

MASSACHUSETTS SCHOOL OF PROFESSIONAL PSYCHOLOGY

A Comparison Between the Effects of the One-hour and Twelve-hour Massachusetts
Municipal Basic Recruit Officer Course Mental Health Training on Officer's De-
Escalation Skills, Self-Efficacy, and Stigmatizing Attitudes

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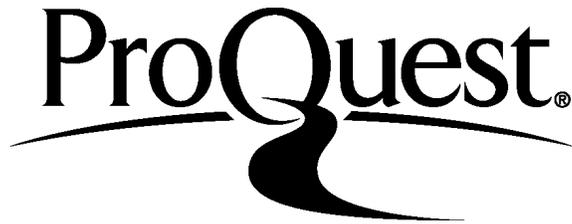
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By

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Abstract

Police officers are often the first responders to persons in crisis with mental illness. In 2009, Massachusetts was ranked last in the United States regarding funding for training new police officers. The mental health curriculum in the police academy was outdated and only one-hour in length. In response to this, Massachusetts recently developed an updated, twelve-hour mental health curriculum. The current research measured the effects of the twelve-hour mental health curriculum for new recruits on officer's de-escalation abilities, self-efficacy, and stigmatizing attitudes. The research intended to compare the effects of the one-hour and twelve-hour curricula, as well as compare the effects of the twelve-hour curriculum to existing police training models such as Crisis Intervention Team (CIT) and Mental Health First Aid (MHFA) trainings. Two hundred and thirty new officers completed pre- and post- training questionnaires that measured the research variables. The results suggested the twelve-hour training produced greater effects on self-efficacy than the one-hour training. In addition, the twelve-hour training produced similar effects as existing police training models. This suggests the updated, twelve-hour curriculum increases officers confidence in responding to persons with

mental illness and helps effectively prepare officers to respond to persons in crises. Providing updated, thorough mental health training to police officers will help them obtain the skills and confidence required to minimize officer, person served, and bystander injuries while working toward the best possible outcome for all involved.

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CHAPTER ONE

INTRODUCTION

Three police officers responded to a scene on August 18, 2013 in Harrisburg, Pennsylvania after receiving a call that a man had stabbed his mother. The officers were aware of the suspect's previous contact with police and that he suffered from mental illness after he had been transported to the hospital during the previous month in order to be psychiatrically evaluated. When they arrived at the man's porch, he lunged at them with a knife and stabbed three officers. The officers chose to use a Taser and physical force to subdue the man. He lived and was treated at the local hospital (Arias, 2013). These officers appear to have met their departmental standard regarding use of force. The Supreme Court ruled that use of force must be objectively reasonable in determining facts of the case, severity of crime, if the subject is an immediate threat to officers or others, and whether the subject is attempting to evade arrest by fight (Graham v. Connor, 1989). According to their Captain, the officers would have been within their rights to use deadly force.

Laura Pagliano shared an emotional story of a police encounter to the online community through a mental illness website. A police officer responded to her house after her son Zac called 911 to report he had been shot in the head. Zac had recently been diagnosed with paranoid schizophrenia. A female officer responded and discussed the situation with Zac, offering to help him and reassuring him that she was there to help, even though it was clear he had not been shot in the head. Zac's mother was amazed by the officer's compassion and her ability to validate his concerns. The officer had a plan to calm him and made him immediately feel better by addressing his concerns. She did

not once ask if he was sick or ridicule his delusion. “There are myriad ways the police visit could have gone wrong. However, it did not because a police officer was willing to do whatever she had to, to make a scared and worried young man feel better, and she did” (Bipolar Bandit, 2013).

These are just two examples that are considered “success stories” regarding police officers responding to persons with mental illness. One could search and find many more from across the country in which police officers were sensitive to the needs of a person with mental illness and responded with proper understanding and knowledge of the situation. Some have been trained in specialized approaches to dealing with the mentally ill, and many officers have contributed to the recovery of a person with mental illness.

Unfortunately, there are also examples of situations that have not seen such positive results. These incidents usually garner the media attention, like the Kelly Thomas case in Los Angeles, California in 2011. Thomas, who had an extensive history of suffering from schizophrenia, did not comply with an order from Officer Manuel Ramos to put his hands on his knees while sitting on the curb. Officer Ramos became frustrated and said “See my fists...they’re getting ready to f- you up.” In the next ten minutes, Thomas was tackled, hit with a baton, pinned to the ground, punched repeatedly in the ribs, and kned in the head, even after blood started to pool around his body. He was Tased four times and struck in the face with the Taser device eight times. Officer Ramos had previously responded to Kelly Thomas many times and did not believe Thomas posed any risk to the responding officers. Subsequent hospital records show that Thomas suffered a brain injury, shattered cheek bone, shattered nose, broken ribs, and internal bleeding. Five days later, Thomas died from his wounds at a Los Angeles

hospital (Rackauckas, 2011). This is a graphic example of a police response to a person with mental illness and certainly does not represent the majority of police encounters with this group of people. Yet, there are still many incidents in which a law enforcement officer has been investigated for excessive use of force on a person with mental illness.

Police officers are not only commonly referred to as the “gatekeepers” of the criminal justice system, but are also frequently first responders during psychiatric emergencies. They respond to a variety of different circumstances involving persons with mental illness, including but not limited to minor disturbances, trespassing, violent crimes, serious health emergencies, suicide attempts, and more. Thus, the argument could be made that police officers hold multiple jobs other than law enforcement, such as social worker, emergency health-care providers, triage decision makers, and transporters. Consequently, responding to persons with mental illness represents a significant challenge for law enforcement officers. According to the Justice Center, a non-profit organization of the Council of State Governments that serves policy makers at all levels in order to increase public safety, “the complex nature of law enforcement responses to people with mental illnesses has become an issue of national concern” (Reuland, Schwarzfeld, & Draper, 2009).

Reuland and Margolis (2003) estimated that between 7 and 10% of police contacts are with persons with mental illness. A study encompassing three major U.S. cities found that 92% of police officers had encountered at least one person with mental illness in crisis during the previous month. Results also showed officers averaged approximately six of these encounters per month (Borum, Deane, Steadman, & Morrissey, 1998). New York City receives an emergency call from an emotionally

disturbed person every 7.3 minutes and responds to approximately 150,000 of such calls each year (Waldman, 2004). While persons with mental illness have high contact rates with law enforcement, they also have higher arrest rates when compared with persons without a mental illness. One study estimated that persons with mental illness were approximately 4.4 times more likely to be arrested than members of the general population (Pandiani, Banks, Clements, & Schacht, 2000).

Definition of Terms

De-Escalation: For law enforcement, it is important to be able to maintain control through means other than use of force when appropriate. For the purpose of this study, de-escalation can be understood as a “complex, interactive process in which the [citizen] is redirected toward a calmer personal space” (Stevenson, 1991, p. 6) in order to maintain control and avoid violent acting out. De-escalation research has focused on specific characteristics and techniques that have been used in clinical practice. The techniques are classified into three areas: verbal communication, non-verbal communication, and environment. Verbal communication involves how the responder verbally communicates with the person in crisis. Proper de-escalation techniques involve speaking slowly and clearly and keeping sentences short. In addition, the responder should be assertive and provide simple and clear directions one at a time, which will allow the person in crisis ample time to process and respond appropriately (Dix & Page, 2008). Only one person should interact with the person in crisis to minimize confusion from speaking to multiple persons, and any action taken should be clearly explained to the person in crisis.

Non-verbal communication is extremely important and represents a significant portion of overall communication. In a clinical setting, the responder should strive to use

authentic engagement, which is “becoming and staying sincerely connected to the patient” (Finfgeld-Connett, 2009, p. 533). However, a law enforcement officer is not a mental health professional and may be better served using an alternate form of engagement, such as using active listening to ensure the person in crisis feels his/her voice is being heard. Persons in crisis may require more distance than normal, so the responder should allow them additional personal space. If possible, the responder should attempt to communicate on the same vertical level as the person in crisis (e.g. sit if the person is sitting). Finally, the environment can play a significant role in the de-escalation process by minimizing distractions and managing others in the area. Communicating in a quiet area will allow the person in crisis to attend to the conversation rather than other external stimuli. The responder should also always have multiple exit strategies from the scene, as well as ensure not to trap the person in crisis in a corner.

Self-Efficacy. The current study will define self-efficacy using Bandura’s (1977, 1986) definition as a person’s belief in his or her capabilities to successfully perform tasks in particular situations that affect their lives. It is essentially a judgment of how well one can perform at a certain task in a specific situation. Individuals who have high self-efficacy are able to attend to the environment and determine the best course of action in situations. However, individuals with low self-efficacy divert mental energy on worry about failure and anxiety regarding each decision and action they take (Bandura, 1982). Averill proposed that an individual can achieve a sense of being in control either behaviorally or cognitively (as cited in Bandura, 1982, p. 136). In order to achieve behavioral control, a person must physically modify the situation to stall or avoid a negative consequence. In contrast, a person achieves cognitive control with the belief

that he/she will be able to handle an environmental threat if it occurs. This concept is important to police officers because they often have a large amount of discretion in responding to a scene. According to Averill's theory, an officer with low self-efficacy might be more likely to revert to behavioral control to deal with a potential threat, which may include handcuffing the subject or using physical force. However, an officer with high self-efficacy might use cognitive control to deal with the potential threat, therefore avoiding a use of force.

Stigmatizing Attitudes. Stigma can have many definitions depending on the context. However, for the purpose of this study, Park's concept of social distance will be used to measure stigma. Park (1924) discussed the degrees to which a person understands another and the levels of personal intimacy towards another as social distance. In relation to mental illness, stigma has been found to be a major barrier to persons receiving treatment, obtaining employment, and obtaining quality housing (U.S. Department of Health and Human Services, 1999). The public holds views that persons with mental illness have less behavioral control and potential for recovery (Socall & Holtgraves, 1992). Some believe this stigma is the result of holding inaccurate information about mental illness such as the causes of types of mental illness. However, one of the largest misperceptions regarding persons with mental illness is violence perception. In a public opinion poll in 2013, 46% of the surveyed general public endorsed the belief that persons with mental illness are more dangerous than those without (Barry, McGinty, Vernick, & Webster, 2013). However, research has shown that persons with mental illness without co-occurring substance abuse were no more violent than the comparison community sample (Monahan, 2002; Steadman et al., 1998).

One-Hour Training: The Massachusetts Municipal Police Academy Basic Recruit Officer mental health training. The overall training four hours total which focuses on special populations including persons who are deaf and hard of hearing, those with HIV/AIDS, and persons with mental illness. The specific section that focuses on mental illness is one hour in total, which is why it will be referred to as the one-hour training. The training consists of a PowerPoint, lecture style presentation about categories of mental illness.

Twelve-Hour Training: The recently developed Massachusetts Municipal Police Academy Basic Recruit Officer mental health training. The twelve hour training was developed by a group of subject-matter experts and combines aspects of CIT training, MHFA training, and law enforcement mental health trainings recently developed by other states across the country. At the time of the current study, the training was in the pilot stage.

Current Study

Extensive research exists that examines the effects of popular police mental health training models such as Crisis Intervention Team (CIT) training and Mental Health First Aid (MHFA). Officers who completed CIT training perceived an increase in knowledge of mental illness (Hanafi, Bahora, Demir, & Compton, 2008) and were able to better recognize and identify persons with mental illness (Wells & Schafer, 2006). In addition, officers reported feeling better prepared to respond to a mental health crisis when compared with non-CIT trained officers (Borum, Deane, Steadman, & Morrissey, 1998). Research also suggests that CIT training has reduced myths regarding mental illness,

increased understanding and support, and reduced overall stigmatizing attitudes towards mental illness (Compton et al., 2006).

Completion of the MHFA course has been found to increase participants knowledge and recognition of mental illness (Hossain, Gorman, & Coutts, 2010; Jorm et al., 2010). In addition, the MHFA course significantly increased participants' confidence in responding to a person in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, & Mugford, 2005). Completion of the course was also associated with a significant reduction in stigmatizing attitudes about mental illness (Bee Hui Yap & Jorm, 2011; Jorm et al., 2010). Finally, becoming MHFA certified also increased the likelihood that a responder would actually provide help to a person in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, O'Kearney, & Dear, 2004). Responders that were MHFA trained were more likely to use active listening skills, empathize with the person in crisis, and encourage the person to seek professional help.

Massachusetts has made significant efforts to improve specialized law enforcement programs for persons with mental illness. At the time of this study, three counties had CIT trained police officers. In addition, multiple cities and towns have received funding for ride-along programs in which a mental health clinician rides with a police officer to calls that have been identified to involve a mental health emergency, including Danvers, Framingham, Marlborough, and others. However, as of 2011, Massachusetts had 351 cities and towns and had almost 15,000 police officers (Federal Bureau of Investigation, 2012). The current specialized training programs only reach a small proportion of all of the officers in Massachusetts. DMA Health Strategies (2012) researched Massachusetts police training as part of a position paper for the Association

for Behavioral Healthcare and the National Alliance on Mental Illness Massachusetts. At the time of the current research, Massachusetts had extremely limited financial resources for police training and lacked comprehensive mental health training for all officers.

DMA Health Strategies recommended that Massachusetts:

- “Develop a state of the art curriculum for approaching emotional disturbance calls and working with emergency service providers that combines the best practices from community policing and tested mental health training programs such as CIT, MH First Aid, and MMDIP; and
- Ensure that all police officers receive training in the new curriculum either in the police academy or in continuing education; and that the training is periodically refreshed and updated” (p. 12).

In response, a committee of experts was formed and tasked with creating a new mental health curriculum for the Massachusetts Municipal Basic Recruit Officer Course, also known as the police academy. The new training model is twelve hours, which increased total training time by 1,100%, and included many of the same core aspects as CIT and MHFA. However, the new training does not encompass the entire curriculum of CIT or MHFA. CIT research has not identified what specific portions of the CIT training model are necessary in order to produce similar results (Compton, Bahora, Watson, & Oliva, 2008), so there is no reliable means to know if the new Massachusetts training will produce similar effects as CIT or MHFA.

The following chapters will explore law enforcement mental health training models, de-escalation, self-efficacy, stigmatizing attitudes, and other related research

questions. This research will investigate whether the new Massachusetts basic recruit officer mental health training produces similar results as CIT and MHFA in regards to de-escalation skills, self-efficacy, and stigmatizing attitudes. In addition, in order to ensure Massachusetts is effectively using resources, the study will also investigate if the updated twelve-hour training is more effective than the previous one-hour training in regard to the previously mentioned variables. Hypotheses for this study include:

De-Escalation Hypotheses

Hypothesis 1: There will be no significant difference in de-escalation skills as measured by the Behavioral Outcome Scale (BOS) (Appendix C) between the pre-one-hour training officers and the pre-twelve-hour training officers.

Hypothesis 2: Completion of the Basic Recruit Officer Course twelve-hour mental health training will lead to significantly greater increase in de-escalation skills as measured by the BOS than completion of the one-hour mental health training.

Self-Efficacy Hypotheses

Hypothesis 1: There will be no significant difference in the reported self-efficacy as measured by the Self-Efficacy Scale (SES) (Appendix D) between the pre-one-hour training officers and the pre-twelve-hour training officers.

Hypothesis 2: Participants with previous experience in law enforcement, corrections, probation, security or another similar field who have previously responded to a larger number of persons with mental illness will have significantly greater pre-training self-efficacy in responding to persons with mental illness as measured by the SES when compared to participants with less or no previous experience.

Hypothesis 3: Completion of the Basic Recruit Officer Course twelve-hour mental health training will lead to a significantly greater increase in self-efficacy in responding to persons with mental illness as measured by the SES than the completion of the one-hour mental health training.

Stigmatizing Attitudes Hypotheses

Hypothesis 1: There will be no significant difference in stigmatizing attitudes towards mental illness as measured by the Adapted Social Distance Scale (ASDS) (Appendix E) between the pre-one-hour training officers and the pre-twelve-hour training officers.

Hypothesis 2: Participants who report knowing a greater number of persons with mental illness will have significantly lower stigmatizing attitudes towards mental illness pre-training when compared to participants who report knowing a lesser number of persons with mental illness.

Hypothesis 3: Completion of the Basic Recruit Officer Course twelve-hour mental health training will lead to a significantly greater decrease in stigmatizing attitudes towards mental illness as measured by the ASDS than the completion of the one-hour mental health training.

Additional Hypotheses

Hypothesis 1: The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as CIT research.

Hypothesis 2: The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as MHFA research.

Chapter Two will examine relevant literature on law enforcement mental health training models, de-escalation, self-efficacy, stigmatizing attitudes, use of force by police officers, and contact and arrest rates for persons with mental illness. The law enforcement mental health section will explore major models of mental health police training, including the nature and effects of training. De-escalation, self-efficacy, and stigmatizing attitudes will be discussed in relation to the general public as well as police officers. Literature on the use of force will include statistics and information on both the use of force and excessive use of force by police officers. Finally, the literature review will investigate the contact and arrest rates of persons with mental illness in major cities and in Massachusetts.

The third chapter describes the methodology and procedures used in the research. The fourth chapter will present the results of the research and the final chapter will be a discussion of the results, potential training and policy implications, limitations of this study, and areas for future research.

CHAPTER TWO

LITERATURE REVIEW

Police officers have estimated that 7 to 10% of the people they contact are persons with mental illness (Reuland & Margolis, 2003), and officers averaged approximately six encounters with persons with mental illness each month (Borum, Deane, Steadman, & Morrissey, 1998). It is clear that persons with mental illness are having frequent contact with law enforcement. Along with greater contact rates, persons with mental illness are 4.4 times more likely to be arrested than members of the general public (Pandiani, Banks, Clements, & Schacht, 2000). Typically, crimes committed by persons with mental illness can fall under three main categories:

- “Illegal acts which are a byproduct of mental illness; e.g., disorderly conduct, criminal trespass, disturbing the peace, public intoxication.
- Economic crimes to obtain money for subsistence; e.g., petty theft, shoplifting, prostitution.
- More serious offenses such as burglary, assault, and robbery” (The Sentencing Project, 2002, p. 7).

The first two categories may be avoided or reduced through community resources. Sometimes resources are simply not available. Other times, the person does not have the means or knowledge to access those resources. Thus, a police officer is faced with a decision when a person with mental illness has committed a crime that falls in either of the first two categories. The officer may choose to arrest, divert to treatment, or informally dispose of the case depending on the circumstances of the crime and the

availability of treatment. The third category consists of more serious offenses and is more likely to require an arrest.

In 2009, the Boston Police Department (BPD) reported receiving 20,000 calls involving an emotionally disturbed person, while Boston Police Officers were involved in 840 mental health incidents (as cited in DMA Health Strategies, 2012, p. 2). However, there were probably many more incidents where mental illness was not the primary concern (e.g. getting a trespassing call with no knowledge of mental illness, only to later find out the person suffers from schizophrenia). Fisher et al. (2006) researched the arrest rates of almost 14,000 individuals receiving services from the Massachusetts Department of Mental Health (DMH) over a ten year period. Overall, 27.9% of persons receiving services were arrested over the ten year period, primarily for non-violent crimes. The most common crime was a crime against public order, which was defined as disorderly conduct, disturbing the peace, trespassing, public consumption of alcohol, etc. While the second highest category was serious violent offense, a significant amount of the violent offenses were perpetrated by a small percentage of persons with serious mental illness and co-occurring substance abuse. Thus, the majority of the persons with mental illness were encountered by police for misdemeanor offenses.

A person who received services from DMH was more likely to be arrested than members of the general public. While an arrest and subsequent release or an arrest and misdemeanor charge may not result in jail time, it has the potential to significantly affect the persons housing, employment, and treatment adherence. There is little doubt that a person who commits a serious, violent crime should be removed from the streets to protect the public safety, even if that person has a mental illness. However, research

suggests that arresting a person with mental illness does not make them significantly more likely to receive treatment (Cuellar, Snowden, Ewing, 2007) and can cause additional barriers for wellbeing. Thus, police officers are required to make a significant decision in how to respond to these misdemeanor/low level crimes. In 2010, Massachusetts was ranked last in the country in resources provided to train municipal police officers (DMA Health Strategies, 2012), only allotting one-half of what the second lowest state spent on police officer training (Timilty & Costello, 2010). It appears Massachusetts officers are expected to make decisions that have significant implications on the person served, but are not being properly trained to make those decisions, especially regarding persons with mental illness.

Police Excessive Use of Force

Janet Reno (1999), former Attorney General, was quoted as saying “police officers have the hardest job there is.” They have to protect the public and are empowered to use force, with the potential to take a human life if necessary to protect the public from harm. Police officers protect against crime but are tasked with protecting our human rights at the same time. Every day police officers use their discretion in determining the best course of action and how to best respond to a subject. This is one of the reasons why they receive a significant amount of training, both in the police academy and through in-service training for incumbent officers. However, the fact remains that police officers yield significant power through their badges and weapons, such as their firearm, Taser, baton, and/or pepper spray. While most officers use discretion well and make every attempt to peacefully resolve scenarios, there are a small number of officers who abuse their power through the use of excessive force. The use of force is defined by

the International Association of the Chiefs of Police (2001) as the “amount of effort required by police to compel compliance by an unwilling subject.” Excessive force is difficult to explicitly define due to vast differences in how it is classified by different states and police departments. However, excessive force can be described through the following problems:

- “*any* force when *none* is needed;
- *more* force than is needed;
- *any* force or a *level* of force continuing after the necessity for it has ended;
- knowingly wrongful uses of force;
- well-intentioned mistakes that result in undesired use of force” (Geller & Toch, 1996, p. 292).

But how does an officer determine when to use force? The Supreme Court has ruled that use of force must be “objectively reasonable” in that,

“the facts and circumstances of each particular case, including severity of crime at issue, whether the subject poses an immediate threat to the safety of the officers and others, and whether he is actively resisting arrest or attempting to evade arrest by flight” (Graham v. Connor, 1989).

In addition, an officer cannot use deadly force to prevent a suspect from escaping unless the officer believes the suspect poses a significant threat of death or harm to the officer or others (Tennessee v. Garner, 1985). However, the Supreme Court states objective reasonableness must be viewed through the lens that officers are often forced to make split second decisions on whether to use force in rapidly evolving situations, so it is not always as clear cut as it may seem to the lay observer.

One of the most widely cited sources for use of force statistics is a U.S. Department of Justice self-report survey which measured citizen contact with police officers. Out of a participant pool of 60,000, approximately 17% of Americans had contact with a police officer in 2008. Of those, 1.4% of police contacts resulted in use of force. Although the overall use of force rate was extremely low, approximately 80% of those who had force used against them felt it was excessive. However, only 13.7% actually filed a police complaint report (Eith & Durose, 2011). This presents one of the challenges in measuring and researching excessive use of force. Self-report measures can have questionable validity and systematically tracking excessive use of force is extremely challenging. Thus, one must use caution when interpreting excessive use of force statistics.

In a Gallup telephone survey across the United States in 1991, 5% of participants reported being physical mistreated or abuse by police and 20% reported knowing someone who had been physically mistreated or abused (as cited in Adams, 1996). In Los Angeles, an independent investigation estimated that there were between six and eight excessive force incidents per 100 officers per year, but only 2% of the incidents were sustained as excessive force by the departments (Independent Commission of Los Angeles Police Department, 1991).

Many different variables and influences affect the use and abuse of force. One major variable is the subject's behavior. If a subject attempts to resist arrest, exhibits threatening or hostile behavior, or holds a weapon, officers are more likely to use force against that person (Johnson, 2011). Sometimes, officer level characteristics can affect the use of force as well. Toch (1996) stated that officers who repeatedly use excessive

force may be seeking peer approval and actively create situations in which conflicts arise, thus earning peer approval when the conflict is resolved. In addition, officers who feel they have a low status within their department might seek to conquer these types of situations in order to boost their self-esteem and garner recognition. The Rodney King incident in Los Angeles demonstrates the effects of on scene reinforcements or back-up officers. Scenarios in which groups of officers respond have the potential to affect the use of force by the first officer on scene in two ways. First, a group of well-trained officers responding to the scene might have a calming effect on the officer and help prevent excessive use of force. Alternatively, the group of responding officers may exacerbate the use of force, such as the Rodney King incident, and increase use of force to an excessive amount (Geller & Toch, 1996).

Research lacks consistency in the findings regarding officer attitudes towards excessive use of force. Officers with an average of ten months on the job were questioned about fifteen deviant professional behaviors. While corruption of authority and sleeping on duty were the most common behaviors noted, excessive use of force was the third most common but rated as less deviant than sleeping on duty, perjury, sex on duty, and drinking on duty (Barker, 1978). However, Micucci and Gomme (2005) found that novice officers, highly experienced veterans, and supervisors were more likely to view excessive force as serious and worthy of severe discipline. The Independent Commission of Los Angeles Police Department (1991) found that 84% of surveyed officers did not approve of the use of excessive physical force on a subject who committed a heinous crime or exhibited an uncooperative attitude. Overall, research is

inconsistent regarding officer attitudes on excessive use of force and may be influenced by response bias.

One method to study police behavior is observation of police procedures and encounters with subjects. Piquero and Bouffard (2003) suggested that police officers who exhibit non-threatening physical and verbal behavior increases the odds a subject will comply with police requests. Alternatively, they found that officers who exhibited threatening verbal and physical behavior increased the likelihood of subject defiance. When police use threatening verbal or physical behaviors with an irrational subject, such as a person under the influence or a person with mental illness, the rebellious effect was even stronger and caused greater defiance (McCluskey, 2003). This has serious implications for responding to persons with mental illness. Terrill and Mastrofski (2002) investigated if persons with mental illness were more likely to receive force from a police officer. After controlling for confounding variables such as substance use, the presence of a weapon, and resistance, results suggested police officers were not more likely to use force on persons with mental illness when compared to a general sample.

However, the use of force is a broad term and can include actions from minimal physical redirection, such as controlling a subject's wrists, to discharging a firearm. Johnson (2011) conducted an analysis of different levels of use of force with over 600 subjects in Oregon. Results suggested the level of force used on mentally unstable subjects varied in comparison with a general sample. Police officers were less likely to use any level of force on an emotionally disturbed subject than the general sample. However, mentally unstable subjects were over three times more likely to receive serious use of force than the general sample. It should be noted that emotionally disturbed

subjects were more likely to resist arrest by grabbing or wrestling with officers, physically assaulting officers, or holding an item the officers perceived as a weapon, which may explain the increase in use of serious force.

Law Enforcement Mental Health Training

Officer Training Preferences

Given that police officers interact with persons with mental illness at a higher rate than any other occupational group aside from mental health professionals (Kadish, 1966), proper training in working with persons with mental illness is imperative. Corder (2006) stated police officers spend more time responding to persons with mental illness than assaults, burglaries, and traffic incidents combined. A 1995 study suggested California law enforcement officials received an average of 6.3 hours of mental health training. However, more than two-thirds of California law enforcement agencies did not track training hours, which led the researchers to break down the mandatory two hours of mental health training as follows: 17 minutes on a description of mental illness, 19 minutes on symptom recognition, 22 minutes of handling mental illness crises, and 15 minutes on suicidal persons (Husted, Charter, & Perrou, 1995). As of July 2013, Massachusetts municipal new recruit officers received a four hour curriculum on ‘special populations.’ However, only one hour was solely devoted to mental illness. Thus, it is clear that the type and amount of training is not able to properly prepare police officers to identify, respond, and appropriately refer persons with mental illness.

Police officers have expressed desire to participate in additional trainings on mental illness (Vermette, Pinals, & Appelbaum, 2005). However, many of the mental

health trainings consist of lecture style learning with PowerPoint presentations. Officers do not value lecture based courses. One officer from a 2010 study makes this clear, stating “[I dislike instructors who teach in a] robot motion, put up overheads, and read. That kind of presentation is horrible. The hardest thing is to stay awake” (Oliva & Compton, 2009). Officers typically respond better and learn more from interactive classroom styles and have rated de-escalation scenario based learning as one of the most preferred classroom tools (Husbands et al., 2011). Given the choice of mental health training topics, Massachusetts police officers expressed interest in learning about dangerousness, suicide by cop, decreasing suicide risk, mental health law, and potential liability for bad outcomes. Furthermore, they ranked their preference of training modalities as video presentations, small group discussions, handouts, lectures, role playing, slides, and panel discussion, from most to least effective (Vermette, Pinals, & Appelbaum, 2005).

Many states and organizations have begun to revamp their law enforcement mental health training. While some states have chosen to create and implement trainings they have created, others have chosen to implement evidence based mental health trainings that have been created with a law enforcement audience in mind. Two widely used law enforcement mental health trainings are Mental Health First Aid (MHFA) and the Memphis Crisis Intervention Team (CIT) training model.

Mental Health First Aid Training

The Mental Health First Aid program was first developed in Australia in 2001 by Anthony Jorm and Betty Kitchener. The program is a twelve hour interactive course that,

“presents an overview of mental illness and substance use disorders in the U.S. and introduces participants to risk factors and warning signs of mental health problems, builds understanding of their impact, and overviews common treatments” (National Council for Community Behavioral Health, 2009). MHFA was designed to assist members of the general public identify, understand, and respond to signs and symptoms of mental illness and substance abuse disorders. The course emphasizes a five step action plan that includes compassionate listening and knowledge that will connect the person in crisis to professional, peer, social, and self-help support. The National Council for Behavioral Health, the Maryland State Department of Health and Mental Hygiene, and the Missouri Department of Mental Health partnered with the MHFA creators to bring the program to the United States in 2008. MHFA prepares members of the public to respond to a person in a mental health crisis by providing knowledge about mental illness and treatments, increasing participant’s confidence in responding to a person in crisis, reducing stigma, and increasing the likelihood that the participant will provide help and encourage the person in crisis to seek additional help.

Although MHFA was originally developed to help members of the general public best respond to someone in a mental health crisis, the training has been targeted toward several specific groups. In the budget proposal for fiscal year 2014, President Obama included 50 million dollars to fund a project that would train school teachers in MHFA to help them better identify signs of mental illness (Mohney, 2013). In addition, The National Council for Behavioral Health has created a revised MHFA curriculum for public safety personnel, including police officers, probation officers, correctional officers, and other public safety officials. In 2013, the public safety curriculum was

piloted in New York City, Philadelphia, Washington D.C., and Rhode Island. The Substance Abuse and Mental Health Services Administration (SAMHSA) 2014 budget will include \$15 million towards providing MHFA training to police officers, first responders, primary care professionals, social workers, and college staff (The National Council, n.d.). According to the co-creator of the public safety version of MHFA, the revised curriculum places additional emphasis on psychosis, substance abuse, co-occurring disorders, depression, and anxiety. The public safety version also includes information on traumatic brain injury, autism spectrum disorders, and excited delirium, all of which are not included in the basic MHFA training. Finally, the public safety version places additional emphasis on self-care due to the difficult nature of public safety positions (B. Gibb, personal communication, July 24, 2013). Other than these additions, the core components of the general MHFA training remain the same in the public safety version.

The first chapter of the MHFA manual and the first portion of the training focus on providing background regarding mental disorders. This includes a broader description of mental health problems, a definition of mental disorder, and prevalence rates in the United States. In addition, the manual provides a range of individuals who can help someone with a mental illness, including primary care physicians, licensed mental health professionals, psychiatrists, and certified peer specialists. The manual and the class also provides specific information regarding multiple categories of mental illness, including depression, anxiety disorders, psychosis, substance use disorders, and eating disorders (Kitchener, Jorm, & Kelly, 2009). The completion of the class has been linked with an increase in the participants overall knowledge and recognition of mental illness (Hossain,

Gorman, & Coutts, 2010; Jorm et al., 2010; Jorm & Kitchener, 2001; Jorm, Kitchener, Fischer, & Cvetkovski, 2010; Jorm, Kitchener, O’Kearney, & Dear, 2004; Lam, Jorm, & Wong, 2010; Minas, Colucci, & Jorm, 2009; O’Reilly, Bell, Kelly, & Chen, 2011).

An individual’s sense of self-efficacy (or self-confidence) has a significant influence on his or her actions (Bandura, 1982). MHFA intends to increase the participant’s self-confidence in responding to persons in crisis, which would then increase the number of individuals a MHFA trained individual would respond to. Overall, the twelve hour MHFA course has significantly increased the participant’s confidence in responding to a person in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O’Kearney, & Dear, 2004; Kitchener & Jorm, 2006; Kitchener & Jorm, 2004; Morawska et al., 2013). Additionally, individuals who received MHFA training electronically through the internet or an e-learning CD also showed increased confidence in responding (Hart, Jorm, Paxton, & Cvetkovski, 2012; Jorm, Kitchener, Fischer, & Cvetkovski, 2010). Although MHFA training was targeted for members of the general public, successful completion of the course also increased confidence for specific groups such as pharmacy students (O’Reilly, Bell, Kelly, & Chen, 2011), high school teachers (Jorm, Kitchener, Sawyer, Scales, & Cvetkovski, 2010), and football coaches (Pierce, Liaw, Dobell, & Anderson, 2010).

Stigma towards persons with mental illness is common in the United States and has serious consequences. Former President Bill Clinton (1999) addressed the stigma regarding mental illness in the United States by stating, “Mental illness is nothing to be ashamed of, but stigma and bias shame us all.” The MHFA course is designed to reduce stigma and increase empathy by helping the responder examine his/her own ideas about

mental illness. The course also provides prevalence rates for different mental illnesses. Finally, MHFA participants complete multiple stigma-reducing exercises, such as a modified version of the “voices” program and an exercise that asks participants to rank the most disabling disorders in the United States. Overall, completion of the MHFA course has been associated with a reduction in stigmatizing attitudes regarding mental illness (Bee Hui Yap & Jorm, 2011; Jorm et al., 2010; Jorm & Kitchener, 2001; Jorm, Kitchener, Fischer, & Cvetkovski, 2010; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O’Kearney, & Dear, 2004; Kitchener & Jorm, 2006; Kitchener & Jorm, 2004; Lam, Jorm, & Wong, 2010; Morawksa et al., 2012; Minas, Colucci, & Jorm, 2009; O’Reilly, Bell, Kelly, & Chen, 2011).

Research has suggested MHFA increases knowledge and self-confidence and decreases stigma regarding mental illness. It seems likely a responder who has taken this coursework would be more willing to provide help to a person in a mental health crisis. Overall, successful completion of the MHFA course has been correlated with an increased likelihood that the responder will actually provide help to a person in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, O’Kearney, & Dear, 2004; Kitchener & Jorm, 2004; Minas, Colucci, & Jorm, 2009; Morawska et al., 2012). However, the responder will only be helpful if he/she responds using specific skills and techniques. MHFA provides the skills necessary to be the first line of support by helping the person in crisis feel less distressed and providing important information about seeking assistance, all while using a strengths based approach. This can be accomplished using the five step action plan termed “ALGEE,” which stands for Assess for risk of suicide or harm, Listen nonjudgmentally, Give reassurance and information, Encourage appropriate professional

help, and Encourage self-help and other support strategies (Kitchener, Jorm, & Kelly, 2009). ALGEE is a core component to MHFA and can be used to respond to all types of mental health diagnoses.

Jorm et al. (2005) found that the most common responses of a MHFA trained responder to a person with mental illness were encouraging professional help and listening and/or talking to the person. These are two components of the ALGEE action plan and can help the person in crisis to feel heard and point him/her toward help. However, these responses were not provided by all participants. When participants rated what type of response they would provide to a vignette, 32-44% did not endorse professional help and 27-34% did not endorse listening, talking, and supporting. Furthermore, some research has suggested the likelihood that responders will suggest professional help actually decreased following the completion of the MHFA course (Kitchener & Jorm, 2002).

Aside from providing tools to use when responding to a person in a mental health crisis, research by Kitchener and Jorm (2004) suggests MHFA training benefitted the mental health of the individuals who completed the course. Only 5% of the participants from Australian general public noted their own mental health as a reason for taking the MHFA course, yet a larger number of participants showed a significant improvement in their own mental health. The researchers hypothesized that the improvement was the result of the evidenced based information provided in the course. This information allowed participants to improve their own mental health by seeking help. However, the authors also cautioned that the training was provided to well-educated business employees who were allowed to participate in the research during work hours.

Additionally, these results may not be generalizable because the course was taught by the creator of MHFA.

Crisis Intervention Team Training

In 1987, police officers from the Memphis Police Department responded to a man with a mental illness who was holding a knife and threatening to cut himself and others. When the man did not respond to commands to drop the knife, officers fatally shot him (Hanafi, Bahora, Demir, & Compton, 2008; King, 2011). Partly in response to public outcry of the shooting, Dr. Randolph Dupont of the University of Tennessee, Memphis, and Major Sam Cochran of the Memphis Police Department, developed the Crisis Intervention Team (CIT) Memphis model in 1988. Their goal was to bring together mental health professionals, law enforcement personnel, and local mental health advocates to develop a law enforcement training (Compton, Bahora, Watson, & Oliva, 2008). The CIT model provides law enforcement personnel with crisis intervention training in order to respond to individuals with mental illness and increases the safety of the officers, person served, family members, and citizens of the community (Dupont, Cochran, & Pillsbury, 2007). In addition, the model also acts as a pre-arrest jail diversion for persons with mental illness.

The CIT training was designed to allow incumbent officers to volunteer to become part of the CIT response team. The 40 hour CIT curriculum attempts to provide a common knowledge base regarding mental illness and intends to provide officers with the skills to:

- “Recognize signs and symptoms of mental illness and co-occurring disorders
- Recognize whether those signs and symptoms represent a crisis situation
- De-escalate mental illness crisis
- Know where to take consumers in crisis
- Learn about jail diversion options
- Know appropriate steps to follow up, such as contacting case managers, providing families with community resources, etc.
- Learn how to problem-solve with the treatment system” (Florida CIT Coalition, 2005, p. 7-8).

The training accomplishes these tasks by providing information about mental illness, scenario based de-escalation techniques, information about local mental health services, and visits to the local mental health facilities. Various portions of the training are led by police officers, mental health professionals, mental health advocates, and persons with mental illness and their family members. The CIT model places significant value on partnerships with local mental health agencies and encourages officers to become familiar with available resources (Dupont, Cochran, & Pillsbury, 2007).

The CIT model also provides training to the dispatch officer, who is responsible for providing the patrol officer with the dispatch code for the received call. When dispatch receives a call that is designated with some mental health involvement, the dispatcher sends a CIT trained officer to the scene. Once the CIT trained officer arrives at the scene, he or she immediately becomes the officer in charge on scene. The goal of the Memphis model is to have continuous coverage to ensure a CIT trained officer is

always available to respond to a scene. A small department may need to train most of their officers to ensure availability, while the recommendation for larger departments is to have 20-25% of the departments patrol division CIT trained (Dupont, Cochran, & Pillsbury, 2007; Florida CIT Coalition, 2005). When the Memphis model is properly replicated, the Federal Bureau of Investigations has labeled the CIT Memphis model as best practice when responding to a mental health crisis (Jines, 2013).

The CIT program has been adopted by many states, some of which have implemented state-wide models. Tennessee and Florida have each produced CIT guides that intend to promote adoption by other counties and states (Dupont, Cochran, & Pillsbury, 2007; Florida CIT Coalition, 2005). Kentucky, Virginia, North Carolina, Georgia, Illinois, Maine, and Ohio all have wide reaching CIT programs in the majority of their respective counties. In addition, many other states have a number of counties with CIT programs. At the time of this research, the only states without a police department with a CIT program are West Virginia, Arkansas, and Alabama (National Alliance on Mental Illness, n.d.). State and city specific CIT research has supported positive outcomes in multiple areas. In an evaluation of the Chicago CIT program, Watson (2010) indicated that the program has increased the connectivity to services for persons with mental illness and resulted in a reduction of the use of force by police officers. Research also suggests the arrest rates in Florida dropped following the implementation of the CIT program (Franz & Borum, 2011).

In order to best prepare police officers to respond to individuals with mental illness, the officers must have knowledge and awareness of categories and symptoms of mental illnesses, as well as behaviors one might encounter. Officers perceived an

increase in knowledge about mental illness following CIT training (Hanafi, Bahora, Demir, & Compton, 2008), as well as were able to better recognize and identify persons with mental illness (Wells & Schafer, 2006). Although officers who volunteered for CIT training had a relatively high level of knowledge about schizophrenia before enrolling, completion of the CIT course did significantly increase knowledge and awareness (Compton et al., 2006). Even though CIT training has been shown to significantly increase knowledge about mental illness, knowledge retention decreased just months after the completion of the CIT course. However, officers with more years of service experienced higher levels of knowledge retention (Compton & Chien, 2008).

Borum, Deane, Steadman, and Morrissey (1998) investigated officer's perceptions about their ability to handle incidents that involve responding to a person with mental illness. Officers were surveyed from three distinct police responses to mental illness, including a Community Service Officer program, a CIT program, and a mobile crisis team response program. A significantly larger number of officers from the CIT program indicated they felt well prepared to respond to a mental health crisis when compared to the non-CIT officers. In addition, the CIT officers were more likely to judge mental health services could be helpful than non-CIT officers. In addition, Bahora, Hanafi, Chien, and Compton (2008) found that the CIT training significantly increased officer's self-efficacy when responding to psychiatric illnesses and substance use disorders. Overall, CIT training has been found to increase the officer's confidence in their abilities to respond to a person with mental illness. Social learning theory suggests that the CIT trained officer's higher self-confidence indicates they will be more likely to use cognitive control rather than behavioral control (arrest) in order to alleviate fear.

Police officers have endorsed more stigmatizing attitudes towards persons with mental illness in regard to dangerousness, unpredictability, and tension (Broussard et al., 2011). The CIT program intends to reduce the stigmatizing attitudes toward persons with mental illness. CIT training has been found to reduce myths regarding mental illness, increase understanding and support, and reduce overall stigmatizing attitudes towards mental illness (Compton et al., 2006). One potential catalyst in the reduction of stigma may be the officer's causal beliefs for mental illness. A survey by Demir, Broussard, Goulding, and Compton (2009) indicated police officers were more likely to believe schizophrenia was caused by personal/family/social stressors. However, after CIT training, officers were more likely to endorse causal beliefs consistent with modern biological conceptions. Social distance, which is a measure of how close one is willing to be with someone with mental illness, is often used as a measure of stigma in the literature. CIT training significantly reduced social distance ratings in regard to persons with schizophrenia, depression, cocaine dependence, and alcohol dependence. Notably, officers without a family history of mental health treatment showed the highest social distance ratings before the training and the largest decrease in social distance after the training (Bahora, Hanafi, Chien, & Compton, 2008). An overall reduction in stigmatizing attitudes may lead to improved communication between officers and the person served and/or family members, increased rapport building, and a greater willingness to take time to respond to a person with mental illness.

One of the primary goals of the Memphis CIT model is to increase the safety of all concerned. Compton et al. (2011) investigated the use of force preference by providing three scenarios to a group of police officers who had completed CIT training

and another group who had not. When confronted with an increasingly agitated and psychotic individual, CIT trained officers chose to respond by using a significantly lower level of force when compared with non-CIT trained officers. Furthermore, CIT trained officers perceived non-physical police responses as more effective, and conversely, physical responses less effective when faced with the psychotic individual. This suggests that CIT trained police officers are less likely to use physical force when confronted with severe mental illness, partly because they perceived non-physical interventions as effective in de-escalating a situation. Additionally, police officers were more confident in their de-escalation abilities, which likely led to a calmer approach to the situation. Additional research supports the notion that CIT training reduced the officer's use of force when confronted with an escalating situation (Watson, 2010; Morabito et al., 2012).

Unfortunately, there are times when even the best trained officers will need to use force to respond to a situation. CIT training hopes to eliminate the use of unnecessary force. Skeem and Bibeau (2008) developed a longitudinal study to follow a group of CIT trained officers. Results suggest although there were times when officers used force, it occurred in only 6% of the total number of calls involving individuals with mental illness. Similar studies following non-CIT trained officers resulted in a use of force in 17% of calls. Even when force was used by a CIT trained officer, only 6% of individuals were injured, while 38% were injured by non-CIT trained officers.

However, aside from the safety of the person served and law enforcement, CIT training also intends to divert individuals from jails to more appropriate services. This is an imperative cost saving variable and although it may cost more money initially for a trip to the hospital or to have an evaluation completed, it will likely save future

incarceration costs. As such, the diversion aspect of the CIT training begins with training the dispatchers on how to alert officers through dispatch codes. Ritter et al. (2011) found that the dispatch coding chosen by the dispatcher was a significant predictor of transport decisions. However, even if the dispatcher did not provide the correct coding, the CIT trained officers were able to properly identify the mental health problem. Furthermore, officers responding to calls involving the areas of importance in the CIT curriculum (substance abuse, medication, signs and symptoms of mental and physical illness, and violence towards self and others) were all more likely to divert the individual to treatment. This suggests that advanced knowledge in these areas led to more accurate assessment and transport decisions. CIT has been successful in the jail diversion aspect of the program, as the arrest rates for CIT trained officers were four times lower than those of non-CIT trained officers when responding to calls involving individuals with mental illness (Skeem & Bibeau, 2008).

Although some jurisdictions assign officers to become CIT trained, the Memphis model recommends that they be allowed to volunteer for training and subsequently go through a selection process that includes a personnel file review, an interview, and recommendations. This process allows the police department to ensure the right officers are being selected for the CIT position. Most officers who volunteer to become CIT trained have had some previous exposure to mental illness (Bahora, Hanafi, Chien, & Compton, 2008). Officers who volunteered for CIT training in Georgia were approximately twice as likely to report having a previous exposure to a mental health professional (Compton et al., 2011). In a study with 159 officers in Atlanta, 11% of officers reported they had previously received psychiatric treatment. However, almost all

of the officers reported previous exposure to mental illness in some form. Thirty percent of officers (n=48) reported a family history of mental illness and 52% (n= 83) reported knowing someone who had a mental illness. Sixty percent of officers (n= 92) reported previously arresting a person with an obvious mental illness (Compton et al., 2006).

Massachusetts Law Enforcement Mental Health Training

After an investigation of the law enforcement and mental health interactions in Massachusetts, DMA Health Strategies (2012) recommended that state representatives set a goal to reduce arrests of persons with mental illness by increasing financial support, expanding court diversion options, and increasing the investment in police training. As of 2010, Massachusetts ranked last in the United States in regard to the amount of resources allotted to training municipal police officers. Furthermore, Massachusetts allotted only one-half of what the second lowest state spent on police training per officer (Timilty & Costello, 2010). However, many Massachusetts cities and towns have worked around budget cuts and been able to implement specialized law enforcement mental health programs with positive results. At the time of the current study, Berkshire, Worcester, Nantucket, and Bristol Counties had each implemented CIT programs (National Alliance on Mental Illness, n.d.). Fitchburg, North Hampton, and Somerville have trained their officers in MHFA and a percentage of officers in CIT.

In addition, many other cities and towns have implemented additional mental health programs in their police departments. A number of cities and towns have implemented clinician ride along programs or clinician availability at the request of an officer, including Framingham, Danvers, Worcester, Marlborough, Arlington, and

Wakefield. Natick has proposed a plan for a ride-along program as well. In addition, many departments are aware they can contact their local Emergency Service Providers (ESP) to evaluate the person in crisis. However, there are times when the ESP's are extremely busy, which increases their response time and places the officer in a position to wait for the ESP or make a decision on his/her own. Finally, some cities and towns, such as Boston, Worcester, Somerville, and Wakefield, have partnered with their local mental health agencies for better continuity of care and additional training for their officers. While this is certainly not an exhaustive list of police training models in Massachusetts, it includes many of the most prominent training approaches at the time of this study.

Although many cities and towns have worked hard to improve their law enforcement response to persons with mental illness, the reality remains that the majority of cities and towns in Massachusetts do not have a specialized response program for persons with mental illness. While the National Institute of Justice has labeled CIT as best practice in responding to situations with a person with a serious mental illness (Jines, 2013), implementing a full 40-hour training for the thousands of Massachusetts police officers may not be possible. Given the significant law enforcement training budget cuts, Broussard et al. (2011) stated, "shorter types of intervention may be more practical and efficient to implement across multiple departments" (p. 7). One of the most efficient methods to train a large amount of officers is the police academy. However, the four hour 'special populations' curriculum had not been updated in some time and only provided one hour on mental illness. The information was provided in lecture format and included a minimal number of videos and group discussion.

A 2012 investigation of law enforcement mental health training in Massachusetts resulted in recommendations to:

- “Develop a state of the art curriculum for approaching emotional disturbance calls and working with ESPs that combines the best practices from community policing and tested mental health training programs such as CIT, MH First Aid, and MMDIP; and
- Ensure that all police officers receive training in the new curriculum either in the police academy or in continuing education, and that the training is periodically refreshed and updated” (DMA Health Strategies, 2012, p. 12).

Given the above information, an expert task force was created in order to build and test new mental health training for the police academy. The task force consisted of Debra Pinals, M.D., the assistant forensic commissioner for the Department of Mental Health, June Binney, Esq, the director for the NAMI Massachusetts Criminal Justice Project, and Katie Hunsader, NAMI Massachusetts Criminal Justice Project assistant. In addition, this author significantly contributed to the creation of the twelve-hour mental health curriculum, including creation of the curriculum outline, the PowerPoint presentation, instructor guide, and training the trainers.

Updated Massachusetts Police Academy Mental Health Training

The updated Massachusetts municipal police mental health training was developed and approved as a twelve hour curriculum. This represents an 1100% increase in total training hours when compared to the previous mental health training. It is important to note that the mental health training is designed to be co-taught by a mental

health professional with experience training law enforcement and a police officer with extensive field/training experience with persons with mental illness. This allows the mental health professional to act as the mental health subject expert, while the police officer can discuss his/her personal experiences with persons with mental illness and provide information about what behaviors might be observed from a police standpoint. The updated training begins by providing information on mental illness that attempts to reduce stigma. This includes how stigma affects persons with mental illness, myths and facts about mental illness, and common attitudes and behaviors regarding mental illness. In addition, the officers are given a list of mental and physical disorders and asked to rate them from most to least disabling. Because many police officers believe persons with mental illness are dangerous and unpredictable (Broussard et al., 2011), the instructors focus on providing information while discussing the researched violence rates of persons with mental illness.

It is also important to note that the updated mental health training, specifically the de-escalation skills, are not meant to supplant training officers have received in other portions of the police academy, such as defensive tactics and scene control. Rather, the techniques this training provides are intended to act as additional tools officers will be able to use if they deem the situation appropriate to do so. While the training intends to increase the safety of the person served, both instructors emphasize that officer safety is imperative and should be maintained at all times.

The next section of the curriculum involves de-escalation techniques and an overview of mental illness, neurocognitive disorders, and neurodevelopmental disorders. Many of the previously mentioned de-escalation skills are provided, including the

importance of remaining calm, expressing empathy, listening actively and non-judgmentally, using simple reflections of person's statements or feelings, monitoring non-verbal communication, using simple and clear language, being consistent and predictable, and more. These general de-escalation skills act as a base for the officers to build upon when specific disorders are discussed. Next, information is provided about major categories of mental illness, including mood, anxiety, trauma and trauma related, psychotic, personality, and substance related disorders. Officers also discuss intellectual disabilities, Autism spectrum disorders, and dementia/Alzheimer's.

The curriculum is designed to allow group discussion about each category of mental illness. The police officer instructor will provide the class examples of how or where an officer might encounter each mental illness. In addition, a video scenario is provided for each category that depicts a person with symptoms that fit with the topic being discussed. The instructor will stop the video at multiple points and ask the class questions such as "how would you respond," "what symptoms were observed," or "what did that officer do correctly/incorrectly" in order to elicit critical thinking and participation. The updated training also includes information about trauma, posttraumatic stress disorder, and excited delirium, which was not included in the previous training curriculum. Finally, the training provides officers with a thorough overview of Massachusetts mental health laws, including MGL, Section 12 and Section 35.

Research Variables

The ultimate goal for researching CIT, MHFA, or any other specialized police training program is to investigate if the program has been effective. In other words, if the goal of the training is to reduce unnecessary arrests and violence, does the training

actually lead to fewer arrests or fewer incidents of excessive force used against persons with mental illness. However, obtaining data to investigate overall program effectiveness has proven extremely difficult for researchers due to problems with dispatch documentation, arrest paperwork, and the tracking of police response to persons with mental illness. Thus, investigative research has primarily been conducted at the officer level to attempt to detect if they are affected by the trainings. Much of the existing literature on CIT and MHFA investigates de-escalation skills, self-efficacy, and stigmatizing attitudes in order to measure any changes caused by the mental health training. Thus, this study will utilize the same variables in order to compare the results of the Massachusetts training to the existing literature on CIT and MHFA. Each of the variables will be discussed below.

De-Escalation

The use of physical restraint is a behavioral management tool used to respond to a person in crisis. A person in crisis may be defined as someone who is a threat to harm themselves or another due to poor judgment and low behavioral control. Many times, the risk of harm of self or another is likely but inadvertent. Physical restraint has been implemented in many settings, including geriatric nursing homes, inpatient psychiatric hospitals, adolescent residential centers, schools, and other clinical settings.

Professionals in these settings are tasked with working with individuals with significant physical or psychiatric disabilities and are often subjected to significant workplace violence, which physical restraints are intended to help prevent. Aside from law enforcement, persons working in the mental health field were subjected to the highest rate of workplace violence in the United States (20 in 1000 people) from 2005-2009 (U.S.

Department of Justice, 2011). However, many institutions have recognized that physical restraints are not the most effective first response and can result in serious consequences to both staff and the person in crisis, such as physical injury, impairment in cognitive performance, depression, social disengagement, and death (Castle, 2006; Castle & Engberg, 2009; Molastiotis, 1995; Mohr, Petti & Mohr, 2003). The National Alliance on Mental Illness (2003) recommended that seclusion and restraints be used only as a last resort measure. The use of de-escalation techniques has since replaced physical restraints as the first response to a person who is in crisis or escalating towards violence.

Before discussing the de-escalation process, it is important to quickly discuss the escalation process. *Merriam Webster Online* defines “escalate” as: “to increase in extent, volume, number, amount, intensity, or scope.” Maier (1996) described the process of escalation in a psychiatric context using five stages that started with frustration and ended with potential physical aggression. The individual begins with minor motor cues such as clenched fists or jaw, then typically exhibits verbal threatening and/or posturing behaviors. During the next stage, the person exhibits physically assaultive behaviors and will physically strike with the arms or legs. The escalating individual experiences relaxation in the last stage, which is typically accompanied by physical cues that suggest exhaustion. However, Johnson and Delaney (2007) note that escalation does not always follow this pattern. Through observation of a psychiatric inpatient unit, the authors observed behaviors that were perceived as escalating but never reached an aggressive or violent level. Thus, they amended the definition of escalation to situations “in which the behavioral intensity (e.g. loudness, agitation, or disruption) increased but did not necessarily continue to build up” (p. 44).

On the contrary, de-escalation has been defined as a “complex, interactive process in which the patient is redirected toward a calmer personal space” (Stevenson, 1991, p. 6) with the goal of reducing anxiety, maintaining control, and avoiding acting out violently. De-escalation is included in many professional organization’s policy and best practice recommendations. The American Psychiatric Nurses Association (2008) included de-escalation in a position paper on violence in the workplace. Recommendations included staff training on conflict management, effective communication skills, alternatives to restraint and seclusion, and trauma-informed care approaches in order to reduce workplace violence when working with psychiatric patients. The National Institute for Clinical Excellence (2005) also produced clinical guidelines for the short-term management of disturbed/violent behavior. Many companies use Crisis Prevention Institute to train their staff in nonviolent crisis intervention techniques. The training emphasizes how to identify behaviors that may result in a crisis, how to best respond in order to avoid escalation, how to use verbal and nonverbal techniques to reduce the potential for violence, and how to avoid injury (International Association of Nonviolent Crisis Intervention Certified Instructors, 2006). Notably, at the time of this study, the American Psychological Association and the American Psychiatric Association have not produced similar position papers or best practice recommendations regarding the use of restraints or de-escalation techniques.

A “standard” approach or best practice method for de-escalation does not currently exist (Robertson, Daffern, Thomas & Martin, 2012). Rather, research has produced a collection of ‘basic rules’ of de-escalation that have been effective in practice. A significant portion of the research has focused on psychiatric nurses in mental health

inpatient and residential units or nursing homes (American Psychiatric Nurses Association, 2008; Castle, 2006; Castle, 2009; Dix, 2001; Finfgeld-Connett, 2009; Johnson & Hauser, 2001; Molastiotis, 1995; Robertson et al., 2012; Stevenson, 1991). This research focuses on specific characteristics and techniques that have led to successful de-escalation in clinical practice. The characteristics and techniques are typically classified into three areas: verbal communication, non-verbal communication, and environment.

Verbal de-escalation techniques involve how the responder communicates with an emotionally disturbed person (EDP). The responder should speak in a calm, slow, and assertive manner, while avoiding the use of jargon (Dix & Page, 2008; International Association of Nonviolent Crisis Intervention Certified Instructors, 2006; Stevenson, 1991). EDP's might also have difficulty understanding complex sentences or following multiple directions (e.g. "go to your room, turn off the radio, and go to sleep"). Using simple, clear, assertive instructions (e.g. "please go to your room") and allowing the individual time to follow the directions will increase the chance the EDP responds appropriately (Dix & Page, 2008; National Institute for Clinical Excellence, 2005). When multiple people respond to a situation with an emotionally disturbed person (EDP), one person should take the lead and be the only one to interact with the EDP (National Institute for Clinical Excellence, 2005). A person in an emotional crisis and individuals with a mental illness such as Bipolar Disorder or Schizophrenia can have disorganized cognitive processes or difficulty maintaining attention. Having a conversation with more than one person might confuse or further escalate them.

A responder should always attempt to quickly build rapport with an EDP. This process can occur over an extended period of time for psychiatric nurses that work with patients on their unit and have multiple interactions with them. However, this process is quite different for a person responding to a crisis who has had minimal contact with the EDP. Finfgeld-Connett (2009) labeled this process of ‘authentic engagement’ as the core facet of verbal de-escalation. Authentic engagement is “becoming and staying sincerely connected to the patient” (p. 533) by presenting oneself in a genuine manner so the EDP feels his/her story is being heard and the situation is understood in a non-judgmental and non-threatening manner. Core elements of authentic engagement begin with viewing the situation in context and understanding that aggression can often uncover concerns or problems that might otherwise be hidden. If any action is taken, the responder should strive to let the EDP know what is being done and the reasoning behind any action. However, Finfgeld-Connett (2009) cautions that one must balance the rapport building tactics with limit-setting and the awareness that sometimes EDP’s need a form of physical control to assist them in emotional and behavioral regulation.

In order to build rapport, one must use empathic listening and open-ended questions to attempt to understand the crisis. The responder should never threaten the EDP and attempt to offer realistic options without lying to the individual in crisis (National Institute for Clinical Excellence, 2005). Often, EDP’s will attempt to verbally attack personal characteristics of the responder, so it is important to remain focused on the task at hand and refrain from being sidetracked. At times, it might be appropriate to use self-disclosure to help build rapport. It can also be helpful to point out the person’s behavior and how it is affecting other people (e.g. “your shouting is scaring other

people”), which helps “demonstrate the patient is making an impact and thus diminish the need for further escalation” (Dix & Page, 2008, p. 27).

Non-verbal de-escalation techniques often focus upon the body and how one presents to the EDP. Non-verbal communication involves aspects of body posture, clothing, facial expression, eye contact, and other facets of a responder’s presentation. An EDP is experiencing emotional dysregulation and may be aggressive or violent, so it is important to use non-verbal communication that does not exacerbate those qualities. An EDP should be allowed more personal space than normal (Dix, 2008; International Association of Nonviolent Crisis Intervention Certified Instructors, 2006; National Institute for Clinical Excellence, 2005). Individuals displaying verbal aggression may require three times the personal body space than those during non-aggressive communications (Lanza, 1988). Additionally, a responder should position his/her body at an angle when communicating with an EDP. This does not allow for ‘face-to-face’ interactions that may be perceived as threatening and also allows the responder to turn to exit quickly if needed. If it is safe to do so, one should also strive to communicate on the same vertical level as an EDP and sit if the person is sitting (Dix, 2008; National Institute for Clinical Excellence, 2005).

Context and environment are also extremely important when responding to an EDP. The goal should be to minimize distractions by managing others in the environment. This may include removing other people from the immediate scene or moving an EDP to a quieter area. The EDP should never be engaged when he/she is in a corner and may feel “trapped.” An EDP should always be allowed to pace or walk around, and the responder should never walk behind an EDP (Stevenson, 1991). In

addition, the responder should always maintain safety and have multiple exit strategies in case of physical violence. Finally, the responder should ensure there are no available weapons in the immediate environment (National Institute for Clinical Excellence, 2005).

Additionally, the responder must be aware of their personal triggers and vulnerabilities during a crisis situation. Stevenson (1991) suggests that any person who might encounter an EDP be aware of their emotional state and how it might contribute to any interactions. For example, asking questions such as “is there a problem at home,” “am I more stressed than usual today,” “does this person remind me about someone in my personal life that I have problems with,” or other similar questions can help to monitor one’s emotional state. Judgment and decision making abilities often decrease with increased stress and emotional arousal, so it is extremely important to be aware of one’s emotional state. In order to be able to properly use the techniques outlined above, one must be able to remain calm and centered.

Dix and Page (2008) discussed de-escalation in regards to the use on psychiatric intensive care units (PICU) and low secure units (LSU). Along with the verbal and non-verbal communication techniques discussed above, the authors discuss situational assessment and problem solving tactics as two additional facets of de-escalation based on experience in the PICU and LSU. The authors state that one must use a situational analysis of any incident in order to fully understand the reasoning behind the action. First, one must be aware of the situation and the events that the patient was focusing upon immediately before the aggressive incident. The patient inherently draws conclusions about the reasons and circumstances of the situation, which then leads to an emotional response. Next, one must consider the person’s mental state, including their ability to

control aggression due to mental illness. The final step in the chain of analysis is the observable aggressive response by the patient. This solves the common problem of believing the activating event was the direct cause of the behavior (often viewed in cognitive-behavioral theory as $A = C$). Dix explains this level of understanding will allow for multiple intervention points in order to “de-rail the journey from event to aggression” (p. 26).

Many de-escalation tactics need to be modified for each situation. The ‘attitude and behavior cycle’ involves the preconceived notions that both the responder and the person in crisis bring to the situation about the other. If the responder can successfully use de-escalation techniques and connect with the EDP in a way that breaks the EDP’s pre-conceived notions, he/she will be more likely to respond in a positive manner. This will break the responder’s preconceived notions about the EDP, which will break the attitude and behavior cycle. Another common interaction concept is the “win-lose equation.” The ‘win-lose equation’ represents the notion that conflicts always end with someone winning and someone losing. De-escalation techniques strive to produce as close to a ‘win-win’ result as possible. Finally, the ‘debunking’ technique aims to shift the person in crisis from using aggression to using discussion to get their needs met. Aligning goals with the EDP can allow the person to feel that he/she shares the same goals with the responder.

Johnson and Hauser (2001) noted psychiatric nurses actually participated in a process that assisted the client to calm down as opposed to simply reacting or responding to the client’s behaviors. The most effective nurses were able to draw from multiple intervention techniques, so “although there were some general rules guiding their actions,

the nurses' ways of intervening were individualized for *this* patient in *this* situation" (p. 663). The authors also highlight the importance of understanding the context of the situation, including what led up to the patient escalating and what the patient's typical escalation pattern has been while he/she has been on the psychiatric unit. The overall process was more complicated than simply using a set of rules. Although research has identified key variables in de-escalation training, a systematic review of the impact of the training programs by Richter et al. (2007) revealed the training has increased the knowledge and self-efficacy, but failed to decrease the violence and/or aggressive incidents (as cited in Price & Baker, 2012, p. 310). Furthermore, the variation in the de-escalation techniques and in the literature suggests the effectiveness of de-escalation training has not been established and requires further research with controlled trials.

In order to alleviate discrepancies between different models of de-escalation in the research, Richter (2006) proposes that the simplest technique to successfully de-escalate someone is to *not* using certain communication styles and verbal interventions. Ordering, warning, moralizing, arguing, blaming, shaming, judging, name-calling, analyzing, probing, using sarcasm, and belittling have all been labeled as roadblocks and communication killers by Dutschmann (as cited in Richter, 2006, p. 139-140). However, this may be easily accomplished in a calm emotional state, but may be more difficult when the responder is emotionally aroused in an escalating situation.

However, when police officers respond to a call for service, they typically arrive at a scene after an individual is already moderately escalated. The officers do not have the opportunity to observe the context throughout the escalation or the opportunity to intervene early in the escalation process. According to Dori-Ann Ference, the curricula

development coordinator for the Massachusetts Municipal Police Training Committee, all new recruits go through a “defensive tactics” module in the police academy that teaches them skills on how to approach a scene, control the scene, and defend themselves if necessary (personal communication, May 23, 2013). While this material is applicable when an officer is responding to a person who is capable of thinking rationally and following directions, many of the tactics go against the de-escalation skills that were previously discussed. For example, an officer is taught to instruct a person to remove their hands from their pockets to ensure they are not hiding a weapon. Although this is extremely important for officer safety, asking an individual with a mental illness to remove their hands from their pockets might serve to further escalate the individual. Another example is officers typically do not let persons walk around while they are questioning the person. However, de-escalation skills instruct the responder to allow an emotionally disturbed person to walk around or pace as necessary. These are a small number of examples that highlight the discrepancies between the scene control tactics taught in the police academy and the de-escalation skills required to respond to an emotionally disturbed person.

Self-Efficacy

Self-efficacy can be defined as “judgments of how well one can execute courses of actions required to deal with prospective situations” (Bandura, 1982, p. 122). Self-efficacy is not simply a prediction of the future, rather it involves how people think, behave, and emotionally react. Judgments based on self-efficacy significantly influence daily behavior and the activities they choose to participate in. Individuals who have high self-efficacy tend to apply their mental attention to the environment, can attend to salient

details, and determine how to best proceed. However, individuals with lower self-efficacy tend to focus a significant amount of mental energy on concerns about failure and over-analyzing every move they make (Bandura, 1982).

Bandura (1977) explains that self-efficacy can vary in several ways, including magnitude, generality, and strength. The *magnitude* of efficacy involves the difficulty of the task in relation to the level of mastery. An individual with low magnitude might be confident in his or her abilities regarding a simple task, but much less confident about a more complex task. Another person might have high magnitude that allows him or her to have confidence about both simple and difficult tasks. The *generality* of efficacy expectations refers to how specific the expectation is in relation to the task. In some instances, the efficacy expectation might be specific to one task and stop there. For example, a professional musician would have high expectations for the ability to play music, but might have low expectations for the ability to paint. In other instances, the sense of efficacy may extend beyond the specific task at hand and result in a more universal sense of self-confidence. Finally, the *strength* of the efficacy expectation refers to the level of perseverance. The strength of the self-efficacy will determine how long an individual continues to participate in a behavior or situation in the face of obstacles and adversity. In other words, when engaging in a behavior that is not leading to the desired results, those with high self-efficacy are more likely to persist in the task. Those with low levels of self-efficacy are more likely to discontinue at the first sign of adversity or failure.

There are four main ways in which efficacy expectations can be influenced: enactive, vicarious, verbal persuasion, and emotional. *Enactive* influence consists of the

individual's performance accomplishment, which is thought to be one of the most influential sources because it is essentially based on the individual's personal experiences. Repeated successes will increase mastery and efficacy, while repeated failures will decrease mastery and efficacy, significantly so if the failure is early in the process. *Vicarious* experiences involve seeing other people perform similar activities without negative consequences. This allows the individual to observe that they can fail without significant consequences, as well as that they will improve with increased effort and persistence. Essentially, seeing others fail and pick themselves back up may serve to positively influence one's level of mastery. *Verbal persuasion* is suggesting that one can cope with failure and persist. *Emotional arousal* acts as an additional source of personal competency, as stressful situations evoke many different emotions. Higher anxiety will hinder performance, which will then confirm the provocation of anxiety in a similar situation in the future. However, lower levels of anxiety will improve performance, therefore increasing efficacy expectations (Bandura, 1977).

The concept of self-efficacy becomes extremely important when discussing the choices police officers make in their daily work, specifically regarding the experience of fear. Officers have an extremely difficult job which inherently involves some aspects of fear, as many officers interact with dangerous individuals. They are trained to respond to dangerous situations and are given firearms and other instruments to provide some source of protection. However, a police officer might have a different experience when comparing the reaction to a citizen with or without mental illness, as responding to a person with mental illness can be confusing and frightening. Along with normal

disposition choices such as problem solving, citation, and arrest, an officer may also be able to bring a person with mental illness to the hospital for an evaluation.

Social learning theory helps explain that events produce fear because an individual believes he/she will be ineffective in coping with potentially negative events based on prior experiences or observations of ineffectiveness. If someone can prevent or lessen the severity of the negative outcome, there is little reason to be fearful. Averill stated an individual's sense of control can be achieved either behaviorally or cognitively (as cited in Bandura, 1982, p. 136). Behaviorally, an individual can control a situation by physically modifying the scene to stall or modify a negative consequence. In cognitive control, a person believes that he/she can manage an environmental threat if it occurs (Bandura, 1982). This concept is relevant to police officers because they have the ability to establish behavioral control by placing an individual in handcuffs and arresting that individual if a law has been broken. Behavioral control is often correctly applied to prevent future crimes and injury. However, this type of behavioral control may not be necessary in some instances, one of which might include responding to an individual with mental illness. If a police officer has low self-efficacy regarding his/her ability to respond some of the unusual behaviors and symptoms of mental illness and is unable to use cognitive control, the officer might utilize behavioral control to alleviate fear. However, if an officer has a high level of self-efficacy, the officer will be more likely to utilize mechanisms other than arrest to de-escalate the situation.

While extensive self-efficacy literature exists targeting other populations such as mental health therapists (Chandler, Balkin, & Perepiczka, 2011; Gibson, Grey, & Hastings, 2009; Marmarosh et al., 2013; Taubner et al., 2013), students (Isik, 2012; Joet,

Usher, & Bressoux, 2011; Lockwood & Wohl, 2012; Strunk & Steele, 2011), and teachers (Brown, 2012; Hartmann, 2012; Holzberger, Philipp, & Kunter, 2013; Kent & McIntosh, 2012; Khurshid, Qasmi, & Ashraf, 2012; Schwarzer & Hallum, 2008), there is comparatively little research regarding the self-efficacy of police officers. Research on police officer job satisfaction suggests positive job satisfaction was correlated with positive affect, life satisfaction, and self-esteem, while a lack of job satisfaction was correlated with high levels of stress, negative affect, and increased alcohol consumption (Kohan & O'Connor, 2002). Furthermore, officers who had poor job satisfaction were found to have more widespread negative attitudes (cynicism) and external loci of control (Lester, 1987). However, information regarding job satisfaction does not directly address how confident an officer feels about his/her abilities. One might be confident in one's abilities but still hold low job satisfaction, or vice versa. Research has suggested that female police officers feel less confident in their abilities to respond to violent offenders and riot situations than male police officers (Love & Singer, 1988).

Much of the self-efficacy research regarding police officer self-efficacy is included in the research on CIT training. One of the goals of CIT training is to increase police officer's self-efficacy when responding to persons with mental illness. Overall, research has generally shown that CIT training increases officer's self-efficacy (Bahora, Hanafi, Chien, & Compton, 2008). However, CIT research is specific to responding to individuals with mental illness and does not provide information on overall professional self-efficacy for police officers. Thus, little other information was available at the time of this study regarding police officer's overall professional self-efficacy.

Stigmatizing Attitudes

Stigma has been defined in many ways in different contexts. The dictionary definition of stigma is “a mark of shame or discredit” (Stigma, Merriam Webster Online). Goffman (1963) explicitly defined stigma within social science as an “attribute that is deeply discrediting that reduces the bearer from a whole and usual person to a tainted, discounted one” (p. 3). Since that time, many professionals have amended Goffman’s definition or even created a new definition of stigma. Crocker, Major, and Steele (1998) stated “stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context” (p. 505). Variations of definitions of stigma are in part due to the variety of research contexts. Stigma research spans across many disciplines, such as sociology, psychology, anthropology, political science, and social geography. Each discipline has inherently different goals and uses stigma in different ways, thus leading to variations in defining stigma. Link and Phelan (2001) recommend allowing variation in how one defines stigma as long as the investigators are clear what stigma means in the context they intend to use it.

The current study will use the concept of social distance to measure stigmatizing attitudes. Park (1924) defined social distance as the degrees of understanding and intimacy found in personal and social relations. Park wrote that all humans have a natural impulse to understand and share another person’s feelings, including any pleasure, sorrow, hope, fear, and joy that they might experience. This concept is now commonly referred to as empathy. However, this natural process can be blocked by a deliberate effort that could stem from self-interest and/or fear. One can block one’s

ability to experience empathy toward another person if the lack of empathy will somehow be beneficial. In addition, one can block empathy due to fear, which is often vague and represents a general unknown about another person. Overall, humans experience this degree of understanding and intimacy on both an individual level and towards groups of people that all share some characteristic, such as race, gender, disability, etc. Park stated that it is possible to maintain an intimate relationship with a group of people as long as there was a proper distance between the individual and the group. Although Park wrote about race, he acknowledged, “the same is probably true of every other race, class, or category of persons towards whom our attitudes have become fixed, customary, and conventionalized” (Park, 1924, p. 341). In theory, Park believed everyone will get along and function with no issues as long as the proper distance is maintained between them. Unfortunately, reality has shown that just because people maintain proper distance does not mean they will get along.

Park’s social distance theory is also applicable to mental illness. The report of the Presidential Task Force on Employment of Adults with Disabilities (2000) and the Surgeon General’s report on mental illness stated that stigma has been found to be a major barrier to receiving treatment, obtaining employment, and obtaining quality housing among adults with mental illness (U.S. Department of Health and Human Services, 1999). Persons with mental illness often face many obstacles in order to try to function at their desired level. One such obstacle is created from the attitudes and beliefs the public hold towards mental illness. Members of the public endorsed a higher rate of negative attitudes towards a person with mental illness in comparison to a person with a

physical illness. Persons with mental illness were also viewed to have less behavioral control and a lower potential for recovery (Socall & Holtgraves, 1992).

Link et al. (1999) surveyed almost 1,500 people from across the country in 1996 by asking various questions about a number of vignettes describing various mental illnesses. Members of the public endorsed the belief that stress was the main factor in bringing about different types of mental disorders. Participants were able to identify that schizophrenia and major depression were caused by a chemical imbalance in the brain, but also believed that cocaine dependence was the result of the person's own bad character. The public endorsed the idea that the way a person was raised played a significant role in the manifestation of a mental disorder (45% for schizophrenia and 48% for major depression). Additionally, the authors found that participants desired the most social distance from a person with cocaine dependence, alcohol dependence, and schizophrenia.

Desire for increased social distance may be due to the potential of the negative emotional reaction to a person with mental illness. Individuals who do not have accurate information might perceive a person with mental illness as unpredictable, frightening, and generally confusing. Although the public may have general knowledge about some types of mental illness as suggested by the Link (1999) survey, public perception has been very inaccurate regarding other aspects of mental illness. Members of the public endorsed the belief that all types of mental disorders significantly increased the potential for violence when compared with a person without a mental illness (Link et al., 1999). Furthermore, individuals with schizophrenia were believed to have the highest violence risk, which also increased the desire for social distance (Silton, Flannelly, Milstein, &

Vaaler, 2011). However, the perception that persons with mental illness are violent is not only in the United States, as respondents from sixteen other countries endorsed a fear of violence from a person with a mental illness and uneasiness about how to interact with a person with mental illness (Pescosolido, Medina, Martin, & Long, 2013).

Overall, research suggests members of the general public hold negative attitudes towards mental illness. Slightly more than half of the general public endorsed the belief that persons with serious mental illness could get treatment, get well, and return to productive lives (Barry et al., 2013). Such stigma can have a wide range of negative effects on persons with mental illness. Individuals might be less likely to seek help for fear of prejudiced attitudes and substandard treatments. In 1993, approximately 51% of surveyed members of the public were willing to live next to someone with a mental illness (Brockington, Hall, Levings, & Murphy, 1993). However, a 2013 survey indicated that only 33% of surveyed members of the public would be willing to live next to someone with a mental illness (Barry et al., 2013). Research has also shown that groups that were labeled as mental patients were associated with less income, unemployment, and demoralization (Link, 1987). Persons with mental illness that perceived higher levels of discrimination and devaluation (grouped as stigma) had significantly lower life satisfaction than those who did not perceive high levels of stigma. Essentially, stigma can compromise patients' basic sense of self-efficacy and self-worth, which can reduce the chance a person with mental illness would feel satisfaction about his/her life (Rosenfield, 1997). This may cause an increase in depression or exacerbate other symptoms of mental illness, which then creates a self-reinforcing cycle of decreased self-worth and increased symptoms.

Stigmatizing attitudes toward mental illness can act as a barrier to treatment in three ways. First, mental health institutions might not receive adequate funding from a legislative level (Corrigan, Markowitz, & Watson, 2004). Many times, major policies do not actively intend to discriminate against persons with mental illness. Nonetheless, these policies have consequences that restrict treatment availability. Second, public and community attitudes negatively affect persons with mental illness. A group of members of the public were surveyed about prioritizing healthcare services. At the beginning of the study, only 36% of participants prioritized mental health coverage under insurance policies (Evans-Lacko, Baum, Danis, Biddle, & Goold, 2011). Third, individual attitudes and experiences of discrimination reduce the likelihood of seeking treatment. Persons with mental illness that felt socially rejected due to stigmatizing attitudes had a weaker sense of mastery (Wright, Gronfein, & Owens, 2000). That is, experiencing stigma decreased their sense of being in control of their life and their ability to succeed in various aspects of their lives (e.g. treatment, vocation, relationships, etc.). If someone does not believe they are in control or that they will not succeed in an endeavor, such as treatment, why would they initiate it?

The awareness and acknowledgement of stigma can also prevent persons with mental illness from seeking additional services due to the stigma that is associated with actually receiving psychiatric and rehabilitative services. Participation in vocational, financial, social and treatment services has been correlated with higher life satisfaction (Rosenfield, 1997). Thus, fear of increased stigma can prevent a person from seeking services that can decrease symptoms and improve life satisfaction. However, stigma can negatively affect individuals who are already in treatment as well. Older adults who

perceived high levels of stigma were more likely to discontinue mental health treatment than those who did not perceive a high level of stigma (Sirey et al., 2001).

Perlick et al. (2001) investigated the effects of stigma on familial and non-familial relationships using patients in an acute phase of Bipolar Disorder. Authors found a higher level of concern about stigma impaired non-familial social functioning at seven months post-acute phase. Although the study only measured isolation seven months after the acute phase due to being part of a larger family study, it is likely that social isolation lasted even longer due to continued stigmatizing attitudes. Results also showed that patient isolation, which can be viewed as a way to escape stigma, was correlated with higher symptom severity. Persons who were not in an intimate relationship further isolated themselves, and even those who were married showed behavioral avoidance of their significant others. Fear of increased stigma even pertained to family members and significant others, who are often thought to act as a significant support system for a person. If a person with mental illness even fears negative attitudes from family, who can he/she turn to for support? This level of complete isolation has the potential to exacerbate mental health symptoms and removes all social supports. While not all individuals with mental illness may not experience stigma, it is clear that stigma and discrimination negatively affect optimism, morale, and life opportunities of persons with mental illness (Hinshaw, 2006).

Attribution theory has become an important lens which helps to explain the connection between stigmatizing attitudes and the resulting behaviors of the individuals who hold these attitudes. According to Weiner (1995), attribution theory states that behavior results from the cognitive-emotional process. In other words, a person makes a

judgment about the cause of another person's behavior, as well as whether that person could control their illness. This results in the attitude holder making an ultimate judgment about responsibility. That responsibility judgment leads to an emotional reaction, such as anger or pity, which can ultimately lead to helping or punishing behaviors from the attitude holder. Thus, when a person is presented with a situation involving someone with a mental illness, that person tries to determine who is responsible. According to attribution theory, they do that by determining the cause and controllability of the event. If someone judges that the cause of the event was within the control of the individual with mental illness, the individual with mental illness will be judged to be responsible. In contrast, if someone judges that a person with mental illness did not cause or was not in control of their illness, sympathy may be evoked.

However, if someone judges that a person with mental illness caused or was in control of their mental illness, such as believing that using drugs caused the mental illness, that person will be viewed as irresponsible and anger might be evoked. This may lead the person to expand those views into general societal beliefs, such as "too many people are irresponsible for their behavior and should be punished," which exacerbates the anger. Corrigan, Markowitz, Watson, Rowan, and Kubiak (2003) designed a study to investigate the application of attribution theory to mental illness. The authors found that attributing the cause of a person's mental illness to personal responsibility (i.e. life choices), along with the perception of dangerousness, were correlated with avoidance, reluctance to engage in helping behaviors, and support for mandatory treatment. Furthermore, a higher level of knowledge and familiarity with mental illness and

behavioral disorders were correlated with decreased avoidance and a greater willingness to help.

Attribution theory becomes even more relevant when investigating police officers' attitudes and beliefs. Police officers have a significant amount of discretion in serving as the gatekeepers for the criminal justice system. According to attribution theory, if a police officer judges that the cause of a person's mental illness is due to personal choices, the officer may become angry or frustrated. Unlike other citizens, police officers have the power to punish individuals they believe were responsible for their illness and resulting behaviors. Thus, the attribution of responsibility can lead to fines, arrest, and/or incarceration. Corrigan et al. (2002) surveyed over 1,000 persons with mental illness about stigma and discrimination. Many persons with mental illness endorsed the belief that police officers hold negative attitudes toward them.

Watson, Corrigan, and Ottati (2004) developed a study in order to investigate the effects of police officers' knowledge on attitudes towards and decision-making when responding to a person with mental illness. Officers were provided with multiple vignettes depicting a man with schizophrenia holding various roles, such as a person in need of assistance, a suspect, a victim, and a witness. Some vignettes explicitly stated the man had schizophrenia, while others provided no mental health status. Officers answered multiple questionnaires that measured attribution, dangerousness, and credibility. When police officers were told that the man had schizophrenia, they judged him to be less responsible than when the mental health status was unknown. Officers also reported feeling significantly more pity for an individual diagnosed with schizophrenia than for a person with an unknown mental status. Additionally, officers were more willing to help

someone who they knew had schizophrenia than someone for whom no mental health status was provided. However, officers did not feel less anger when they knew someone had schizophrenia than when they did not know any mental health status, and rated a person with schizophrenia as more dangerous than someone whose mental health status was unknown. While knowledge of the man's mental illness led to a greater willingness to help, it also led officers to believe the man was more dangerous.

Demir, Broussard, Goulding, and Compton (2009) investigated police officers' beliefs about the causes of schizophrenia before and after mental health training. Before the specialized training, police officers attributed a majority of the cause of schizophrenia to personal/family/social stressors rather than the biological conceptualizations widely accepted by mental health professionals. Broussard et al. (2011) investigated specific aspects of stigma and found that police officers held more stigmatizing attitudes towards persons with mental illness in regard to dangerousness, unpredictability, and tension. Officers did not report stigmatizing attitudes regarding worthlessness, coldness, or viewing individuals as mentally slow. Officers also held more stigmatizing attitudes towards a man with schizophrenia than towards a woman who was intoxicated and suicidal. Over 80% of the participants were male, which may introduce the potential for a gender bias, which the authors did not investigate.

Research has also shown gender and type of psychiatric illness is a confounding variable regarding mental health stigma and social distance. Bahora, Hanafi, Chien, and Compton (2008) investigated social distance and stigma in 74 police officers from the Atlanta area using scenarios depicting depression, schizophrenia, alcohol dependence, and cocaine dependence. Results suggest female police officers had significantly lower

social distance scores than male officers when asked about depression and alcohol abuse. Police officers reported a neutral belief or slight disagreement with the idea that persons with mental illness should not be allowed to make decisions on their own and the idea that they require coercive treatment (King, 2011). Additional research suggests that police officers did agree with forced treatment for persons with mental illness (Watson, Corrigan, and Ottati, 2004).

In order to combat the significant negative effects of stigma towards mental illness, a number of educational and experiential models have been developed. Psychosis, specifically hallucinations (e.g. hearing voices or seeing things), is often misunderstood and evokes high social distancing (Broussard, Goulding, Talley, & Compton, 2012). Deegan (1996) developed a workshop that allowed participants to actually live the experience of hearing voices while they were attempting to participate in daily activities. This training has been implemented to both medical and mental health professionals in an attempt to reduce stigma. Additionally, trainings that have been developed by persons with mental illness have resulted in a reduction in stigma towards persons with mental illness. These trainings often include individuals with mental illness sharing stories about their symptoms and how they are affected, as well as extended question-and-answer time to allow the target audience a chance to ask personal questions (Spagnolo & Murphy, 2008).

In summary, the literature on stigma towards mental illness suggests the public perception of mental illness has improved in regards to the perceived causes of mental illness (i.e. family versus biological origins) and willingness to help. However, research also suggests the public continues to hold the belief that persons with mental illness are

dangerous, which ultimately leads to increased fear. According to the social distance theory, increased fear results in a reduction of empathy towards another. Police officers have shown a willingness to help persons with mental illness but continue to believe these individuals are dangerous, which has significant implications for an officer responding to a scene involving a person with mental illness. A police officer has discretion in how to respond in a given scenario, and believing a person is violent might make the officer more likely to use force rather than attempt to de-escalate the situation.

Summary

Approximately one out of every ten people a police officer contacts has a mental illness (Reuland & Margolis, 2003). This is partly due to a number of potential consequences of mental illness, such as homelessness, lack of impulse control, loss of touch with reality, paranoia, poverty, and other symptoms or consequences. However, persons with mental illness are 4.4 times more likely to be arrested than members of the general public (Pandiani, Banks, Clements, & Schacht, 2000). Furthermore, a study in Massachusetts found that the majority of police encounters with persons with mental illness were the result of misdemeanor offenses such as trespassing or public intoxication (Fisher et al., 2006).

Police officers are often the first responders to a call involving a person with mental illness and thus act as a gatekeeper for the criminal justice system. They possess significant discretion in how they choose to handle these situations and can arrest, cite, warn, transport for services, or choose to take no action. Given that police officers hold a great amount of responsibility and are asked to make disposition decisions that have the potential to have a large influence on a person's life, officers should be properly trained

and prepared. However, the amount of resources that Massachusetts allotted to train the municipal police officers in 2010 was ranked last in the country (DMA Health Strategies, 2012). The state only spent half of what the second to last lowest state spent on training police officers (Timilty & Costello, 2010). A special commission on Massachusetts Police Training found that the chronic underfunding of the police training budget has negatively influenced police training throughout the entire state. As of 2010, the basic recruit training had not been overhauled in over a decade, which has prevented progressive training (Timilty & Costello, 2010).

Unfortunately, the lack of an updated curriculum indicates new recruits received mental health training that was inadequate and out of date. As of the beginning of this research project, the mental health portion of new recruit training was only one hour long and provided a brief overview of categories of mental illness. It did not focus on police response to a person with mental illness and was presented solely in lecture format, which only 22% of officers ranked as effective (Vermette, Pinals, & Appelbaum, 2005).

Fortunately, multiple specialized mental health training programs have been developed for police officers. Mental Health First Aid (MHFA) was developed in Australia as a twelve hour interactive course to help members of the general public identify, understand, and respond to signs of mental illness. The training includes a background of mental disorders, prevalence rates in the United States, exercises to reduce stigma and elicit classroom participation, and an overview of the categories of mental illness. In addition, the training uses the acronym “ALGEE” in order to remind responders of the proper steps to take when responding to a person in a crisis. A specialized MHFA training has also been developed for first responders, including police

officers. Completion of MHFA training has been linked to many benefits in regard to responding to persons in crisis. The course has been shown to increase knowledge and recognition of mental illness (Hossain, Gorman, & Coutts, 2010; Jorm et al., 2010; Jorm & Kitchener, 2001), self-efficacy (confidence) in responding to a person in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O’Kearney, & Dear, 2004), and significantly reduced stigmatizing attitudes towards persons with mental illness (Bee Hui Yap & Jorm, 2011; Jorm et al., 2010; Jorm & Kitchener, 2001; Jorm, Kitchener, Fischer, & Cvetkovski, 2010).

The Crisis Intervention Team (CIT) Memphis model is another specialized mental health training for police officers. CIT emphasizes the skills necessary for the officer to properly respond to a person with mental illness and focuses on jail diversion and a reduction in the use of force. The 40-hour program is for incumbent officers who volunteer to become part of the specialized team. A CIT trained officer automatically becomes the officer in charge on scene if the situation involves a person with mental illness. Completion of the CIT course has been shown to increase knowledge and recognition of mental illness (Wells & Schafer, 2006), increase officer’s confidence in responding (Bahora, Hanafi, Chien, & Compton, 2008), reduced stigmatizing attitudes towards mental illness (Compton et al., 2006), and reduced the preference for use of force (Compton et al., 2011).

Given the training discrepancies in Massachusetts, a committee of subject experts was created in order to create a new mental health curriculum for the police academy. Although CIT has widely been accepted as the gold standard for police training, CIT cannot be implemented at the recruit level due to the large amount of resources (both

time and money) necessary for a 40-hour training. Thus, the committee developed a training that included aspects from multiple police training models, including CIT, MHFA, and models developed by other states. The new curriculum increased the total training time by 1100% and ensured the material would be co-taught by a mental health professional and a police officer with ample experience with persons with mental illness. In addition, the new curriculum added group exercises, updated videos, and focused on the best police responses using de-escalation skills for various mental and cognitive disorders. At the time of this study, the new curriculum was in the pilot stage. The current research intends to measure the effects of the new curriculum in comparison with CIT and MHFA research. In addition, effects of the new curriculum will also be compared to the previous one-hour curriculum in order to investigate if Massachusetts is efficiently using resources devoted to the updated training.

CHAPTER THREE

METHOD

Introduction

The purpose of the study is to compare the effects between the one-hour and twelve-hour Massachusetts Municipal Basic Recruit Officer mental health training. Specifically, this study will compare the effects of each training curriculum on officer's de-escalation skills, self-efficacy, and stigmatizing attitudes. The updated twelve-hour training combines information and exercises from various law enforcement mental health trainings, including CIT, MHFA, and trainings developed and implemented by other states across the country. Research has shown CIT and MHFA trainings have improved de-escalation skills, self-efficacy, and reduced stigmatizing attitudes. However, research that investigates if the combination of elements from multiple training models will produce similar results in Massachusetts does not exist. The overall goal of this study is to evaluate if the updated twelve-hour training will better prepare Massachusetts municipal police officers to respond to persons with mental illness through changes in the three research variables. In this chapter, the research design, definition of terms, research questions, and hypotheses will be presented. The participants, research procedures and measures, participant debriefing, data storage and protection, and proposed data analysis will also be discussed.

Research Design

This study utilized quantitative approach which attempted to investigate the effects of two curricula of Basic Recruit Officer mental health training and explore the relationship between variables. The study used archival data from the one-hour mental

health training which was collected by the Massachusetts Municipal Police Training Committee as part of their mental health training program evaluation. The archival data was analyzed with the research data obtained from the twelve-hour training. The research data for the current study was obtained using paper-and-pencil questionnaires. This design allowed the officers to complete the questionnaires before and after the training without impeding the overall police academy process. A paper-and-pencil design was utilized due to the lack of computer availability in each respective police academy.

It should be noted that this author significantly contributed to the creation of the twelve-hour curriculum. Thus, it could be argued this author is invested in supporting the proposed hypotheses. A quantitative design was specifically chosen in order to minimize the amount of researcher bias. In addition, the utilization of research questionnaires that were not created by this author was intended to serve to minimize the authors influence on the results. Finally, this author was intentionally not present during the administration of the surveys in an attempt to minimize any potential influence this author may have on the participants or the data. In summary, the research design, the questionnaires used, and this author intentionally not being present during survey administration intended to minimize the effects that this author's predisposed notions or beliefs regarding the curriculum had on the results of the current study.

Research Questions

Fundamental research questions guided the current research to examine the impact of a combination of mental health training elements, including an increase in total training time, on police officer's de-escalation skills, self-efficacy in responding to

persons with mental illness, and stigmatizing attitudes towards mental illness. This research is imperative to investigate if Massachusetts is effectively and efficiently using the increased resources devoted to training officers on responding to persons with mental illness.

1. Does the twelve-hour training produce greater effects on officers' de-escalation abilities, self-efficacy, and stigmatizing attitudes than the one-hour training?
2. When compared to CIT and MHFA efficacy research, does the twelve-hour training produce significant changes of de-escalation skills, self-efficacy, and reduce stigma?

Hypotheses

De-Escalation Hypotheses

Hypothesis 1: There will be no significant difference in de-escalation skills as measured by the Behavioral Outcome Scale (BOS) (Appendix C) between the pre-one-hour training officers and the pre-twelve-hour training officers.

Hypothesis 2: Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict significantly greater increase in de-escalation skills as measured by the BOS than completion of the one-hour mental health training.

Self-Efficacy Hypotheses

Hypothesis 1: There will be no significant difference in the reported self-efficacy as measured by the Self-Efficacy Scale (SES) (Appendix D) between the pre-one-hour training officers and the pre-twelve-hour training officers.

Hypothesis 2: Participants with previous experience in law enforcement, corrections, probation, security or another similar field who have previously responded to a larger number of persons with mental illness will have significantly greater pre-training self-efficacy in responding to persons with mental illness as measured by the SES when compared to participants with less or no previous experience.

Hypothesis 3: Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict a significantly greater increase in self-efficacy in responding to persons with mental illness as measured by the SES than the completion of the one-hour mental health training.

Stigmatizing Attitudes Hypotheses

Hypothesis 1: There will be no significant difference in stigmatizing attitudes towards mental illness as measured by the Adapted Social Distance Scale (ASDS) (Appendix E) between the pre-one-hour training officers and the pre-twelve-hour training officers.

Hypothesis 2: Participants who report knowing a greater number of persons with mental illness will have significantly lower stigmatizing attitudes towards mental illness pre-training when compared to participants who report knowing a lesser number of persons with mental illness.

Hypothesis 3: Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict a significantly greater decrease in stigmatizing attitudes towards mental illness as measured by the ASDS than the completion of the one-hour mental health training.

Additional Hypotheses

Hypothesis 1: The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as CIT research.

Hypothesis 2: The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as MHFA research.

Participants

The only requirement for participation in this study was enrollment in the Massachusetts Municipal Basic Recruit Officer Course. This study used two separate samples. The first sample was obtained from the archival data from the Massachusetts Municipal Police Training Committee ($n=131$) through three separate classes ($n=39$, $n=37$, $n= 53$, respectively). The research sample ($n= 124$) was obtained through four separate Basic Recruit Officer Course classes ($n= 24$, $n= 24$, $n= 36$, $n= 40$ respectively). This expected total sample size was selected to closely match the total sample used by Broussard et al. (2011) in the creation of the measures utilized in this study. In addition, the expected total sample size of this study exceeded many of the sample sizes included in research on the effects of law enforcement mental health training (Bahora, Hanafi, Chien, & Compton, 2007; Compton & Chien, 2008; Compton, Demir Neubert, Broussard, McGriff, Morgan, & Oliva, 2011; Compton et al., 2006; Demir, Broussard, Goulding, & Compton, 2009). All participants were able to read the informed consent (Appendix A) and measures in English (Appendix A and Appendices B through G) and were able to use a pen or pencil to complete the measures.

Procedures

Archival Data

The archival data gathered by the MPTC as part of their mental health training program evaluation consisted of a pre-training packet and a post-training packet. The pre-training packet consisted of the David Scenario, The Behavioral Outcome Scale (BOS) (Appendix C), The Self-Efficacy Scale (SES) (Appendix D), and The Adapted Social Distance Scale (ASDS) (Appendix E). The “post-training” packet consisted of the David Scenario, the BOS, the SES, the ASDS, and the Demographics questionnaire (Appendix F). Officers were instructed to complete the packet as part of the evaluation of the mental health training. Neither the academy director nor mental health training leader were present in the room when the officers completed the questionnaires. In order to maintain confidentiality and anonymity, officers were asked to use the last four digits of their social security number and the first three letters of their street name in order to track the pre-post questionnaires. A colored piece of paper was placed on the top of each group of surveys and a rubber band was used to secure them together. The completed surveys were locked in the academy director’s office. The surveys were provided to this researcher in order to analyze the data.

Current Research

The author of this research provided the MPTC curriculum coordinator with three separate research pieces. In addition, the author of this research spoke with each academy director in person to answer any questions. The Academy Director Instructions (Appendix H) introduced the director of each respective academy to the current research and provided directions on how to administer and store the questionnaires. The

participants were given the informed consent (Appendix A) form along with the “pre-training” packet. The “pre-training” packet consisted of one copy of the the Demographics Questionnaire (Appendix F), the David scenario (Appendix B), the Behavioral Outcome Scale (BOS) (Appendix C), the Self-Efficacy Scale (SES) (Appendix D), and the Adapted Social Distance Scale (ASDS) (Appendix E). The “post-training” packet consisted of the David Scenario, the BOS, the SES, the ASDS, and the Debriefing Statement (Appendix G).

This author did not attend the trainings in order to attempt to further reduce experimenter bias by minimizing any potential influence the presence of this author had on participants. Thus, the primary questionnaire administration responsibilities fell on each academy's training director. The training director made copies of the pre and post packet. The director administered the informed consent and the pre-training packet before the recruits began the mental health portion of the training. After the director provided the officers with the packet, he/she left the room, or if he/she was unable to do so, was instructed to provide the recruits with the greatest amount of privacy possible to ensure confidentiality. After the officers complete the questionnaires, they deposited the informed consent form and the packet into a locked box labeled “pre-training,” which was provided to each academy in order to ensure the information remained secure and confidential.

Forty participants from the last research group completed on January 23, 2014, received a change in methods regarding the informed consent. Due to a formatting change when the blank informed consent documents were printed for the January 23rd test group, the informed consent document printed out as two pages in length. Each

participant was provided the two-page informed consent and given a chance to ask any questions by the administrator. The administrator then asked the participants to deposit the second page of the informed consent document, which contained their signature and consent to the research, into the locked drop box. The participants were allowed to keep the first page of the informed consent document. The research then continued with the approved research methodology. The Massachusetts School of Professional Psychology Institutional Review Board was notified of this change in research method on February 5, 2014. In addition, the administrator of the research on January 23, 2014 signed an informed consent addendum (Appendix I).

The officers then completed the twelve-hours of mental health training over two six-hour days. Following the training, the academy director provided the officers with the post-training packet, once again leaving the room (if possible) after providing the packet. After the officers completed the questionnaires, they deposited the packet into a locked box labeled “post-training,” which was also be provided to each academy prior to the training. The information in the locked boxes remained untouched and was stored behind locked doors in each academy director’s office until this author was able to travel to each academy to obtain them.

Solicitation and Enrollment of Participants

The archival data was obtained by the Massachusetts Municipal Police Committee as part of their training evaluation. The participants were again recruited as part of the Basic Recruit Officer Course. Participants were provided the pre-training packets and instructed to complete them and leave them in the front of the room. After the one-hour mental health training, participants were then asked to complete the post-training packet

and leave them in the front of the room. In order to maintain confidentiality and anonymity, participants were asked to use the last four digits of their social security number and the first three letters of their street name in order to track the pre-post questionnaires. A colored piece of paper was placed on the top of each group of surveys and a rubber band was used to secure them together. The completed surveys were locked in each academy director's office.

The participants for the current research were solicited through the Massachusetts Municipal Police Training Committee Basic Recruit Officer Course. Each new officer is required to complete the course, part of which consists of the mental health training. Given the officers were already required to be physically present in the recruit course, little recruitment for the current research was needed. Participants were informed of the nature and intent of the research and their rights through the informed consent document (Appendix A). The informed consent provided information regarding procedures, potential benefits and risks, confidentiality and anonymity, the right to refuse or withdraw at any time, and contact information of the researcher and the supervising psychologist. Because all officers must be fluent in English as part of their professional requirements, the informed consent was available to participants in English.

Data Collection

If the participants chose to sign the informed consent form, they were asked to complete a set of paper-and-pencil packet that consisted of a Demographics Questionnaire (Appendix F), a scenario (Appendix B) and three scales (Appendices C, D, and E, respectively). After completing the twelve-hour mental health training, participants were again asked to complete the paper-and-pencil packet that consisted of a

scenario (Appendix B) three scales (Appendices C, D, and E, respectively) and a debriefing statement (Appendix G). Participants were informed through the informed consent that they could stop completing the scales and withdraw from the research at any time without penalty, but they would still be required to complete the mental health training because the training and the research were separate entities. If the participants chose not to participate in the research, they were instructed to deposit the blank packet into the locked box so they would not be identified as not participating in the research.

Measures

David Scenario (Appendix B)

The David Scenario was created by Broussard et al. (2011) as a vignette describing an individual with a serious mental illness. This author was granted permission to include the David scenario in the current research by Beth Broussard and Michael Compton on May 9, 2013. The scenario provides the following directions to participants: “Please read the scenario below about David. The next set of questions will ask about your opinions and thoughts about David or someone like him.” The scenario describes an interaction between an individual known as David and a police officer. The scenario describes David talking to himself and exhibiting paranoia regarding the CIA headquarters being located on an industrial property. The police officer is responding to a call on a disturbance on private property and attempts to speak with David about his actions. Broussard et al. (2011) designed this scenario to depict a situation that a patrol officer could realistically encounter. This scenario is used to answer questions on the subsequent scales.

The Behavioral Outcome Scale (BOS) (Appendix C)

The BOS was developed by Broussard et al. (2011), who granted this author permission to use the BOS in the current research on May 9, 2013. The instrument was designed with de-escalation and referral decisions constructs. The BOS provides the following directions to participants:

“Please indicate below whether you think each of the following items would be negative or positive when interacting with someone like David. “Negative” refers to a statement or action that would not be beneficial, or would be harmful, in the situation. “Positive” refers to a statement or action that would be beneficial or helpful in the situation.”

The BOS consists of sixteen statements that are rated on a four point likert scale from 0= “Very Negative” to 3= “Very Positive.” Participants are asked to use the scale to rate statements such as “Having your hand on your baton or gun when speaking to David” and “Asking David to leave the premises immediately to avoid being arrested.” The total score may range from zero to twenty-four.

Research suggests the BOS exhibited relatively low internal consistency, with Cronbach’s α coefficients of 0.42 and .60 for the control group and 0.48 and 0.55 for the experimental group, respectively. The test-retest reliability was acceptable ($r = 0.75$). The measure showed good validity, as scores significantly changed post-manipulation ($t = -3.29$, d.f. = 62, $p = 0.002$) (Broussard et al., 2011). Although the measure showed low internal consistency, at the time of this research this author was unaware of any other scales used to measure police officer de-escalation skills.

Self-Efficacy Scale (SES) (Appendix D)

The Self-Efficacy Scale was originally created by Bahora et al. (2008) and modified by Broussard et al. (2011), who provided this author permission to use the SES in the current research on May 9, 2013. The items were adapted to fit with the David scenario. The SES provides participants with the following instructions: “For each of the following questions, circle the one response that best describes your thoughts about yourself and David’s situation.” The scale consists of sixteen items, such as “How confident would you feel in your ability to effectively communicate with someone like David?” and “How confident would you feel calming down someone like David?” Responses are rated on a four-point likert scale ranging from 1= “not at all confident” to 4= “very confident.”

Total scores can range from sixteen to sixty-four, with a larger total score indicating an officer has a higher level of confidence interacting with a person with mental illness. Research suggests the SES has exhibited high internal consistency reliability with an average Cronbach’s α value of 0.92. The scale has shown good five-day test-retest reliability of $r = 0.86$. Additionally, the SES has shown good sensitivity to change validity ($t = -9.65$, d.f. = 65, $p < 0.001$) (Broussard et al., 2011).

The Adapted Social Distance Scale (ASDS) (Appendix E)

The Adapted Social Distance Scale was based on the Social Distance Scale (Bogardus, 1925) and was adapted by Broussard et al. (2011), who gave this author permission to use the ASDS in the current research on May 9, 2013. The items were adapted to fit the David scenario. The ASDS provides the following directions to participants: “Circle the response that best describes your thoughts about David. There

are no right or wrong answers. Please answer every item.” The scale consists of nine items such as “Six months from now, when David is not in crisis, how willing would you be to live next door to him?” and “Six months from now, when David is not in crisis, how willing would you be to have him marry into your family?” Responses are rated on a four point likert scale ranging from 1= “very willing” to 4= “very unwilling” with total scores ranging from nine to thirty-six. Lower scores indicate a lower level of stigma towards mental illness.

Broussard et al. (2011) removed the neutral response option because they found officer’s over endorsed it, likely from a desire to provide socially acceptable responses. The items inquire about David six months from now in an attempt to measure social distance from an individual with a known history mental illness rather than measuring stigma that might come from seeing a person in an acute mental health crisis (p. 460). Research on the ASDS has suggested good internal consistency with an average Cronbach’s α value of 0.88. The measure showed moderately acceptable test-retest reliability at $r = 0.55$ with a good sensitivity to change after a manipulation ($t = 7.98$, d.f. = 67, $p < 0.001$).

Demographics Questionnaire (Appendix F)

The demographics questionnaire was developed by the author for use in the current research. The questionnaire consists of thirteen total items, nine of which are multiple choice questions. The remaining four questions ask the participant to write their answer in a provided space. Participants are asked to complete the demographics questionnaire after the mental health training. The directions are as follows: “Please take a moment to answer the following demographic questions. Please circle your answer for

multiple choice questions.” The questions address areas such as age, gender, education, and race. In addition, six questions ask participants about previous law enforcement experience, knowledge or interactions with persons with mental illness, and education on mental illness. The questionnaire was reviewed by all three committee members, Debra Pinals, M.D., and the curriculum coordinator for the MPTC.

Data Storage

In order to ensure anonymity while allowing the researcher to match pre-post scores, participants were asked to develop a personal code by providing the last four digits of their phone number and the first three letters of their street name. The researcher was not present during the administration of the questionnaires in an attempt to minimize experimenter bias. Thus, each academy location was provided with two locked boxes that were left at the front of the training classroom. Participants were instructed to place the completed research packets into a small opening in the front of the locked box to ensure the information remains confidential. The academy director and the mental health instructors were not present in the room after the surveys had been administered, if possible. This procedure occurred once before the training and once after the training. Only the researcher had the key to access the locked boxes. After the completion of the training, the locked boxes were placed into each respective academy director’s office behind locked door until the researcher was able to retrieve the boxes at the earliest possible time.

After the researcher retrieved the research packets from each academy, the data was entered for analysis. The paper measures, including the informed consent forms, will be stored in a locked file in the home of the researcher and will be destroyed by

shredding after three years and one day (1096 days) from the completion of the research (January 23, 2014). All written records and notes taken during the study will also be stored in a locked file in the home of the investigator and will be destroyed by shredding after a period of three days and one year (1096 days) after the completion of the research. All electronic data will be stored in password protected files on the researcher's computer, which requires a password to log on as well. After three years and one day (1096 days), the electronic data will be erased from the researcher's computer to the greatest extent possible.

Debriefing of Participants

Participants were made aware of the nature of the research through a debriefing statement (Appendix G). The debriefing statement was the last page of the post training packet after the twelve-hour training and included information regarding how to obtain the general results of the research.

Data Analysis Method

This quantitative research intended to analyze data in three parts. The first part consists of a presentation of the participant pool, which included descriptive statistics on gender, age, county of the department that hired the officer, race, and years of formal education. Descriptive data for marital status and religion were obtained for the archival data only and were not collected from research participants. The second part of the data analysis assessed if statistically significant differences exist within groups before and after both the one hour and the twelve hour training. The ordinal data obtained from the BOS, SES, and ASDS will use paired *t* tests to investigate the effects of each training curriculum on de-escalation skills, self-efficacy, and stigma. The third part of data

analysis assessed if statistically significant differences exist between the one hour training group and the twelve hour training group. In other words, did the twelve hour training produce significantly different changes than the one hour training? A repeated measures analysis was performed in order to compare the effects of the one-hour mental health training and the twelve hour mental health training.

In addition, analyses were completed in order to investigate the effects of demographic variables. A two-tailed t test was performed in order to investigate the effects of knowing someone with a mental illness and knowing someone who has been in mental health counseling on stigma. A two-tailed t test was also performed to investigate the effects of previous experience in responding to someone with mental illness on de-escalation skills and self-efficacy.

CHAPTER FOUR

RESULTS

Introduction

This chapter provides the results of the statistical analyses conducted to test the hypotheses developed for the present study. The first section of this chapter presents the socio-demographic information of the participants, which will include basic demographic information such as age, gender, race, etc., as well as information regarding the amount of previous contact the sample had with persons with mental illness. The second section presents the results of the ANOVAs and t-tests that were used to test the research hypotheses.

Participant Demographics

Archival Sample

The archival sample consisted of 131 completed surveys and five surveys that were not able to be utilized for the current study due to incomplete data or a lack of tracking information from pre to post training. The overall completion rate for the archival sample was 96 percent. The sample consisted of 122 males (93%), 8 females (6%), and 4 participants who chose not to provide a gender (3%), with an average age of 28.5 years old (ranging from 23 to 46, $SD= 4.98$). One Hundred Twenty One officers identified as White, one as Black, seven as Hispanic, one as Asian, and one as Native American, respectively. Thirty-one percent of the archival sample completed high school, 16% completed an associate's degree, 47% completed a bachelor's degree, 3.1% completed a master's degree, and 1.5% completed a doctoral degree.

Single/never married participants comprised 54% of the archival sample, with 37% reported being married, 6% divorced, 1% widowed, and 1.5% unreported. The largest portion of the archival sample reported they are contracted to work for a police department in Hampden County (n = 23), followed by Plymouth County (n = 19), Middlesex County (n = 15), and Essex County and Barnstable County (n = 14). Three officers did not report belonging to a police department. The remaining counties can be found in Table 1. For comparison purposes, the separate socio-demographic characteristics of the archival sample, research sample, and total sample are presented in Table 1.

Sixty-six percent of the archival sample reported knowing at least one person who had received mental health treatment (counseling or medications). In terms of previous education on mental illness, five officers (3.8%) had taken a junior college course, 47(36%) had taken a college course, and thirteen (10%) had direct contact with a mental health professional. Seventy-Eight officers (60%) reported they knew someone with depression, 61 (47%) reported they know someone with bipolar disorder, 50 (38%) reported they knew someone with autism, and 41 (31%) reported they knew someone with generalized anxiety disorder. The remaining categories of mental illness are shown in Table 2. Overall, more than 50 percent of the archival sample knew persons in a total of 3 or more categories of mental health. Sixty officers reported previous professional encounters (i.e. in the role of police officer, security guard, or correctional officer) with persons with mental illness ($M = 18.32$, $SD = 65.415$, range 1-500, mode = 2).

Research Sample

The research sample consisted of 124 completed surveys and 28 surveys that were not able to be utilized for the current study due to incomplete data or a lack of tracking information from pre to post training. The overall completion rate for the research sample was 82 percent. The sample consisted of 108 males (87%), 12 females (10%), and 4 participants who chose not to provide a gender (3%), with an average age of 27.5 years old (ranging from 22 to 46, $SD = 3.96$). One Hundred Twenty officers identified as White, three as Hispanic, one as Asian, and one as other (Brazilian), respectively. Twenty-two percent of the research sample completed high school, 20% completed an associate's degree, 50% completed a bachelor's degree, 6.5% completed a master's degree, and 1.6% completed a doctoral degree. The largest portion of the archival sample reported they are contracted to work for a police department in Middlesex County ($n = 27$), followed by Barnstable County ($n=19$), Essex County ($n = 14$), and Bristol County and Plymouth County ($n = 12$). The remaining counties can be found in Table 1. Four officers did not report belonging to a police department. For comparison purposes, the separate socio-demographic characteristics of the archival sample, research sample, and total sample are presented in Table 1.

Thirty-seven percent of the research sample reported knowing at least one person who had received mental health treatment (counseling or medications). In terms of previous education on mental illness, one officer (0.8%) had taken a junior college course, 55(44%) had taken a college course, and six (5%) had direct contact with a mental health professional. Thirty-one officers (25%) reported they knew someone with depression, 15 (12%) reported they know someone with bipolar disorder, and 18 (15%)

reported they knew someone with generalized anxiety disorder. The remaining categories of mental illness are shown in Table 2. Overall, less than half (45%) of the research sample knew persons in at least one of the mental health categories. Sixty-five officers reported previous professional encounters (i.e. in the role of police officer, security guard, or correctional officer) with persons with mental illness ($M = 28.09$, $SD = 79.6$, range 1-500, mode = 1).

Total Sample

The total sample of archival and research participants consisted of 254 completed surveys and 32 surveys that were not able to be utilized for the current study due to incomplete data or a lack of tracking information from pre to post training. The completion rate for the overall sample was 89 percent. The sample consisted of 230 males (90%), 20 females (8%), and 4 participants who chose not to provide a gender (1.5%), with an average age of 28 years old (ranging from 22 to 46, $SD = 4.56$). Two hundred forty one officers identified as White, one as Black, ten as Hispanic, two as Asian, and one as other (Brazilian), respectively. Twenty-seven percent of the research sample completed high school, 18% completed an associate's degree, 49% completed a bachelor's degree, 5% completed a master's degree, and 1.6% completed a doctoral degree. The largest portion of the archival sample reported they are contracted to work for a police department in Middlesex County ($n = 42$), followed by Plymouth County ($n = 31$), Hampden County ($n = 30$), and Barnstable County ($n = 29$). The remaining counties can be found in Table 1. Seven officers did not report belonging to a police department. For comparison purposes, the separate socio-demographic characteristics of the archival sample, research sample, and total sample are presented in Table 1.

Over half (52.5%) of the overall sample reported knowing at least one person who had received mental health treatment (counseling or medications). In terms of previous education on mental illness, six officers (2%) had taken a junior college course, 102(40%) had taken a college course, and 19 (8%) had direct contact with a mental health professional. One-hundred nine officers (48%) reported they knew someone with depression, 76 (30%) reported they know someone with bipolar disorder, 59 (23%) reported they knew someone with generalized anxiety disorder, and 56 (22%) reported they knew someone with autism. The remaining categories of mental illness are shown in Table 2. Overall, more than half (57%) of the overall sample knew persons in at least one of the mental health categories. One-hundred twenty five officers reported previous professional encounters (i.e. in the role of police officer, security guard, or correctional officer) with persons with mental illness ($M = 23.40$, $SD = 73$, range 1-500, mode =1).

Table 1

Socio-demographic characteristics of the two groups of police officers

Characteristics	<i>One-Hour Sample</i>		<i>Twelve-Hour Sample</i>		<i>Total Sample</i>	
	<i>n= 131 officers</i>		<i>n= 124 officers</i>		<i>n= 254 officers</i>	
	Mean	S.D	Mean	S.D.	Mean	S.D.
Age, years	28.5	4.98	27.5	3.96	28	4.53
Education, years	14.80	1.97	14.97	1.86	14.88	1.91
	n	%	n	%	n	%
Gender, male	122	93	108	87	230	90
Gender, female	8	6	12	10	20	8%
Race						
White	121	92	120	97	241	94.5
Black	1	0.8	0	0	1	0.4
Hispanic	7	5.3	3	2.5	10	4
Asian	1	0.8	1	0.8	2	1
Native American	1	0.8	0	0	1	< .1
Other	0	0	1	0.8	1	< .1
County						
Barnstable	14	10.7	15	12.1	29	11.4
Berkshire	5	3.8	6	4.8	11	4.3
Bristol	9	6.9	12	9.7	21	8.2
Dukes	0	0	1	0.8	1	0.4
Essex	14	10.7	14	11.3	28	11
Franklin	4	3.4	3	2.4	7	2.7
Hampden	23	17.6	7	5.6	30	11.8
Hampshire	3	2.3	0	0	3	1.2
Middlesex	15	11.5	27	21.8	42	16.5
Norfolk	7	5.3	10	8.1	17	6.7
Plymouth	19	14.5	12	9.7	31	12.2
Suffolk	7	5.3	7	5.6	14	5.5
Worcester	7	5.3	7	5.6	14	5.5
No County	1	0.8	3	2.4	4	1.6
Education						
High School	41	31.3	27	21.8	68	26.7
Associate's	21	16.0	25	20.2	46	18
Bachelor's	62	47.3	62	50	124	48.6
Master's	4	3.1	8	6.5	12	4.7
Doctoral	2	1.5	2	1.6	4	1.6

Table 2

Contact with persons with mental illness of the two groups of police officers

Categories	<i>One-Hour Sample n= 131 officers</i>		<i>Twelve-Hour Sample n= 124 officers</i>		<i>Total Sample n= 254 officers</i>	
	n	%	n	%	n	%
	Know someone in MH T/X	87	66.4	47	37.9	134
Previous Education on MH						
Junior College Course	5	3.8	1	0.8	6	2.4
College Course	47	35.9	55	44.4	102	40
Professional Contact	13	9.9	6	4.8	19	7.5
Regular Contact Categories						
Depression	78	59.5	31	25	109	42.7
Bipolar	61	46.6	15	12.1	76	29.8
GAD	41	31.3	18	14.5	59	23.1
Panic Disorder	19	14.5	8	6.5	27	10.6
Specific Phobia	10	7.6	2	1.6	12	4.7
Schizophrenia	18	13.7	4	3.2	22	8.6
Personality Disorder	9	6.9	2	1.6	11	4.3
Intellectual Disability	24	18.3	6	4.8	30	11.8
Asperger's	27	20.6	3	2.4	30	11.8
Autism	50	38.2	6	4.8	56	22
Alzheimer's	39	29.8	7	5.6	46	18
Dementia	29	22.1	7	5.6	36	14.1
None	18	13.7	66	53.2	84	32.9
Total Categories Known						
0	18	13.7	69	55.6	87	34.1
1	26	19.8	31	25	57	22.4
2	20	15.3	13	10.5	33	12.9
3	19	14.5	5	4.0	24	9.4
4	19	14.5	2	1.6	21	8.2
5	7	5.3	2	1.6	9	3.5
6	6	4.6	0	0	6	2.4
7	6	4.6	1	0.8	7	2.7
8	3	2.3	0	0	3	1.2
9	3	2.3	0	0	3	1.2
10	3	2.3	0	0	3	1.2
11	0	0	0	0	0	0
12	1	0.8	1	0.8	2	0.8

Hypotheses Testing

De-Escalation Hypotheses

Hypothesis 1: *There will be no significant difference in de-escalation skills as measured by the Behavioral Outcome Scale (BOS) (Appendix C) between the pre-one-hour training officers and the pre-twelve-hour training officers.*

An ANOVA was performed to examine if there were significant differences between the pre-one-hour training officers and the pre-twelve-hour training officers in regards to de-escalation abilities and referral decisions as measured by the total Behavioral Outcome Scale (BOS) score. A significant difference existed between the pre-one-hour training officers and the pre-twelve-hour training officers on total BOS scores, $F(1, 253) = 70.16, p < .001$. Pre-twelve-hour training officers scored higher on the BOS ($M = 37.53, SD = 4.74, n = 124$), indicating higher levels of de-escalation and referral decision abilities than the pre-one-hour training officers ($M = 36.04, SD = 4.94, n = 131$). These results fail to support the hypothesis.

Hypothesis 2: *Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict significantly greater increase in de-escalation skills as measured by the BOS than completion of the one-hour mental health training.*

A repeated measures ANOVA was performed to examine if there were significant differences between the effects of the one-hour training and the twelve-hour training on de-escalation abilities and referral decisions as measured by the total score of the Behavioral Outcome Scale (BOS). There was no significant difference in the pre-post change in BOS scores between the one-hour training group and the twelve-hour training group $F(1, 253) = .085, p = .771$. The BOS score increased for both the one-hour training

group ($M = 2.55$) and the twelve-hour training group ($M = 2.38$), indicating all participants de-escalation and referral abilities improved with training. However, the twelve-hour training did not produce greater effects than the one-hour training. These results fail to support the hypothesis.

Although not originally hypothesized, years and level of education was correlated with de-escalation abilities and referral decisions. An independent samples T-test was performed in order to investigate effects of education on the pre-training BOS score. The participants were placed into two groups for comparison. The first group consisted of participants who reported a high school diploma/twelve years of education ($n = 56$), while the second group consisted of participants who had 13 or more years of education ($n = 195$), which consisted of associate's degrees, bachelor's degrees, master's degrees, and doctoral level/professional degrees. Descriptive statistics for level and years of education can be found in Table 1. Participants with greater than high school education had significantly greater de-escalation and referral decision abilities ($M = 37.25$, $SD = 4.80$) than those with a high school education ($M = 35.21$, $SD = 5.07$), $t(253) = 2.76$, $p = <.05$).

Self-Efficacy Hypotheses

Hypothesis 1: *There will be no significant difference in the reported self-efficacy as measured by the Self-Efficacy Scale (SES) (Appendix D) between the pre-one-hour training officers and the pre-twelve-hour training officers.*

An ANOVA was performed to examine if there were significant differences between the pre-one-hour training officers and the pre-twelve-hour training officers in regards to self-efficacy as measured by the total Self-Efficacy Scale (SES) score. No

significant difference existed between the pre-one-hour training officers and the pre-twelve-hour training officers on total SES scores, $F(1, 253) = 1.99, p = .159$. The pre-training scores are included in Table 3. These results support the hypothesis and indicate the pre-training groups were similar in regard to self-efficacy ratings.

Hypothesis 2: *Participants with previous experience in law enforcement, corrections, probation, security or another similar field who have previously responded to a larger number of persons with mental illness will have significantly greater pre-training self-efficacy in responding to persons with mental illness as measured by the SES when compared to participants with less or no previous experience.*

An Independent samples T-Test was utilized in order to investigate the effects of previous experience in a law enforcement field. Participants were asked if they had previous experience in a law enforcement field, and if so, to report an approximate number of previous encounters with persons with mental illness. In order to group the responses into meaningful groups that were able to be analyzed, a cutoff of two previous responses was utilized. Due to a wide range of previous encounters with persons with mental illness (0-500), a cutoff of two encounters provided groups of 171 participants who had less than two encounters and a group of 82 participants who had two or more previous encounters. Those with less than two previous encounters scored lower on the SES ($M = 50.82, SD = 7.55$) than those with two or more previous encounters ($M = 51.82, SD = 7.17$). However, having two or more previous encounters did not result in significantly higher self-efficacy scores at the pre-test level, $t(251) = 1.01, p = >.05$. These results fail to support the hypothesis.

Hypothesis 3: *Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict a significantly greater increase in self-efficacy in responding to persons with mental illness as measured by the SES than the completion of the one-hour mental health training.*

A repeated measures ANOVA was performed to examine if there were significant differences between the effects of the one-hour training and the twelve-hour training on self-efficacy as measured by the total score of the Self-Efficacy Scale (SES). There was a significant difference in the pre-post change in SES scores between the one-hour training group and the twelve-hour training group $F(1, 253) = 4.90, p = <.05$. The SES score increased for both the one-hour training group ($M = 4.26$) and the twelve-hour training group ($M = 5.86$), indicating all participants de-escalation and referral abilities increased. The hypothesis is supported, indicating participants that received the twelve-hour training showed greater increase in self-efficacy than participants who received the one-hour training.

Table 3
Comparison of Differences in Groups for Research Variables

Variables	<i>One-Hour Sample</i>			<i>Twelve-Hour Sample</i>		
	<i>n= 131 officers</i>			<i>n= 124 officers</i>		
	Pre	Post	Difference	Pre	Post	Difference
BOS (Total)	36.04	38.59	+2.55	37.53	39.91	+2.38
SES (Total)	52.09	56.36	+ 4.26	50.18	56.03	+5.86
SDS (Total)	21.98	20.82	-1.16	23.91	22.32	-1.59

Stigmatizing Attitudes Hypotheses

Hypothesis 1: *There will be no significant difference in stigmatizing attitudes towards mental illness as measured by the Adapted Social Distance Scale (ASDS) (Appendix E) between the pre-one-hour training officers and the pre-twelve-hour training officers.*

An ANOVA was performed to examine if there were significant differences between the pre-one-hour training officers and the pre-twelve-hour training officers in regards to stigmatizing attitudes towards mental illness as measured by the total Adapted Social Distance Scale (ASDS) score. A significant difference existed between the pre-one-hour training officers and the pre-twelve-hour training officers on total ASDS scores, $F(1, 253) = 7.27, p = < .01$. Pre-twelve-hour training officers scored higher on the SES ($M = 23.91, SD = 5.24, n = 122$), indicating higher levels of stigmatizing attitudes towards mental illness than the pre-one-hour training officers ($M = 21.98, SD = 5.04, n = 131$). These results fail to support the hypothesis.

Hypothesis 2: *Participants who report knowing a greater number of persons with mental illness will have significantly lower stigmatizing attitudes towards mental illness pre-training when compared to participants who report knowing a lesser number of persons with mental illness.*

Independent samples T-tests were completed on the entire sample in order to investigate the effects of knowing a greater number of people with mental illness on stigmatizing attitudes. There were multiple attempts to measure stigmatizing attitudes, which included knowing persons with specific categories of mental illness, knowing someone in mental health treatment, and previous education on mental illness.

Descriptive statistics for each of these variables can be found in Table 2. Total mental health categories known was divided into two groups in order to be analyzed. Given the wide range (0-12), a cutoff score of two or more was used in order to create groups of similar size ($n = 111, 144$, respectively). Recruit officers that reported knowing persons in less than two of the mental health categories had significantly higher stigmatizing attitudes ($M = 23.62, SD = 5.20$) than those who knew persons in two or more of the mental health categories ($M = 22.00, SD = 5.11$), $t(253) = -2.46, p = <.05$.

More than half of participants reported they knew someone in mental health treatment ($n = 134$). Participants that did not know someone in mental health treatment had a higher level of stigmatizing attitudes at the pre-training level ($M = 23.47, SD = 5.22$) than those who did know someone in mental health treatment ($M = 22.41, SD = 5.18$). However, the pre-training difference was not statistically significant, $t(253) = -1.63, p = >.05$. In regard to prior education, 101 participants reported taking a college course that involved mental illness. Those who reported prior education showed lower stigmatizing attitudes ($M = 22.75, SD = 5.11$) than those who did not have previous education on mental illness ($M = 23.02, SD = 5.29$). However, the pre-training difference was not statistically significant, $t(253) = .401, p = >.05$.

Overall, the hypothesis was partially supported. Participants who had more personal or professional contact with persons in various mental health categories showed significantly lower stigmatizing attitudes towards persons with mental illness. However, knowing someone in mental health treatment and prior education on mental illness did not significantly reduce stigmatizing attitudes towards persons with mental illness.

Hypothesis 3: *Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict a significantly greater decrease in stigmatizing attitudes towards mental illness as measured by the ASDS than the completion of the one-hour mental health training.*

A repeated measures ANOVA was performed to examine if there were significant differences between the effects of the one-hour training and the twelve-hour training on stigmatizing attitudes towards mental illness as measured by the total score of the Adapted Social Distance Scale (ASDS). There was no significant difference in the pre-post change in ASDS scores between the one-hour training group and the twelve-hour training group $F(1, 251) = .71, p = .40$. The SES score decreased for both the one-hour training group ($M = -1.16$) and the twelve-hour training group ($M = -1.59$), indicating all participants stigmatizing attitudes towards mental illness were reduced with training. However, the twelve-hour training did not produce greater effects than the one-hour training. These results fail to support the hypothesis.

Additional Hypotheses

Hypothesis 1: *The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as CIT research.*

First, the current research will be compared to research completed by Broussard et al. (2011), who created the scales used in the current study and developed initial reliability and validity data in the 2011 study. It should be noted that the current study was administered with recruit officers during academy training, while the Broussard et al. research was administered with incumbent officers during CIT training. Table 4 includes a comparison of the changes in the current study to changes in the research by Broussard

et al. The twelve-hour training resulted in smaller total changes in each research variable as noted in Table 4. However, it should also be noted that the pre-training sample used by Broussard et al. scored lower on the BOS and the SES, and higher on the SDS than the current research sample. This indicates the officers in the current research had greater de-escalation and referral abilities, higher self-efficacy, and lower levels of stigma towards mental illness than the sample used by Broussard et al.

Table 4
A Comparison of the current research study to research by Broussard et. al (2011)

Research Variables	Current Research				Broussard et. al (2011)			
	<i>One-Hour Sample</i> <i>n= 131 officers</i>		<i>Twelve-Hour Sample</i> <i>n= 124 officers</i>		<i>Non-CIT Officers</i> <i>n= 105 officers</i>		<i>CIT Officers</i> <i>n= 73 officers</i>	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
BOS (Total)	36.04	38.59	37.53	39.91	36.19	36.7	36.51	39.06
SES (Total)	52.09	56.36	50.18	56.03	48.33	49.63	48.36	57.59
SDS (Total)	21.98	20.82	23.91	22.32	25.25	25.04	25.42	20.25

Next, the current research will be compared to research on the effects of CIT training completed by King (2011). King used 98 officers from various counties in Maine to measure the effects of CIT training on self-efficacy using the Self-Efficacy Scale (SES). It should be noted that the current study was administered with recruit officers during academy training, while the King research was administered with incumbent officers during CIT training. King (2011) found that CIT training

significantly increased officer's reported self-efficacy from pre-training ($M = 50.26$, $SD = 6.84$, $n = 57$) to post-training ($M = 59.37$, $SD = 4.90$, $n = 57$) (p. 62).

These results are comparable to the SES effects from the twelve-hour training in the current study from pre-training ($M = 50.18$, $SD = 7.24$, $n = 124$) to post-training ($M = 56.03$, $SD = 6.59$, $n = 124$). In addition, King's research suggested CIT training lowered officer's levels of socially restrictive attitudes, distrust, and fearfulness towards persons with mental illness. This is comparable to the social distance variable used in the current study, which indicated the twelve-hour training significantly lowered officer's stigmatizing attitudes towards persons with mental illness.

Hypothesis 2: *The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as MHFA research.*

Before discussing this hypothesis, it should be noted that MHFA was developed for members of the public. As such, members of the public have a different job than those of police officers. Police officers are tasked with protecting the public while upholding the law, while ordinary citizens trained in MHFA are tasked with helping a person in crisis until a first responder, such as a police officer, responds to the scene. Thus, it is possible that the variables measured in the MHFA research are somewhat different from the variables measured in the current research. Nonetheless, the current research will be compared to the overall MHFA results for self-efficacy and stigmatizing attitudes. De-escalation variables were not included in any of the MHFA research available to this author at the time of the current study. It should also be noted that the MHFA research does not use the same scales utilized in the current study. In fact, many

of the variables, such as confidence in responding, were measured with one question in a Likert scale format. Thus, the results will be provided in summary format.

Overall, many research trials have found that MHFA increased participants confidence in providing help to someone in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O’Kearney, & Dear, 2004; Kitchener & Jorm, 2006; Kitchener & Jorm, 2004; Morawska et al., 2013). Comparatively, the current research results suggested the 12-hour training also significantly increased officer’s confidence in responding to persons with mental illness. Social distance, which is the measure of stigma used in the current research, was also used in much of the MHFA research. Overall, research suggests that MHFA significantly decreases social distance towards persons with mental illness. However, there are differences in social distance depending on the mental illness. This is important to note given the current study used a vignette depicting a person with psychosis. In comparison, the current research showed the twelve-hour mental health training did not significantly reduce social distance towards persons with mental illness.

CHAPTER FIVE

DISCUSSION

This chapter presents a summary of the research before providing a more comprehensive discussion of the results. The proposed hypotheses will be used in order to further interpret the results. The strengths and limitations of the research design and any ethical issues will also be discussed. Finally, recommendations for future research, the implications for future practice, and a conclusion will be presented.

Overview of the Study

Persons with mental illness have relatively frequent contact with police officers and are 4.1 times more likely to be arrested than members of the general public (Pandiani, Banks, Clements, & Schacht, 2000). Researchers have classified crimes committed by persons with mental illness into three main categories: 1) acts that are a byproduct of mental illness such as disorderly conduct or disturbing the peace; 2) crimes which are intended to improve the economic situation of the person, such as petty theft or shoplifting; 3) more serious offenses, such as assault, burglary, and robbery (The Sentencing Project, 2002, p. 7). Many persons with mental illness are arrested by the police for the first two of the above types of crimes, rather than being diverted to other services. The persons with mental illness may be in distress or have active symptoms of mental illness such as psychosis or mania, which requires the officer to make many decisions in how to respond to the situation. Officers can make a judgment to facilitate transportation to the emergency room, arrest the individual and bring him/her to jail, or

contact a mobile crisis unit to evaluate the person served. These are only a few options available to an officer.

Some situations may require an officer to respond in a different manner than they are accustomed to. Many times, officers use scene control and specific defensive tactics to deal with suspects. However, responding to persons with mental illness may require a different approach. Persons with mental illness experience cognitive, affective, and behavioral symptoms that may become exacerbated by loud noises, complex directions, increases in emotional intensity such as fear, or other aspects of the interaction between the officer and the surrounding scene. Thus, a number of specialized trainings have been developed in order to assist officers in responding to persons with mental illness. Modules such as Crisis Intervention Team (CIT) and Mental Health First Aid (MHFA) training were designed to provide police officers and other first responders with the knowledge and skills to allow officers to resolve a crisis event.

Crisis Intervention Team (CIT) training is one prominent police training module on mental illness which acts as a pre-arrest jail diversion program for persons with mental illness. This 40-hour program provides crisis intervention training in order to respond to persons with mental illness and to increase the safety of the persons served, the officers involved, family members, and the public. Crisis Intervention Team training reaches its goals by providing information about mental illness, scenario based de-escalation techniques, information regarding local mental health services, and visits to the local mental health facilities. Most states across the country have some form of CIT training in at least one county or geographical district (National Alliance on Mental Illness, n.d.).

Research has shown that CIT training results in an increase in knowledge and recognition of mental illness (Compton et al., 2006; Compton & Chien, 2008; Hanafi, Bahora, Demir, & Compton, 2008). With regard to self-confidence, CIT training improved officers' confidence in responding to persons with mental illness (Bahora, Hanafi, Chien, & Compton, 2008; Borum, Deane, Steadman, & Morrissey, 1998). Similar to MHFA, CIT training also reduced stigmatizing attitudes towards persons with mental illness (Bahora, Hanafi, Chien, & Compton, 2008; Compton et al., 2006; Demir, Broussard, Goulding, & Compton, 2009). Furthermore, Compton et al. (2011) found that officers who had completed CIT training found non-physical responses to persons with mental illness as more effective than physical responses. Finally, CIT trained officers were more likely to divert individuals with mental illness to treatment than those without CIT training, which suggests CIT can be an effective jail diversion strategy (Skeem & Bibeau, 2008).

Mental Health First Aid has been modified for use with public safety personnel, including police officers, probation officers, correctional officers, and other public safety officials. The modified version of the training emphasizes the recognition of symptoms associated with psychosis, substance abuse, co-occurring disorders, depression, anxiety, traumatic brain injury, autism spectrum disorders, and excited delirium, as well as the skills to neutrally manage the scene in which a person with mental illness may be involved. The public safety version also spends time discussing self-care strategies due to the emotional demands of responding to persons in crisis (B. Gibb, personal communication, July 24, 2013).

Much of the research on MHFA was completed in Australia, where the training was originally developed. Completion of MHFA training helps increase participants overall knowledge and recognition of various forms of mental illness (Hossain, Gorman, & Coutts, 2010; Jorm et al., 2010; Jorm & Kitchener, 2001; Jorm, Kitchener, Fischer, & Cvetkovski, 2010; Jorm, Kitchener, O’Kearney, & Dear, 2004; Lam, Jorm, & Wong, 2010; Minas, Colucci, & Jorm, 2009; O’Reilly, Bell, Kelly, & Chen, 2011). Recognition of mental illness among police officers is imperative in order to effectively respond to a person in crisis. Participants who completed the MHFA course also showed increased self-confidence in responding to persons in crisis (Jorm & Kitchener, 2001; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O’Kearney, & Dear, 2004; Kitchener & Jorm, 2006; Kitchener & Jorm, 2004; Morawska et al., 2013). Finally, MHFA has also been shown to reduce stigmatizing attitudes towards persons with mental illness (Bee Hui Yap & Jorm, 2011; Jorm et al., 2010; Jorm & Kitchener, 2001; Jorm, Kitchener, Fischer, & Cvetkovski, 2010; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O’Kearney, & Dear, 2004; Kitchener & Jorm, 2006; Kitchener & Jorm, 2004; Lam, Jorm, & Wong, 2010; Morawksa et al., 2012; Minas, Colucci, & Jorm, 2009; O’Reilly, Bell, Kelly, & Chen, 2011).

In 2008, Massachusetts provided the least amount of training dollars per officer when compared to thirteen other states across the country. In fact, Massachusetts provided half of the amount the next closest state provided to train police officers. In response, a special committee was created to investigate the training procedures for Massachusetts police officers, part of which was dedicated to responding to persons with mental illness. The committee found inadequate training and recommended that the state

develop comprehensive training for all police officers on responding to persons with mental illness (DMA Health Strategies, 2012). Prior to the onset of this research project, Massachusetts police academy recruits received a one-hour training module on mental illness.

Some Massachusetts cities and towns have some form of specialized mental health program for police officers. At the time of the current study, Berkshire, Worcester, Nantucket, Bristol, and Middlesex counties had each implemented CIT training programs (National Alliance on Mental Illness, n.d.). In addition, Fitchburg, Northampton, and Somerville have trained a number of their officers in MHFA. Framingham, Danvers, Worcester, Marlborough, Arlington, and Wakefield have all developed ride along programs. Framingham has developed a jail diversion program that has served as a model for other municipalities in Massachusetts. While this is not a complete list of specialized programs in Massachusetts, it represents some of the attention that has been devoted to responding to persons with mental illness.

Although some cities and towns have specialized programs, many of the 351 cities and towns in Massachusetts do not have a specialized program and rely on their officers to use their judgment without benefit of special training programs. While CIT and MHFA training have shown promising results, they require a significant amount of financial support from a state which has a limited training budget. Given the significant budget cuts, Broussard et al. (2011) stated, “shorter types of intervention may be more practical and efficient to implement across multiple departments” (p. 7). One of the most cost-effective ways to train a large number of police officers is through the new recruit

academy, which all officers are required to complete before exercising full police powers within Massachusetts.

In response to the DMA Health Strategies (2012) recommendation, the Massachusetts Municipal Police Training committee partnered with the Department of Mental Health, the National Alliance of Mental Illness- Massachusetts, and this researcher, in order to create a new, updated curriculum that reflected the best practices in responding to persons with mental illness. An updated, twelve-hour training was created which increased the total training time, included more interactive material and classroom exercises, and focused on de-escalation and other skills that can be helpful when responding to persons with mental illness. In addition, the training is also designed to be led by a mental health professional and a police officer in order to allow for a greater police perspective from the trainers. The twelve-hour training was reviewed by psychological, legal, and law enforcement professionals to allow multiple professional perspectives into the curriculum.

The present study intended to examine the new twelve-hour training and the impact of the combination of mental health training elements, including an increase in total training time, on police officer's de-escalation skills, self-efficacy in responding to persons with mental illness, and stigmatizing attitudes towards mental illness. This research is needed to investigate if Massachusetts is effectively and efficiently using the increased resources devoted to training officers on responding to persons with mental illness. Specifically, the research questions were: (1) Does the twelve-hour training produce greater effects on officers' de-escalation abilities, self-efficacy, and stigmatizing attitudes than the one-hour training, and (2) When compared to CIT and MHFA efficacy

research, does the twelve-hour training produce significant changes in de-escalation skills, self-efficacy, and reduce stigma?

Interpretation of Results

De-Escalation Hypotheses

Hypothesis 1: There will be no significant difference in de-escalation skills as measured by the Behavioral Outcome Scale (BOS) (Appendix C) between the pre-one-hour training officers and the pre-twelve-hour training officers.

This first de-escalation hypothesis was tested by comparing the pre-training score of the Behavioral Outcome Scale (BOS) between participants who received the one-hour training and participants who received the twelve-hour training. Contrary to the prediction of hypothesis one, there was a significant difference between officers who received the one-hour training and officers who received the twelve-hour training at the pre-training level. The present study found that, on average, pre-twelve-hour training officers scored significantly higher on measures of de-escalation than pre-one-hour training officers. These results cannot be compared to previous research because the current research used two separate groups with two separate trainings. Prior CIT research typically measured officers who receive CIT training and a control group that does not receive any training. Thus, this research is unique in that it compares two separate trainings on mental illness.

Hypothesis 2: Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict significantly greater increase in de-escalation skills as measured by the BOS than completion of the one-hour mental health training.

This second de-escalation hypothesis was tested by comparing the changes in total score on the BOS between pre-training and post-training in the one-hour training group and the twelve-hour training group. Completion of the twelve-hour mental health training did not result in significantly greater increases in de-escalation abilities than completion of the one-hour training. In fact, the data showed the one hour training actually resulted in a slightly higher increase in de-escalation abilities than the twelve-hour training. This result was not expected given the drastic differences between the one-hour training and the twelve-hour training, specifically the inclusion of de-escalation skills for many psychiatric disorders that were not included in the one-hour training. Although these results reject the proposed hypothesis, it must be noted that the two research samples were significantly different at the pre-training level. Participants who completed the one-hour training had significantly more prior experience in law enforcement roles, such as part-time police officers, military, security guards, or correctional officers, than those in the twelve-hour training group. Given the prior work experience, it is also not surprising that the one-hour training participants had significantly more experience in responding to persons with mental illness during their prior occupations.

There are a number of potential reasons for the pre-training difference in de-escalation abilities. First and arguably most importantly, the researcher was unable to control when the mental health curriculum was given within the overall police academy.

Different groups of recruit officers completed the training in different weeks of the overall police academy, which meant they had different levels of police training, such as defensive tactics, firearms training, legal training, and many other topics that likely influenced their responses on the BOS. A recruit officer who has received more firearms training and defensive tactics may be more likely to endorse responses using those methods versus a recruit officer who has had less firearms training. In addition, officers who received legal training before the mental health training, specifically discussing previous lawsuits against police officers, may be more likely to endorse nonviolent responses out of fear of legal action against them.

Second, recruit officers are not a homogenous group and have differing levels of pre-training law enforcement experience. Many recruits who are going through the police academy have previous experience, whether it occurred under part-time status in college police, as a security guard, or as a correctional officer. In addition, many new recruits have reported extensive experience serving in the military, some of which may have had some experience in working with persons with mental illness or even training on how to respond to persons with mental illness. Participants were asked how many encounters they have had while working in a prior law enforcement field, which included military, this grouping did not separate military experience from other types of experience. In addition, the current research asked participants where they had worked before entering the police academy. However, the answers were not obtained in a manner that could be quantitatively analyzed. Thus, although this researcher can qualitatively state that many individuals had previous experience in the military, there is no specific data to interpret this statement.

In addition to the proposed hypotheses for de-escalation abilities, a correlational relationship was found between level of education and de-escalation abilities. Participants who had a high school education (12 years) were found to have lower levels of de-escalation abilities than those who had post-high school education (13 years and above). Parks Daloz, Keen, Keen, and Daloz Parks (1996) argue that college is a time when individuals are able to adapt ways of thinking towards becoming more critical and taking additional perspectives into account, which leads them to new possibilities they may have not been previously aware of (p. 223). Thus, one possibility for the correlation is that officers with higher levels of education were able to take different perspectives into account which may have helped to better understand the perspective of the persons with mental illness. In addition, the ability to think of multiple methods of responding in any given situation is an important part of de-escalation because de-escalation abilities can be significantly different from the command presence and use of force that an officer often utilizes.

Self-Efficacy Hypotheses

Hypothesis 1: There will be no significant difference in the reported self-efficacy as measured by the Self-Efficacy Scale (SES) (Appendix D) between the pre-one-hour training officers and the pre-twelve-hour training officers.

The first self-efficacy hypothesis was tested by comparing the pre-training score of the Self-Efficacy Scale (SES) between participants who received the one-hour training and participants who received the twelve-hour training. There were no significant differences between the two groups at the pre-training level, which supports the proposed hypothesis. Similar confidence levels between groups is an interesting finding given the

one-hour training group and the twelve-hour training group were significantly different at the pre-training level for the other two research variables. Self-efficacy, or the officer's belief in their ability and/or confidence to respond to a person with mental illness, was similar even though the two groups had various levels of training, experience, and direct interactions with persons with mental illness. One might hypothesize that the officers who did not have prior law enforcement experience or experience responding to persons with mental illness responded in a manner that overestimated their ability to respond at the pre-training level, even if they may have done so unconsciously. One might believe that if one has no experience with a population or in the field of law enforcement, one might report a lower level of confidence given one's professional background.

Hypothesis 2: Participants with previous experience in law enforcement, corrections, probation, security or another similar field who have previously responded to a larger number of persons with mental illness will have significantly greater pre-training self-efficacy in responding to persons with mental illness as measured by the SES when compared to participants with less or no previous experience.

This second self-efficacy hypothesis was tested to investigate correlations of previous experience in a law enforcement field on self-efficacy using the pre-training SES score. Specifically, the number of previous encounters of persons with mental illness was used as a measure of prior experience. Although participants who had two or more prior encounters with persons with mental illness showed higher levels of self-efficacy, the increase was not statistically significant. However, the range of the number of prior encounters was very large (0-500) and the data was not able to be organized into meaningful groups within the overall range. It is likely that these results may have

changed with additional participants who would add additional data to the overall set and permit the creation of meaningful groups that could be compared (i.e. 0-10, 11-20, 21-30, etc.). It seems logical that someone who has responded to 200 persons with mental illness in a law enforcement role would have higher self-efficacy than someone who had never responded to a person with mental illness.

Hypothesis 3: Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict a significantly greater increase in self-efficacy in responding to persons with mental illness as measured by the SES than the completion of the one-hour mental health training.

The third self-efficacy hypothesis was tested by comparing the changes in total SES score between pre-training and post-training in the one-hour training group and the twelve-hour training group. Completion of the twelve-hour mental health training resulted in significantly greater increases in self-efficacy than completion of the one-hour training. Although the total SES score at the end of the one-hour training and the twelve-hour training were similar for each group, the results indicate that there was a larger change in SES score from the twelve-hour training. Therefore, future recruit officers will receive greater benefits from the twelve-hour training than they would from the one-hour training, regardless of their self-efficacy prior to completing the training. The twelve-hour training likely produces a greater increase in self-efficacy because it provides specific de-escalation skills, community resources, and numerous opportunities to view and critically discuss responding to persons with mental illness.

This is an important aspect of the twelve-hour training because it will allow new officers to have more confidence coming out of the police academy. When a person has

a higher level of confidence in their own abilities, they may be less likely to be nervous or anxious when responding to a person with mental illness. Higher levels of anxiety have been shown to negatively influence attention to detail, ineffective and inefficient search strategies, and reduced complex fine motor skills (Calvo, Alamo, & Ramos, 1990; Janelle, 2002). A reduction in visual processing and fine motor skills can have significant implications for police officers given the requirements of their jobs, especially when responding to persons with mental illness. Hopefully, higher self-confidence, which may lead to less anxiety, will allow the officer to fully process the scene and remain calm in responding.

Stigmatizing Attitudes Hypotheses

Hypothesis 1: There will be no significant difference in stigmatizing attitudes towards mental illness as measured by the Adapted Social Distance Scale (ASDS) (Appendix E) between the pre-one-hour training officers and the pre-twelve-hour training officers.

The first stigmatizing attitudes hypothesis was tested by comparing the pre-training score of the Adapted Social Distance Scale (ASDS) between participants who received the one-hour training and participants who received the twelve-hour training. Contrary to the prediction of hypothesis one, there was a significant difference between officers who received the one-hour training and officers who received the twelve-hour training at the pre-training level. The present study found that, on average, pre-twelve-hour training officers scored significantly higher on measures of social distance (stigma) than pre-one-hour training officers. This indicates that the officers who were in the twelve-hour training had higher levels of stigmatizing attitudes towards persons with

mental illness. There are many potential reasons for the significant difference between groups at the pre-training level. For example, different professional and personal experience with mental illness could affect participant attitudes. This indicates the two groups were not similar before the training began, which may have affected the outcome.

Hypothesis 2: Participants who report knowing a greater number of persons with mental illness will have significantly lower stigmatizing attitudes towards mental illness pre-training when compared to participants who report knowing a lesser number of persons with mental illness.

The second stigmatizing attitudes hypothesis was investigated by using correlational analyses on the entire sample. Results suggest that participants who had a regular contact with persons with mental illness in multiple categories (e.g. depression, dementia, psychosis, bipolar, etc.) had lower levels of stigmatizing attitudes than those who did not know persons who fell into those categories. This result is not surprising given the information on stigma and social distance. Park (1924) described social distance by discussing the degrees of understanding and intimacy in personal and social relations. If an individual has frequent interactions with someone with mental illness, they may be more likely to understand that person's experiences and feelings. Not only will the individual be more familiar, he/she may experience a higher level of empathy for a person with mental illness. Humans increase social distance because of the fear evoked by an 'unknown' factor that they attribute to the 'other' (Park, 1924). That is, they are unfamiliar with someone or something, so they have fear regarding the unknown. Thus, having a higher level of regular interactions with persons with mental illness may reduce the fear and the unknown. It should be noted that prior education on mental illness and

knowing persons in mental health treatment did not show a significant effect in reducing stigma.

Hypothesis 3: Completion of the Basic Recruit Officer Course twelve-hour mental health training will predict a significantly greater decrease in stigmatizing attitudes towards mental illness as measured by the ASDS than the completion of the one-hour mental health training.

The third stigmatizing attitudes hypothesis was tested by comparing the changes in total score on the ASDS between pre-training and post-training in the one-hour training group and the twelve-hour training group. Completion of the twelve-hour mental health training did not result in significantly greater increases in social distance than completion of the one-hour training. Stigmatizing attitudes were reduced for each group, indicating both the one-hour and the twelve-hour trainings reduced social distance. These results do not support the hypothesis, which was unexpected given the significant increase in material designed to reduce stigma in the twelve-hour curriculum when compared to the one-hour curriculum.

Multiple activities were included in the twelve-hour training that were intended to reduce stigma, such as the hearing voices exercise and an exercise that asked participants to rank how disabling various medical and psychiatric disorders are, both of which received positive feedback from the officers. One potential reason that both groups showed similar reduction in social distance is the Hawthorne Effect. Participants were aware they were part of a research study that intended to measure the effects of the training. It is possible that participants provided answers on the post-test that they felt would be more socially acceptable rather than endorsing true attitudes towards mental

illness. One should also take into consideration the pre-training differences between the two groups in regard to the level of stigmatizing attitudes.

Additional Hypotheses

Two additional hypotheses were included in the current study in order to investigate if the twelve-hour training produced similar effects as Crisis Intervention Team (CIT) and Mental Health First Aid (MHFA) training. Crisis Intervention Team training is widely considered the gold standard of police training on responding to persons with mental illness. Mental Health First Aid has been widely accepted in the United States, receiving \$15 million in the 2014 budget to train first responders in across the United States (The National Council, n.d.). Thus, the goal of developing the twelve-hour curriculum was to achieve similar results as other widely used police trainings.

Hypothesis 1: The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as CIT research.

The first additional hypothesis was tested by comparing the results from the current study with the results from Broussard et al. (2011), who developed the research scales used in the current study. Overall, the results showed that the officers who received CIT training experienced significantly greater increases in de-escalation and referral abilities, self-efficacy, and greater decreases in stigmatizing attitudes than the participants from the current study. However, this result is not completely surprising given that CIT training is a 40-hour curriculum, while by comparison the current study used a 12-hour curriculum. The basic difference in the number of hours of training could explain the difference in results. In addition, CIT training is designed for incumbent officers who have significant experience in the field who volunteer to be part of the

training. The twelve-hour curriculum used in the current research is part of the police academy. While some of the officers do have some experience as part-time police officers or in the military, many recruits have no experience as a police officer.

In addition, the twelve-hour training is mandatory given it is part of the overall academy, so new officers must complete the course. It is possible that incumbent officers who volunteer for CIT training are significantly more invested and interested in responding to persons with mental illness, which will likely lead to better encoding of material and information presented given its importance to them. The comparison between the current study and the Broussard et al. (2011) research is imperfect given the significant differences in the research questions. Broussard et al. investigated the effects of CIT training in comparison to no training, while the primary goal of the current study was to compare the effects of the one-hour training and the twelve-hour training without the use of a true control group. Thus, the current study did not investigate if the twelve-hour training was simply effective; it investigated if it was *more* effective than the previously used training. This author believes that if a true control group (i.e. participants who received no training) was utilized in the current study, the statistical differences between groups would have been similar or even greater and similar to those of Broussard et al.

The results from the current study can also be compared with research by King (2011), who investigated the effects of CIT training on self-efficacy using the Adapted Social Distance Scale (ASDS) and socially restrictive attitudes towards persons with mental illness, along with other variables not measured in the current study. King found that CIT training significantly increased officer's self-efficacy and lowered officer's

socially restrictive attitudes and fear/distrust towards persons with mental illness. King's use of the ASDS allows for an excellent comparison for self-efficacy, which showed similar increases as the current study, indicating the twelve-hour training produced similar increases in self-efficacy as CIT training. This is an important result given the twelve-hour training is 28 hours less than CIT, yet it produces similar increases in confidence in responding to persons with mental illness. King also measured fearfulness and socially restrictive attitudes towards persons with mental illness. Although King's research did not include the same scale as the current research, the overall results were similar, indicating the twelve-hour training lowered officers' stigmatizing attitudes in a similar manner as the CIT training in King's research.

Hypothesis 2: The twelve-hour training will result in statistically similar changes in regard to de-escalation, self-efficacy, and stigmatizing attitudes as MHFA research.

Comparing the results of the current research to MHFA is somewhat more complicated given the drastic differences in the trainings and the existing research on MHFA. Mental Health First Aid was developed to help members of the general public to respond to persons in crisis until first responders arrive. Although a "First Responders" version of MHFA has been developed, there is little research on the effects of the first responders' curriculum. Thus, the current research will be compared to the general version of MHFA, which has different goals than the twelve-hour curriculum used in the current research. In addition, the scales used in the current research were developed using CIT training and to the best of this author's knowledge have not been utilized with other forms of police trainings. Thus, results of MHFA research will be utilized in aggregate format rather than using the quantitative results that were possible with CIT

research. It should be noted that MHFA literature does not include de-escalation, so this variable will not be included in the comparison.

MHFA has been shown to increase the responder's confidence in many research trials (Jorm & Kitchener, 2001; Jorm, Kitchener, & Mugford, 2005; Jorm, Kitchener, O'Kearney, & Dear, 2004; Kitchener & Jorm, 2006; Kitchener & Jorm, 2004; Morawska et al., 2013). The current research showed that the twelve-hour curriculum significantly increased the officers' self-efficacy in responding to persons with mental illness. In the current study, officers endorsed higher self-efficacy in various aspects of responding to persons with mental illness, including confidence in effectively communicating with someone in crisis, talking to the individual about his/her mental health symptoms, calming the individual down, getting the individual to talk rather than act out, and discussing the persons symptoms with a mental health professional. These very specific aspects of responding to a person with mental illness are imperative in a successful outcome for a police officer in managing the scene to which they were called without escalating the crisis further. Unfortunately, these aspects were not measured in MHFA research. Rather, confidence in responding to a person in crisis was measured using one item with a Likert scale. Thus, the current study suggests that the twelve-hour training produces greater increases in self-efficacy that are more applicable to the various aspects of responding to a person with mental illness that a police officer will encounter.

Social distance is also used in MHFA literature to measure stigmatizing attitudes. While research suggests that MHFA reduces social distance overall, there are differences in the stigmatizing attitudes with different types of mental illness. Kitchener and Jorm (2002) provided each participant with one of two possible vignettes to measure social

distance. One vignette depicted a person with depression and one depicted a person with schizophrenia. Although the overall social distance was significantly reduced for both depression and schizophrenia, participants expressed greater social distance toward someone with schizophrenia than they did toward someone with depression. In a similar study, Kitchener and Jorm (2004) found that the decrease in social distance was only statistically significant for the depression group. Thus, the current research, which did not show a statistical difference in social distance, is similar to MHFA research given that the current research utilizes a vignette depicting a person exhibiting symptoms of psychosis. It is possible the results of the current research could have been different if a vignette depicting a person with depression was utilized.

Ethical Issues

There are no major ethical issues to report in the current study. This author played a major role in the development of the 12-hour training and thus it could be argued that this author had a significant investment in the research results. Multiple steps were taken to ensure this author had as minimal influence on the research as possible. First, a quantitative design was utilized in order to minimize the amount of potential research bias. Furthermore, research measures that were not developed by this author were used to measure the research variables. Lastly, this author was intentionally not present during any of the training sessions for the 12-hour training, which included the administration of the research measures at both the pre and post training levels. In summary, the research design, the questionnaires used, and this author intentionally not being present during survey administration intended to minimize the effects that this author's predisposed notions or beliefs regarding the curriculum had on the results of the

current study. This author has no other conflicts of interest to report and did not profit from any part of the current research or the development of the twelve-hour training.

Limitations of Study

The current research had several strengths and weaknesses. First and foremost, the number of participants was a significant strength. Each research group included over 100 police officers, which resulted in 254 total participants in the research. This large participant pool, which represented 13 of the 14 total counties across Massachusetts, allowed for significant statistical power. Furthermore, the total number of participants was on par with or exceeded much of the existing CIT and MHFA research. In addition, the current research utilized police officers at the recruit level, which appears underrepresented in police training on mental illness. However, the participant pool was relatively uniform in regard to race and gender and does not appear to be a demographic representation of the population of Massachusetts. These sample limitations should be noted when attempting to generalize the results of the current study. While CIT research uses incumbent officers and MHFA did not have literature regarding their first responders curriculum with police officers at the time of this study, the current research involves recruit officers, many of whom have little or no experience in law enforcement. Thus, it appears this research is one of the first to investigate training on responding to persons with mental illness at the recruit level.

Recruit level research is an important aspect within police training, given the importance placed on the police academy. The material presented in the academy is intended to prepare officers to function independently in the field, which is increasingly involving responding to persons with mental illness. While CIT and MHFA has been

shown to be effective in preparing individuals to respond to persons with mental illness, no research has investigated if academy training is doing so as well. One might even argue that the importance of academy training on mental health exceeds any subsequent specialty training because every police officer must complete the academy. Thus, while CIT and MHFA reaches a small portion of the total number of police officers in the state of Massachusetts, the mental health academy training reaches every single new officer. There are widespread benefits to an academy curriculum on mental illness that properly prepares officers to respond to persons with mental illness.

There were a number of limitations in regard to the current research. First, although the participants were from 13 of the 14 counties in Massachusetts and thus were a good geographical representation of the state, the samples were not randomly selected. The participants in this research were selected because they were already enrolled in each respective police academy. The only viable option to create a more random sample would have been to match participants from a larger number of trainings, taking random participants from each academy class instead of using the entire recruit class. However, this method was not feasible due to time constraints of the current research. In addition, much of the police mental health training research has not used truly random samples, including CIT, which requires officers to volunteer for the training and thus cannot create a random sample.

However, the research was negatively affected by the significant differences between groups at the pre-training level. Many police officers who are enrolled in the academy have prior experience in a law enforcement capacity such as part-time officer, security guard, correctional officer, or in the military. Thus, many participants had

different levels of experience, both in law enforcement and with responding to persons with mental illness. Comparing the results of the participants in the one-hour training and the twelve-hour training becomes less valuable when the participants were not similar at the pre-training level, thus not allowing the researcher to investigate the true effects of the updated curriculum.

The twelve-hour curriculum was slightly changed from the first group of participants to the last group of participants. This researcher was unaware that the development committee decided to change the presentation order of a number of videos and segments of the curriculum in order to better serve the recruit officers and produce a better product. However, in doing so, the training was changed, which negatively impacted the research results because different recruit classes ultimately were provided slightly different trainings. In addition, different instructors were used in all sections of both the one-hour and the twelve-hour trainings. The instructors are an integral aspect of police training and it is probable that different instructors created different levels of interest and participation depending on their presentation style and personality. Although the trainers for the twelve-hour curriculum completed a 'train-the-trainer' block of instruction in an attempt to create a uniform presentation and training method, having different trainers also creates a change in the manner in which the material is presented, thus affecting the effects of the material.

The current research was completed during the pilot period of the twelve-hour curriculum. Because of the significant increase in total training hours, each police academy was asked to find two consecutive days in which the twelve-hour mental health curriculum could be delivered. This resulted in each of the twelve-hour trainings being

completed at different points during the overall police academy. This is also a significant limitation due to the different areas of training that may have been presented before the mental health curriculum. For example, if one academy class received a legal training directly before the mental health training, recruits may be less likely to endorse higher levels of force because they were still thinking about law suits and the potential for excessive use of force in the legal realms. This researcher was unable to contact each individual academy in order to find out the exact order for each academy class and when the mental health curriculum was delivered within the overall academy. This design flaw likely influenced the participants in the twelve-hour training.

The scenario used in the current research portrayed a male individual who was exhibiting symptoms of psychosis in a contact with a police officer. This scenario was developed by Broussard et al. (2011) in an attempt to develop scales that could accurately measure de-escalation, self-efficacy, and social distance. However, the use of a scenario that includes a person with schizophrenia may be a potential limitation to one or more of the research variables, specifically social distance. Many persons with psychotic disorders lose touch with some or all of reality and exhibit bizarre symptoms. As such, these individuals, many of whom have a serious and persistent major mental illness, elicit stigmatizing attitudes. Persons with psychosis, specifically schizophrenia, tend to make people uncomfortable due to the bizarre nature of their symptoms, which evokes high levels of social distancing (Broussard, Goulding, Talley, & Compton, 2012). When recruits are asked questions regarding whether they would let David marry into their family or would like to work with him, it is possible that the use of the scenario with such a serious mental illness negatively influenced these answers. Demir, Broussard,

Goulding, and Compton (2009) found that officers endorsed a lower level of stigma towards a person who was suicidal than a person who was exhibiting psychotic behaviors.

The Behavioral Outcomes Scale (BOS) showed low internal consistency in prior research. This may have negatively affected the outcome data for the current study, especially considering the BOS hypotheses were rejected. The BOS only showed acceptable test-retest reliability. When taken with the variety of previous academy modules that recruit officers completed for each class, the lack of test-retest reliability suggests that the participants may have provided different answers if they completed the measure again. However, as previously mentioned, this author was unaware of any other research measures that were developed to measure de-escalation abilities, thus the reliability limitations were tolerated for the current research.

Recommendations for Future Research

There is no question that CIT and MHFA research is extremely important and has shown significant benefits. However, there is a noticeable lack of research that investigates the effects of police academy mental health training on recruit officers. While the current research attempts to investigate the effects of the new twelve-hour mental health curriculum in the police academy in Massachusetts, further research should be implemented both in Massachusetts and across the country to investigate the effects of the academy level mental health training. Many states have recently updated their academy training, but this researcher is unaware of any available research that investigates the effectiveness of said trainings. In this researcher's opinion, research on mental health training at the academy level is just as important as CIT or MHFA research

given the wide reaching effects of the police academy, yet there is significantly greater CIT and MHFA research available than academy level research.

With regard to the current study, subsequent research should attempt to improve upon the previously discussed limitations. Specifically, future research should focus on attempting to create a research sample that is similar at the pre-training level in regard to prior experience both in the field and with responding to persons with mental illness. If future researchers wish to use the one-hour training data from the current study, the future twelve-hour sample should be matched in order to alleviate the pre-training differences. Otherwise, subsequent research should continue to investigate the effectiveness of the twelve-hour training while attempting to avoid research design limitations. Such limitations include stabilizing the point during the overall police academy which the mental health curriculum is delivered and ensuring the same police officer and mental health instructor lead all trainings in the future research.

Future research will not likely have a problem ensuring that the curriculum is not modified during the research because the pilot period for the twelve-hour curriculum ended when the data collection phase of this research was complete. The Massachusetts Municipal Police Training Committee (MPTC) will play a large role in the other research limitations because they oversee the training for the police academy. The MPTC should work toward ensuring that the mental health curriculum is provided at the same point within the overall academy training (e.g. week ten, days three and four). This will improve future research and provide stability and structure to recruit officers, trainers, and academy directors. While the twelve-hour mental health training was designed to allow for a number of trained instructors to lead the training, future research should work

with the MPTC to attempt to minimize the variability of the instructors to attempt to eliminate confounding variables, such as varying presentation styles of the instructors.

Mental Health First Aid (MHFA) research included knowledge about mental illness as a variable. This may be a point of interest for future research given the current study did not address knowledge about mental illness as a variable. While it is certainly important for police officers to be able to have a basic understanding of the different types of mental illness, the officers are not clinicians and will not be expected to be diagnosing persons in crises. Rather, the officers should be able to recognize symptoms or behaviors and exhibit the response that will give them the best chance at a positive outcome. If officers are able to recognize signs and symptoms of mental illness, they may choose to make a decision to transport the person to the local emergency room or call a mobile crisis team, which diverts the person from going to jail and connects him or her with treatment providers. However, it may be helpful to measure if the twelve-hour training increases general knowledge about mental illness, as the training should provide recruits with a basic understanding of the general categories of mental illness (e.g. psychosis versus depression). In addition, future research may investigate the effects of a different scenario. Providing a vignette that portrays an individual with symptoms of depression or mania (without psychotic features) may significantly affect the results given the prior research that suggests persons endorsed higher levels of stigmatizing attitudes towards persons with schizophrenia. Researchers may also consider providing a scenario with a female suspect.

Another area for future research involves previous experience in a law enforcement role. Recruits who are enrolled in the police academy often have prior

experience working as a security guard, a part time police officer, a reserve officer, a correctional officer, or in the military. Each of those roles provides the opportunity to respond to persons with mental illness in a law enforcement role. In the current research, there were many officers who reported a military history, and it is quite common for those who served in the military to become police officers. However, the current research was unable to measure if a military history affected the beliefs and attitudes of the recruit, and if so, to what extent. It is possible that military experience and training creates a knowledge base that can be built upon and expanded in the police academy. However, it is also possible that prior military experience can have a negative impact on the beliefs and attitudes of recruit officers given their experience of their service.

The current research asked about prior military experience in two areas: 1) in a question which asked participants to estimate the number of prior encounters with persons with mental illness while working in one of the previously mentioned law enforcement roles; 2) participants were asked to provide their previous occupations, where many answers included various aspects of military service. The first question did not ascertain the specific prior role they held, so participants who reported previous encounters with persons with mental illness could have held any of those roles. There was no way for the data to specify if the prior encounters were from military service. The second question produced qualitative data and was not statistically analyzed in the current research. Thus, future research should work to obtain additional information regarding military history and may even attempt to investigate potential effects of different military roles, such as Army Reserve/National Guard, those who were deployed, or commissioned

officers. These are just a few specific suggestions for future research on the effects of military experience on attitudes and behaviors in relation to the twelve-hour curriculum.

Arguably one of the most important areas for future research should involve the creation of a longitudinal study with the goal to track the long term effects of the twelve-hour training. The goal of many mental health trainings for police officers is to increase the safety of everyone involved by decreasing the use of force, officer injuries, and citizen injuries. It could be stated that it is impossible to determine if the twelve-hour curriculum meets this goal with the current research given the lack of opportunity for practical application of the material. Tracking outcome data has proven to be difficult for researchers given the complicated nature of the police coding systems and the logistical difficulties of going to various police departments for data, some of which does not exist in a format that can be utilized for research. A longitudinal study that could track the long term effects of the twelve-hour curriculum would provide rich, informative data for the state of Massachusetts.

Implications for Professional Practices

The research question that guided the current project was proposed to investigate if the twelve-hour mental health police academy training produced significantly greater effects than the one-hour training to determine if Massachusetts was best using their resources when they implemented the twelve-hour training. The results from the current research suggest that the twelve-hour training does produce greater effects than the one-hour training in specific areas. As previously mentioned, the greatest indicator of the effects of the new curriculum will be the long term effects, which future research should attempt to measure. It seems plausible that the significant increase in total training time

will increase the knowledge and skills retention on a long term basis. In other words, the knowledge and skill required to respond to persons with mental illness is most important when the officer is out of the academy as a new police officer.

Results suggest the twelve-hour training increased de-escalation abilities and self-efficacy while reducing stigmatizing attitudes. In addition, the twelve-hour curriculum led to significantly greater increases in self-efficacy than the one-hour curriculum, which may allow an officer to be more confident and calm in his/her interaction with a person with mental illness. Overall, the updated training should better prepare the recruits to become entry level police officers who will be able to use de-escalation, along with all of their other law enforcement methods, to respond to persons with mental illness. The greater increase in self-efficacy may allow the officers to experience a lower level of self-doubt and anxiety, which may facilitate de-escalation abilities and reduce the chance of further escalation or injury. This can also contribute to the reduction of the use of force.

The creation and implementation of the twelve-hour training used in the current research is only one aspect of a three tier process in regard to police training on responding to persons with mental illness. Police departments are often top-down organizations. In other words, the chiefs of police and the higher level officers have great influence over the organizations, just as a CEO has great influence over his/her business. Police leadership requires command decision making, team management, emotional stability and maturity, making decisions under stress, management of organizational stresses, discipline by coaching and leadership, and leading in changing times (Miller, 2006). Leading in changing times is what has been required during the recent shift in responding to persons with mental illness. As previously stated, the last fifteen years has

seen the development of CIT and MHFA as well as the initiation of significant research to investigate how officers respond to persons with mental illness. Given most chiefs of police have been in law enforcement for longer than fifteen years, many of them did not receive much or even any training in the academy on how to respond to persons with mental illness. This researcher recently co-taught the de-escalation module of CIT training in Massachusetts. Many of the officers in the training stated they either did not receive any mental illness training in the academy or it was so little they could not even remember it.

Often, trainers wonder if or how much trainees will “buy in” to the material they are being presented. The same can be said for police chiefs, who maintain department standards and act as the final word on following procedures, as well as on how things are done in each department. The MPTC intends to develop a chief of police version of the responding to persons with mental illness training in order to provide information to the chiefs, while creating a forum to help the chiefs “buy in” to the material presented. This is an important step in the training of Massachusetts police officers and will help ensure the skills and methods taught in the curriculum are maintained in professional practice within the various departments across the state.

In addition, the third step in training Massachusetts police officers on best practices in responding to persons with mental illness is to create an in-service training for incumbent officers. There are currently a number of in-service training modules on mental illness. However, as with the previously used one-hour training at the academy level, the current in-service trainings are out of date and do not reflect the current best practices. The creation of incumbent officer in-service trainings will allow officers to

receive more complex, in-depth training on various topics that are now only introduced at the academy level twelve-hour training. For example, in-service training will allow officers to further develop de-escalation skills. While the academy training introduces the concept of de-escalation and only briefly mentions a concept like reflections, an in-service training will allow greater opportunity for further training on simple, complex, and emotional reflections that will facilitate a greater understanding for de-escalation. Other potential examples for in-service training include training on involuntary hospitalizations (e.g. MGL Ch. 123, Section 12 and 35), guided visits to the local mental health hospital or service providers as seen in CIT training, or more specific information regarding a certain mental health disorder.

A special commission was developed in 2008 in order to investigate statewide police training, with a specific section devoted to how officers handle incidents which involve persons with mental illness. The committee found inadequacies within the police training in Massachusetts and one of their recommendations is as follows: “Recognizing that issues pertaining to mental illness require specialized training, the MPTC should continue to update and refine such training for implementation on a statewide basis” (DMA Health Strategies, 2012, p. 4). Taken together, the updated recruit training along with the future implementation of the in-service training and the chiefs of police training will help ensure all organizations at all levels reflect the current best practice methods of responding to persons with mental illness. These three levels of updated trainings should sufficiently address the deficiencies noted in the investigation and should put Massachusetts at the forefront of updated statewide law enforcement training.

The answer to the question of whether the new twelve-hour training can produce enough positive effects in order to warrant the increase in total resources is certainly not a question this author can answer. The Massachusetts Municipal Police Training Committee, the Massachusetts Department of Mental Health, and the National Alliance on Mental Illness- Massachusetts, were all central in the creation and implementation of the twelve-hour training. Each of the organizations has agreed that the twelve-hour training reaches the benchmarks and goals that the committee set before the creation of the curriculum. In addition, the three organizations plan to continue to work together to update the curriculum as needed based on future research and organizational needs to ensure the training prepares recruit officers to interact with persons with mental illness.

Conclusion

Overall, the current research suggested that the updated twelve-hour curriculum produced similar effects as the one-hour curriculum in regard to de-escalation and stigmatizing attitudes, and significantly greater effects on officer self-efficacy. In addition, the twelve-hour curriculum produced similar effects on de-escalation, self-efficacy, and stigma when compared to the existing CIT research. It is again important to note that CIT training is 28 hours longer than the updated recruit curriculum, so it should be expected to produce greater effects given the larger total training time. The current research also suggests that the twelve-hour curriculum also produced similar effects as existing MHFA research. Given that CIT is widely considered the “gold standard” in police training on mental illness, the similar effects of the twelve-hour curriculum are noteworthy.

The goal of the updated academy curriculum was to provide information and skills in order to help new police officers respond to persons with mental illness. The significant increase in self-efficacy will hopefully reduce officer anxiety and possibly allow the officer to retain fine and complex motor skills and efficient, effective scan strategies required to lead to a successful outcome. Hopefully, the updated recruit officer curriculum will be paired with in-service and chiefs of police training in order to train all police officers in Massachusetts on the best methods to respond to persons with mental illness. Ideally, this will reduce the injury rates of officers, persons served, and family members and friends of the persons served. In addition, the new officers now possess knowledge about local treatment providers that may direct the person with mental illness toward treatment if deemed necessary. It is hoped that the results from the current research will encourage future research on academy training and other forms of police training on mental illness. While there is no question that CIT and MHFA are excellent programs and their research has significantly added to the field of police mental health training, they only represent one level of police officer training.

The current research, along with future research, should strengthen the relationship between police officers and the mental health community. A strong relationship and increased understanding between officers, providers, and persons served will lead to the best possible outcomes for all involved. The major goal is to reduce injuries to officers, persons served, and bystanders by minimizing the chances of violent incidents and maximizing access to mental health care, thereby increasing the person's chance of recovery and reducing their chance of future encounters with the criminal justice system.

LIST OF APPENDICES

Letter	Title
A	Informed Consent Form
B	David Scenario
C	Behavioral Outcome Scale (BOS)
D	Self-Efficacy Scale (SES)
E	Adapted Social Distance Scale (ASDS)
F	Demographic Questionnaire
G	Debriefing Statement
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APPENDIX A

INFORMED CONSENT FORM

MASSACHUSETTS SCHOOL OF PROFESSIONAL PSYCHOLOGY

Informed Consent to Research

These questionnaires are part of a clinical psychology research study designed to address police training on mental illness. This is a consent form for research participation. It contains important information about this study and what to expect if you decide to participate.

Description of the project and procedure:

I understand that I have been asked to take part in research that investigates the effects of the twelve hour mental health police Recruit Officer Course curriculum. I will take two sets of questionnaires, one before the mental health training and one after the completion of the mental health training. I understand I will spend about thirty minutes completing the questionnaires (fifteen minutes at each administration). I also understand these questions *will not* be used to determine if I “passed” this portion of the Recruit Officer Course and *will not* affect my academy status in any way.

Benefits and risks of the study:

Your participation in this research will help to improve law enforcement mental health training. There are no risks in this study.

Confidentiality:

The information provided by the participants of this study will be reported in group form and none of it will identify me by name. The general results of this research will be provided to the MPTC in group format without identifying information and will be included in a published doctoral project using group data.

Voluntary participation and withdrawal:

Taking part in this study is completely voluntary. I may decide I no longer wish to participate and stop answering the questions at any time. Should I decide against participating in the study and completing the questionnaires, I will still be required to complete the mental health training as part of my academy training hours. The academy training and this study are completely separate. **If I decide to not participate in the study, I should still deposit my blank packet into the bin.**

Questions, rights, and complaints:

If you have questions or concerns about this research or are interested in obtaining summary of the results, please contact the researcher, John Young

(John_Young@MSPP.edu) or the doctoral project chair, Dr. Samuel Moncata (Samuel_Moncata@MSPP.edu) at Massachusetts School of Professional Psychology, 1 Wells Ave, Newton, MA 02458 or at 617-327-6777.

Consent Statement

By signing below this statement, I agree to participate in this research project being conducted by John Young, M.A., Doctoral Student at the Massachusetts School of Professional Psychology in Newton, MA. I assert that I am at least 18 years old and I have read this information.

Printed name

Signature

Date

Please deposit this informed consent form into the locked box that has been provided to you.

APPENDIX B

DAVID SCENARIO

In order to ensure your answers are anonymous, we ask you provide the following information instead of a name:

Last 4 Digits of Primary Phone #: _____ **First 3 Letters of Street Name:** _____

Please read the scenario below about David. The next set of questions will ask you about your opinions and thoughts about David or someone like him.

DAVID

- In the back of a warehouse David approaches a trash can labeled “CIA Carter Industrial Associates” and proceeds to dump its contents onto the pavement.
- He drops to the ground and frantically fumbles through the trash tossing papers and checking empty boxes.
- He suddenly pauses and sits up grabbing his stomach and grunts in excruciating pain while rocking back and forth. He then gets up to check through the remaining contents in the trash can pulling out papers and returns to the pile on the ground soon after.

David: *“I know it’s in here somewhere. That thing has been tracking me for 6 months. They think they can control my stomach, I’m not going to let it continue.”* (Shaking his head). *“I’ll kill those bastards! The CIA is going down! Finally found ‘em! No more Baricadosis.”*

David: (Pauses and turns his head and listens, as if hearing someone talking from a distance. He then continues searching through the trash and talks back to the voices): *“I hear you fat chat smat plat. I hear your chatting. You’re probably getting nervous because I’m getting close to your shop! Yeah, well shut up... shut up your chatting!”*

[An officer pulls onto the scene and gets out of the car.]

[She pauses and cautiously approaches David.]

Officer: *“What’s going on?”*

David: *"I found this CIA headquarters hidden away here. I'm glad you're here, you can arrest them!"*

[Officer standing at a 20-foot distance, takes one step closer to David]

Officer: *"What? I got a call on a disturbance on private property here. What's your name?"*

[David continues to search through the trash on the pavement.]

David: *"You don't need to know no blow, stow, crow, blow...anything about me. You need to deal with the CIA! Those bastards have been tracking me for 6 months. I've been getting sick. They're using this bariacish device, its giving me Baricadosis...controlling my stomach! It hurts! I'm telling you they're controlling my stomach. I'm losing weight. I'm throwing up. I can't even go to the bathroom hardly. Baricadosis no more! Those bastards need to go to prison. Lock 'em up!"*

[Officer tilts her head to radio and calls for back-up.]

Officer: *"Radio it looks like we have a mentally disturbed subject over here at CIA. I need you to start me some back-up at 201 Carter Industrial Road."*

David (mumbling and shuffling through the trash in the background): *"Where you at?"*

Officer: *"Listen, you're going to have to pick all this mess up. I don't know if you're on drugs or what, but if you don't pick it up you're going to jail. This is not the CIA, its private property."*

David (becoming more agitated): *"Yes it is! If you're not here to help, then you need to get out of here. I've been searching for months. This is CIA headquarters. It's a secret. I found this place on www.wxyz.com! I've been hearing their chats transmitted through the electromagnetic fields. That fat chat smat plat. I can hear them! They say they're going to give me baricadosis until I starve to death or throw up to death or constipate to death."*

[Visibly tense and frustrated, David rises to his feet with clenched fists and kicks the trashcan.]

Officer: *"You need to calm down! This is criminal trespassing and you're going to go to jail. Calm down!"*

David (in an aggressive tone while pointing at the officer): *“No! You need to get the hell out of here! They probably sent you because they know I’m getting close to finding the device.”*

[In a fit of rage David throws the trash can off to the side. He then turns away from the officer and looks off to a distance and speaks to the voices again.]

David: *“That fat chat smat plat. You probably sent her here to kill me because I found your device. Yeah I hear you chatting. I hear you chatting. I hear you chatting.”*

APPENDIX C

BEHAVIORAL OUTCOMES SCALE (BOS)

The Behavioral Outcome Scale (BOS)

Please indicate below whether you think each of the following items would be negative or positive when interacting with someone like David. “Negative” refers to a statement or action that would not be beneficial, or would be harmful, in the situation. “Positive” refers to a statement or action that would be beneficial or helpful in the situation.

1. Having your hand on your baton or gun when speaking to David.
Very Negative Somewhat Negative Somewhat Positive Very Positive
2. Helping David call a family member who can help sort out what is going on.
Very Negative Somewhat Negative Somewhat Positive Very Positive
3. Saying to David, “The CIA is not trying to harm you.”
Very Negative Somewhat Negative Somewhat Positive Very Positive
4. Arresting David for criminal trespass.
Very Negative Somewhat Negative Somewhat Positive Very Positive
5. Saying to David, “It sounds to me like you’re really frustrated and angry.”
Very Negative Somewhat Negative Somewhat Positive Very Positive
6. Helping David call a mental health crisis hotline to get an appointment for services.
Very Negative Somewhat Negative Somewhat Positive Very Positive
7. Saying to David, “The CIA is controlling your stomach, so you should go to the hospital.”
Very Negative Somewhat Negative Somewhat Positive Very Positive
8. Asking David to leave the premises immediately to avoid being arrested.
Very Negative Somewhat Negative Somewhat Positive Very Positive
9. Saying to David, “Tell me more about what’s bothering you.”
Very Negative Somewhat Negative Somewhat Positive Very Positive

10. Transporting David to a psychiatric emergency receiving facility for evaluation.

Very Negative Somewhat Negative Somewhat Positive Very Positive

11. Saying to David, “The owners of this building are going to have you locked up.”

Very Negative Somewhat Negative Somewhat Positive Very Positive

12. Contacting a mobile crisis unit to take David to a mental health facility.

Very Negative Somewhat Negative Somewhat Positive Very Positive

13. Keeping some space between you and David while you talk to him.

Very Negative Somewhat Negative Somewhat Positive Very Positive

14. Helping David call his case manager who can help sort out what is going on.

Very Negative Somewhat Negative Somewhat Positive Very Positive

15. Commanding David to calm down and put his hands where you can see them.

Very Negative Somewhat Negative Somewhat Positive Very Positive

16. Arresting David for disorderly conduct.

Very Negative Somewhat Negative Somewhat Positive Very Positive

APPENDIX D

SELF-EFFICACY SCALE (SES)

Self-Efficacy Scale (SES)

For each of the following questions, circle the one response that best describes your thoughts about yourself and David's situation.

1. How confident would you feel interacting with someone like David?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

2. How confident would you feel talking to someone like David about his mental health symptoms?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

3. How confident would you feel in your ability to effectively communicate with someone like David?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

4. How confident would you feel taking someone like David to a mental health facility?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

5. How confident would you feel asking someone like David open-ended questions to gather information about what is going on?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

6. How confident would you feel interacting with family members of someone like David?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

7. How confident would you feel in your ability to summarize/paraphrase statements made by someone like David in your own words?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

8. How confident would you feel talking to someone like David about his mental health treatment?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

9. How confident would you feel calming down someone like David?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

10. How confident would you feel helping someone like David call a social services agency?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

11. How confident would you feel de-escalating a mental health crisis involving someone like David?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

12. How confident would you feel talking to someone like David about his medications?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

13. How confident would you feel expressing understanding towards someone like David?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

14. How confident would you feel discussing someone like David with a mental health professional?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

15. How confident would you feel getting someone like David to talk to you rather than acting out?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

16. How confident would you feel talking to someone like David about whether or not he uses alcohol or drugs?

Not at All Confident *Not Very Confident* *Somewhat Confident* *Very Confident*

APPENDIX E

ADAPTED SOCIAL DISTANCE SCALE (ASDS)

Adapted Social Distance Scale (ASDS)

Circle the one response that best describes your thoughts about David. There are no right or wrong answers. Please answer every item.

1. Six months from now, when David is not in crisis, how willing would you be to live next door to him?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

2. Six months from now, when David is not in crisis, how willing would you be to spend an evening socializing with him?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

3. Six months from now, when David is not in crisis, how willing would you be to make friends with him?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

4. Six months from now, when David is not in crisis, how willing would you be to sit beside him on a bus?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

5. Six months from now, when David is not in crisis, how willing would you be to have him marry into your family?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

1. Six months from now, when David is not in crisis, how willing would you be to carry on a conversation with him?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

2. Six months from now, when David is not in crisis, how willing would you be to stand next to him in a line at the grocery store?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

3. Six months from now, when David is not in crisis, how willing would you be to have him come into your home to paint a room?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

4. Six months from now, when David is not in crisis, how willing would you be to rent an apartment in your basement to him?

Very Willing Somewhat Willing Somewhat Unwilling Very Unwilling

APPENDIX F

DEMOGRAPHICS QUESTIONNAIRE

1. What is your current age? (*please enter a whole number*) _____
2. What is your gender? (*Please circle*) Male Female
3. In what county is the police department that hired you?
 - a. Barnstable
 - b. Berkshire
 - c. Bristol
 - d. Dukes
 - e. Essex
 - f. Franklin
 - g. Hampden
 - h. Hampshire
 - i. Middlesex
 - j. Nantucket
 - k. Norfolk
 - l. Plymouth
 - m. Suffolk
 - n. Worcester
 - o. I do not belong to a police department
4. Does someone whom you have regular contact with have any of the following conditions (*Please circle all that apply*)
 - a. Depression
 - b. Bipolar Disorder
 - c. Generalized Anxiety Disorder
 - d. Panic Disorder
 - e. Specific Phobia
 - f. Schizophrenia
 - g. Personality Disorder
 - h. Intellectual Disability (also known as Mental Retardation)
 - i. Asperger's
 - j. Autism
 - k. Alzheimer's Disease
 - l. Dementia
 - m. I Don't know anyone with any of these conditions
5. Has someone you have regular contact with ever been in mental health counseling, taken psychiatric medications, or been hospitalized for mental health reasons?
 - a. Yes

- b. No
6. Have you had any previous education on mental illness? If so, please describe:
- a. Junior College Course
 - b. College Course
 - c. Contact with Someone with an Advanced Degree in a Mental Health Field
 - d. Other (please explain): _____
7. If you have previous experience in law enforcement, corrections, probation, security, or another similar field, have you ever responded to anyone with a mental illness? *If so, please write the number of encounters in the provided line.*
- a. Yes: _____
 - b. No
 - c. I do not have previous experience in any of these fields
8. What is your race? Please circle all that apply
- (a) White/Caucasian
 - (b) Black / African American
 - (c) Hispanic
 - (d) Asian
 - (e) Middle Eastern
 - (f) Native American
 - (g) Other _____
9. How many years of formal education did you complete? _____
10. What is the highest level of education you have completed?
- a. Less than high school
 - b. High school/GED
 - c. Associates degree
 - d. Bachelor's degree
 - e. Master's degree
 - f. Doctoral degree or Professional degree
11. What kind of work did you do before entering the academy? If you entered the academy straight from college or school, enter 'student.' Please enter all that apply.
- a. _____
 - b. _____
 - c. _____
 - d. _____

APPENDIX G

DEBRIEFING STATEMENT

Thank you for completing this research and completing these questionnaires. This research was initiated to investigate the effects of the updated Massachusetts Municipal Basic Recruit Officer Course mental health training. If you have any questions about this research, please contact the researcher, John Young, at John.Young@MSPP.edu, or the supervising psychologist, Dr. Samuel Moncata, at Samuel.Moncata@MSPP.edu.

If you would like to obtain a summary of the results, please visit:

<http://johnyng18.wix.com/police-mh-training>

The results will be available online after the research is complete (approximately May-June 2014). You may tear this page off and keep it for your records for the site address.

APPENDIX H

ACADEMY DIRECTOR INSTRUCTIONS

To the Academy Director,

Thank you for taking the time and effort to contribute to my research. This letter is intended to serve as a guide on how to administer and store the questionnaires you have received from Dori-Ann Ference, Curricula Development Coordinator. She has included two separate packets, one labeled “Pre-Training” and one labeled “Post-Training.” In addition, I will provide you with you two locked boxes, one labeled “Pre-Training” and one labeled “Post-Training” before the date of the mental health training. **These boxes are locked to ensure confidentiality.**

Before the Mental Health Training Begins:

- The Pre-Training packet and informed consent form should be provided to recruit officers before they begin the mental health portion of academy training.
- Please leave the Pre-Training locked box in the room so the recruit officers can deposit their packet and informed consent form into the box when they are complete.
- Please provide the recruit officers with the packets and allow them to complete the packets without any instructors or staff present in the room, if possible. If this is not possible, we ask that staff not read any of the packets and afford the recruits their confidentiality.
- When all recruit officers have completed and deposited the packet and informed consent form into the locked-box labeled Pre-Training, please store the box in your locked office to ensure confidentiality.

After the Completion of the Mental Health Training:

- The Post-Training packet should be provided to recruit officers after they complete the two days of mental health academy training.
- Please leave the Post-Training locked box in the room so the recruit officers can deposit their packets into the box when they are complete.
- Please provide the recruit officers with the packets and allow them to complete the packets without any instructors or staff present in the room, if possible. If this is not possible, we ask that staff not read any of the packets and afford the recruits their confidentiality.
- When all recruit officers have completed and deposited the packets into the locked-box labeled Post-Training, please store the box in your locked office to ensure confidentiality.

I will contact you and travel to your academy to retrieve the two locked boxes with the completed packets in them as soon as possible. It is imperative the boxes remain stored in a locked office to ensure the protection of the information. If you have any questions

or concerns about this process, please feel free to contact me using the information included below. Again, thank you for your contribution to this research.

John Young, M.A.
Fourth Year Clinical Psychology Doctoral Student
Massachusetts School of Professional Psychology
John_Young@MSPP.edu
XXX XXX XXXX

APPENDIX I

INFORMED CONSENT ADDENDUM

This addendum is in reference to doctoral project research conducted by John Young, M.A., under the supervision of Samuel Moncata, Psy.D. It serves to explain a minor change in the research method for the last research participant group on January 23, 2014.

On January 23, 2014, recruit officers enrolled in the Plymouth, Massachusetts Police Academy were scheduled to receive the “Responding to Persons with Mental Illness” module of the curriculum. Under the approved research methodology, participants complete a pre-test packet before the training. This includes an informed consent document that is deposited into a locked box with the completed research packet. The signed informed consent documents have been collected by the above-named researcher. However, during the January 23rd pre-test administration, there was an unplanned change in the research method:

- The participants received the full informed consent document before beginning the research packet.
- The original informed consent document approved by the Massachusetts School of Professional Psychology IRB was one page in length, including the participants’ signature.
- Due to a formatting change when the blank informed consent documents were printed for the January 23rd test group, the informed consent document printed out as two pages in length.
- Each participant was provided the two-page informed consent and given a chance to ask any questions by Ms. Ference.
- Ms. Ference then asked the participants to deposit the second page of the informed consent document, which contained their signature and consent to the research, into the locked drop box.
- The participants were allowed to keep the first page of the informed consent document.
- The research then continued with the approved research methodology.

Thus, the primary researcher has collected the second page of the informed consent for the January 23, 2014 test group.

I, Dori-Ann Ference, declare that all participants from the January 23, 2014 test group received the full informed consent document under my direct supervision.

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Undersigned

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