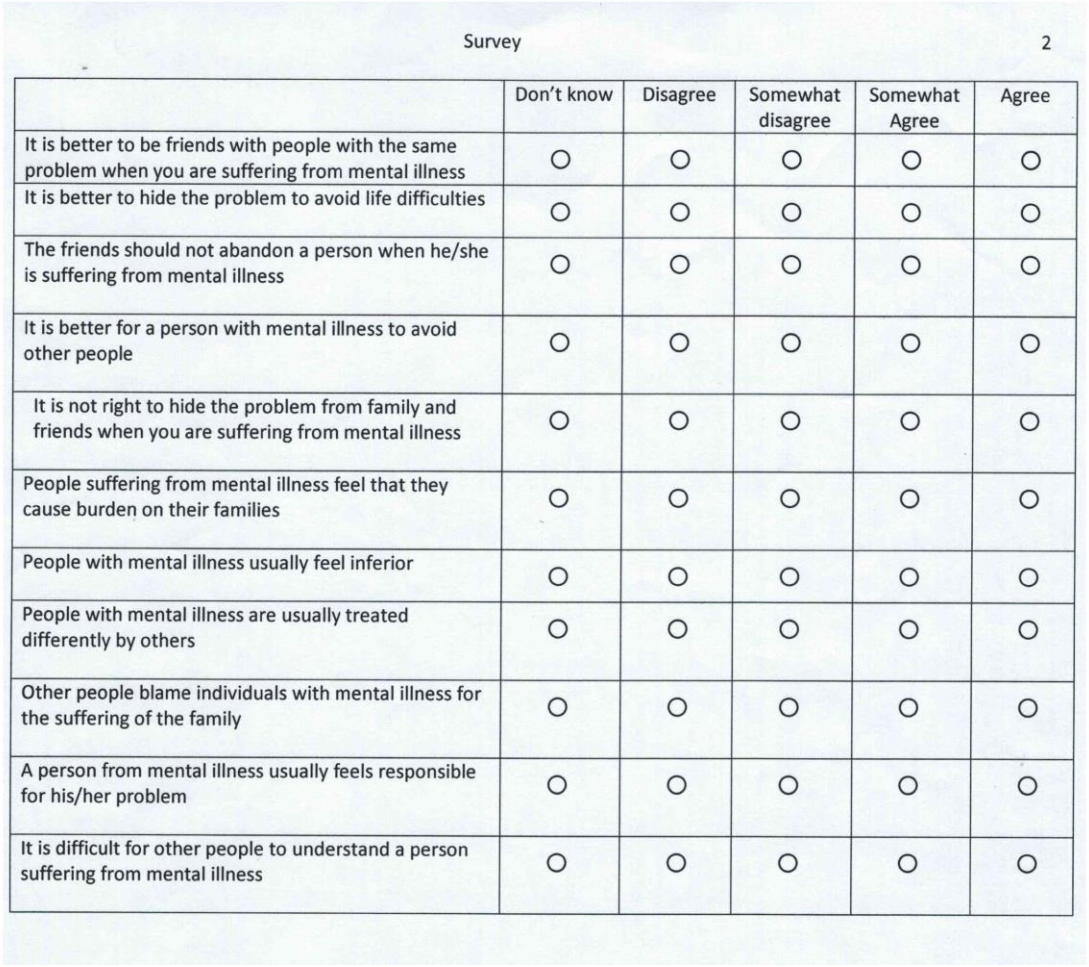
Measurement scale instrument was adapted from following source:

Madianos, M., Economou, M., Peppou, L. E., Kallergis, G., Rogakou, E., & Alevizopoulos, G. (2012). Measuring public attitudes to severe mental illness in Greece: Development of a new scale. *The European Journal of Psychiatry, 26*(1), 55-67. doi:10.4321/s0213-61632012000100006

APPENDIX C

SURVEY

	Don't know	Disagree	Somewhat disagree	Somewhat Agree	Agree
If someone has experienced mental illness, he/she will suffer for the rest of his/her life	○	○	○	○	○
People with mental illness are failures	○	○	○	○	○
In spite of any efforts they are making, people with mental illness will never be like other people	○	○	○	○	○
People with mental illness have to take medication for the rest of their lives	○	○	○	○	○
Mental illness makes someone look ill	○	○	○	○	○
People with mental illness are not like any other people	○	○	○	○	○
Mental illness is easily recognizable	○	○	○	○	○
People with mental illness are not able to acquire new skills	○	○	○	○	○
People with mental illness are dangerous	○	○	○	○	○
Mental illness is caused by bad luck	○	○	○	○	○
Psychiatric medication causes addiction	○	○	○	○	○
A person with mental illness is able to work	○	○	○	○	○
A person with mental illness can be trained in an occupation	○	○	○	○	○
People with mental illness don't differ from other people	○	○	○	○	○
People with mental illness can cope with life difficulties	○	○	○	○	○
To be taking psychiatric medication does not make an individual different from others	○	○	○	○	○
People with mental illness can recover nowadays	○	○	○	○	○
People with mental illness must not give up	○	○	○	○	○
A person with mental illness must seek help from a specialist	○	○	○	○	○
Continue to next page					



Survey 2

	Don't know	Disagree	Somewhat disagree	Somewhat Agree	Agree
It is better to be friends with people with the same problem when you are suffering from mental illness	○	○	○	○	○
It is better to hide the problem to avoid life difficulties	○	○	○	○	○
The friends should not abandon a person when he/she is suffering from mental illness	○	○	○	○	○
It is better for a person with mental illness to avoid other people	○	○	○	○	○
It is not right to hide the problem from family and friends when you are suffering from mental illness	○	○	○	○	○
People suffering from mental illness feel that they cause burden on their families	○	○	○	○	○
People with mental illness usually feel inferior	○	○	○	○	○
People with mental illness are usually treated differently by others	○	○	○	○	○
Other people blame individuals with mental illness for the suffering of the family	○	○	○	○	○
A person from mental illness usually feels responsible for his/her problem	○	○	○	○	○
It is difficult for other people to understand a person suffering from mental illness	○	○	○	○	○

Survey instrument was adapted from following source:

Madianos, M., Economou, M., Peppou, L. E., Kallergis, G., Rogakou, E., & Alevizopoulos, G. (2012). Measuring public attitudes to severe mental illness in Greece: Development of a new scale. *The European Journal of Psychiatry, 26*(1), 55-67. doi:10.4321/s0213-61632012000100006

APPENDIX D

INFORMED CONSENT

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

College of Social and Behavioral Sciences
School of Social Work

California State University, San Bernardino
Social Work Institutional Review Board Sub-Committee
APPROVED 4/18/2016 VOID AFTER 4/17/201
IRB# SW1662 CHAIR

INFORMED CONSENT

The study in which you are asked to participate is designed to examine the attitudes and opinions on mental illnesses. The study is being conducted by Peter A. Caro, a graduate student, under the supervision of Dr. Erica L. Lizano, Assistant Professor in the School of Social Work at California State University, San Bernardino (CSUSB). The study has been approved by the Institutional Review Board Social Work Sub-committee at CSUSB.

PURPOSE: The purpose of the study is to examine the attitudes and opinions on mental illnesses.

DESCRIPTION: If you decide to partake in this study, you will be requested to fill out a survey questionnaire regarding your demographic information, and your attitudes and opinions on mental illnesses.

PARTICIPATION: Your participation in the study is completely voluntary. You can refuse to participate in the study or discontinue your participation at any time without any consequences.

CONFIDENTIALITY OR ANONYMITY: Your responses will remain anonymous. No identifiable information will be used during your participation in this study. All questionnaires will be collected and data will be kept in a password protected file accessible only to the primary researcher. Once data is entered into the data base and analyzed, it will be destroyed.

DURATION: It will take 10 to 15 minutes to complete the survey.

RISKS: There are no foreseeable risks to the participants.

BENEFITS: There will not be any direct benefits to the participants.

CONTACT: If you have any questions about this study, please feel free to contact Dr. Lizano at (909) 537-5584.

RESULTS: Results of the study can be obtained from the Pfau Library ScholarWorks database (http://scholarworks.lib.csusb.edu/) at California State University, San Bernardino after July 2017.

This is to certify that I read the above and I am 18 years or older.

_____ _____

Place an X mark here Date

909.537.5501
5500 UNIVERSITY PARKWAY, SAN BERNARDINO, CA 92407-2393

APPENDIX E

CIT NATIONAL CURRICULUM

CIT National Curriculum
Training Modules: Day 1
0800-0900: CIT Overview/History 0900-1030: Mental Health Didactics: Serve, Persistent Mental illness 1030-1200: Mental Health Didactics: Schizophrenia, Bipolar, Depression, Mania 1200-1300: Lunch 1300-150: Mental Health Didactics: Substance Abuse Issues, Co-Occurring Disorder 1500-1600: Mental Health Didactics: Child & Youth, Adolescence 1600-1700: Community Support: Panel
Training Modules: Day 2
0800-0900: Mental Health Didactics: Special Focus Issue - Personality Disorder 0900-1000: Mental Health Didactics: Cognitive Disorders, Dementia, Delirium, TBI 1000-1700: Site Visit - VA Medical Center, Outpatient Treatment Center, Emergency Crisis Unit, Homeless Program, Psychiatric Hospital
Training Modules: Day 3
0800-0900: Mental Health Didactics: Child & Youth, Adolescence - Autism, Developmental Disabilities 0900-1000: Mental Health Didactics: Psychopharmacology 1000-1100: Mental Health Didactics: Assessment and Commitment 1130-1200: Law Enforcement - Liability 1200-1300: Lunch 1300-1500: Community Support: Veteran Issues, Homelessness Issues 1500-1700: De-Escalation: Scenario-Based Skill Training
Training Modules: Day 4
0800-0900: Mental Health Didactics: Special Focus Issues - PTSD 0900-1030: Mental Health Didactics: Special Focus Issues - Suicide 1030-1200: Community Support: Panel 1200-1300: Lunch 1300-1700: De-Escalation: Scenario-Based Skill training
Training Modules: Day 5
0800-1100: De-Escalation: Scenario-Based Skill Training 1100-1200: Law Enforcement - Q&A 1200-1300: Lunch 1300-1430: Community Support: Panel 1430-1500: Research and System: Evaluation of Training 1500-1630: Graduation

CIT National Curriculum cited from following source:

CIT Center. (n.d.). Retrieved April 25, 2017, 2017, from http://www.cit.memphis.edu/curriculuma.php?id=0

REFERENCES

Bahora, M., Hanafi, S. , Chien, V. , & Compton, M. (2008). Preliminary evidence of effects of crisis intervention team training on self-efficacy and social distance. *Administration & Policy in Mental Health*, *35*(3), 159-167

Canada, K. E., Angell, B., & Watson, A. C. (2012). Intervening at the entry point: Differences in how CIT trained and non-CIT trained officers describe responding to mental health-related calls. *Community Mental Health Journal*, *48*(6), 746–755. http://doi.org/10.1007/s10597-011-9430-9

Kohrt, B. A., Blasingame, E., Compton, M. T., Dakana, S. F., Dossen, B., Lang, F., Strode, P., & Cooper, J. (2015). Adapting the crisis intervention team (CIT) model of police--mental health collaboration in a low-Income, post-conflict country: Curriculum development in Liberia, West Africa. *American Journal Of Public Health*, *105*(3), e73-e80. doi:10.2105/AJPH.2014.302394

Madianos, M., Economou, M., Peppou, L. E., Kallergis, G., Rogakou, E., & Alevizopoulos, G. (2012). Measuring public attitudes to severe mental illness in Greece: Development of a new scale. *The European Journal of Psychiatry, 26*(1), 55-67. doi:10.4321/s0213-61632012000100006

McGuire, A. B., & Bond, G. R. (2011). Critical elements of the crisis intervention team model of jail diversion: An expert survey. *Behavioral Sciences & The Law*, *29*(1), 81-94. doi:10.1002/bsl.941

Munetz, M. R., & Griffin, P. A. (2006). Use of the sequential intercept model as an approach to decriminalization of people with serious mental illness.

Psychiatric Services, 57(4), 544-549. Retrieved from http://ps.psychiatryonline.org/doi/abs/10.1176/ps.2006.57.4.544?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub=pubmed

NAMI. (n.d.). *Mental Health Conditions*. Retrieved November 30, 2015, from https://www.nami.org/Learn-More/Mental-Health-Conditions

National Association of Social Workers (NASW). (2008). Code of ethics of the National Association of Social Workers. Washington, DC: NASW.

Riverside University Health System Behavioral Health. (n.d.). Mental Health Services Act (MHSA). Retrieved from http://www.rcdmh.org/MHSA

Teller, J., Munetz, M., Gil, K., & Ritter, C. (2006). Crisis Intervention Team Training for Police Officers Responding to Mental Disturbance Calls. *PS Psychiatric Services, 57*(2), 232-237. http://dx.doi.org/10.1176/appi.ps.57.2.232

Watson, A. C., & Fulambarker, A. J. (2012). The crisis Intervention team model of police response to mental health crises: A primer for mental health practitioners. *Best Practices in Mental Health*, *8*(2), 71.

Watson, A. C., Ottati, V. C., Draine, J., & Morabito, M. (2011). CIT in context: The impact of mental health resource availability and district saturation on call dispositions. *International Journal of Law and Psychiatry*, *34*(4), 287–294. http://doi.org/10.1016/j.ijlp.2011.07.008

Weinbach, R. W., & Grinnell, R. M. (2015). *Statistics for social workers*. Boston, MA: Pearson.