

**The Impact of Crisis Intervention Team Training on Law Enforcement Officers: An
Evaluation of Self-Efficacy and Attitudes Toward People with Mental Illness**

by

Salena Marie King

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Approved by

John Dagley, Chair, Associate Professor of Special Education, Rehabilitation and Counseling
Randolph Pipes, Professor of Special Education, Rehabilitation and Counseling
Suhyun Suh, Associate Professor of Special Education, Rehabilitation and Counseling
Christopher Howard, Assistant Professor of Psychology, Husson University

Abstract

Law enforcement officers (LEOs) routinely respond to calls involving people with mental illness (PMI) in crisis. While LEOs have come to expect a wide spectrum of needs for assistance from PMI, there is often little to no training provided for responding to these encounters. This is an alarming fact given that 7 to 10 % of all law enforcement contacts involve PMI. It has been found that the lack of training leaves LEOs perceiving themselves as ill-equipped to manage mental health-related situations, creating a great deal of anxiety. The insufficient training has also been determined to negatively impact PMI receiving help, either through exacerbation of the problem or a dismissal of the crisis. As an answer to these difficulties, Crisis Intervention Team (CIT) training was developed to better inform officers about mental illnesses, provide skills useful for these encounters, and prevent unnecessary arrests.

The purpose of the present study was to investigate the impact of CIT training on officers' (1) perceptions of self-efficacy when working with PMI and (2) attitudes toward PMI. The *Self-Efficacy Scale* (SES), designed specifically to assess the self-efficacy of LEOs when encountering a person with mental illness, was administered to 58 officers pre/post CIT training as well as 40 officers with no CIT training. Additionally, the *Community Attitudes Toward the Mentally Ill* (CAMI) was administered to the same groups of officers in order to measure attitudes along the four subscales of *Authoritarianism*, *Benevolence*, *Social Restrictiveness*, and *Community Mental Health Ideology* (CMHI). It was hypothesized that CIT training would significantly increase LEOs' perceived self-efficacy when working with PMI, result in

significantly more positive attitudes toward people with mental illness, and that LEOs with no CIT training would not significantly differ from officers assessed at the pre-CIT stage.

Results, obtained through the use of an ANOVA, indicate that officers who participated in CIT training achieved a significant increase in perceived self-efficacy from pre to post measures. Contrary to expectations, a significant difference was found between officers who did not choose to participate in CIT training and officers assessed at pre-CIT – it was indicated that non-CIT officers reported a higher degree of perceived self-efficacy. Alternatively, there was no significant difference found between non-CIT officers and pre-CIT officers on measures of attitudes toward PMI. Through the use of a MANOVA, it was determined that CIT training effected the desired changes of increasing benevolent and community-inclusive attitudes toward PMI, as well as decreasing socially restrictive attitudes. The prediction that CIT training would decrease authoritarian attitudes toward PMI was not supported. Implications for these outcomes are discussed along with recommendations for law enforcement agencies and mental health advocates.

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I. INTRODUCTION

Law enforcement officers (LEOs) routinely encounter people with mental illness (PMI) because officers are regularly the first responders called to handle a crisis arising from mental illness (Deane, Steadman, Borum, Veysey, & Morrissey, 1999; Finn & Sullivan, 1989; Steadman, Deane, Borum, & Morrissey, 2000; Teplin & Pruett, 1992; Vermette, Pinals, & Appelbaum, 2005). During a typical work shift LEOs may be expected to respond to a range of mental health situations. For example, a depressed person who wants to die by suicide may alarm someone sufficiently that the listener or observer would call for help. Or a call may be received by 911 dispatchers regarding the amphetamine-driven odd behavior of an individual, or a drug-induced out-of-character action noticed by a friend or acquaintance. Moreover, a person diagnosed with schizophrenia may call for help themselves when experiencing a frightening paranoid delusion. Finally, calls may come from traumatized crime victims no longer able to function normally (Compton, Esterberg, McGee, Kotwicky, & Oliva, 2006; Demir, Broussard, Goulding, & Compton, 2009; Watson, Corrigan, & Ottati, 2004).

While LEOs have come to expect a wide spectrum of needs (or demands) for assistance, there is often little to no training provided for responding to PMI (Deane et al., 1999; Demir, Broussard, Goulding, & Compton, 2009). In most law enforcement training academies, only a small portion of time is dedicated to providing trainees with knowledge about mental illness; generally less than 2% of the total time is spent in training (Vermette et al., 2005). This creates a

large discrepancy between the preparation of the academies and the reality LEOs face. In 2000 alone, LEOs in Florida had over 40,000 contacts with PMI that resulted in involuntary psychiatric examinations. This number outweighed the total of people arrested in Florida that year for aggravated assault (39,120) and burglary (26, 087) (McGaha & Styles, 2001). It has been determined that 7% to 10% of all law enforcement contacts involve PMI (Deane et al., 1999; Demir, Broussard, Goulding, & Compton, 2009). Moreover, these calls tend to take up a disproportionate amount of time (Hails & Borum, 2003). Examples of this incongruity are easily accessible. The Lincoln, Nebraska Police Department reported responses to over 1500 calls involving PMI in 2002, and noted that these calls consumed more officer time than traffic accidents, burglaries, or assaults in that year (Cordner, 2006). For 2004, the New York City Police Department also indicated that their officers responded to over 150,000 calls involving PMI (Waldman, 2004). Finally, the Los Angeles Police Department reported an average of 28,000 hours a month on calls regarding PMI (DeCuir & Lamb, 1996, cited in Reuland, Schwarzfeld, & Draper, 2009).

Without proper training and preparation, LEOs tend to feel and exhibit more anxiety than is necessary or helpful. They often perceive themselves as ill-equipped to manage situations involving PMI, which are often ambiguous and uncertain even for trained professionals (Hails & Borum, 2003). LEOs work in a quasi-militaristic environment and are trained to respond in a formulaic fashion. Officers are trained to know what to do when they encounter, for example, a person operating a vehicle under the influence of alcohol, and they know how to respond to a person who is shoplifting (Miller, Mire, & Kim, 2009). While officers generally have discretionary power, there is an expectation from the public that something will be done about the “problem,” yet their options for legal response are few –arrest, write a ticket, or give a

warning. Unfortunately, arrest is a commonly preferred option. In 1999, the Los Angeles County Jail and New York City's Rikers Island each held more PMI than any inpatient psychiatric facilities in the United States (Torrey, 2000). A LEO who has received little to no mental health training will rarely know an appropriate way to respond when he or she encounters a woman who is frightened and agitated because the voices in her head are telling her to hurt someone else – a case such as this would often lead to emotional discomfort for the officer and an unnecessary arrest (Demir et al., 2009; Hails & Borum, 2003; Teplin & Pruett, 1992).

A lack of preparedness and uncertainty not only can create anxiety for law enforcement officers (LEOs), it can also negatively impact the individual requiring help. The anxious officer may wish to avoid working with a person with a psychological or addictive disorder, or may react too harshly or forcefully. Avoidance or excessive use of force would likely exacerbate the problem. If a person exhibiting symptoms of mania is arrested for public disruption, that individual may eventually get the medical and psychological help he or she needs, but the unwarranted arrest and time spent in the chaotic environment of a jail could be traumatic. The same is true for a person found sobbing and despondent, that is, if the officer fails to make an in-depth contact to fully assess the situation. In the first nine months of 2006, the Los Angeles Police Department reported that 46,129 contacts were made with PMI; out of that total, 4,686 were taken into custody for an involuntary psychiatric assessment and 709 had attempted suicide (Reuland, Schwarzfeld, & Draper, 2009). The important yet subtle indicators of a person experiencing suicidal ideation can be lost on an officer not trained to perceive them.

Conversely, an LEO untrained in managing his or her own vocal tone or body language might possibly worsen a situation, by automatically placing a hand on their gun when a person with paranoid delusions appears agitated. The outcome is likely to be unfavorable for all

involved (Bahora, Hanafi, Chien, & Compton, 2008; Teller, Munetz, Gil, & Ritter, 2006; Tucker, Van Hasselt, & Russell, 2008). Between the years of 1994 and 1999, Los Angeles police officers shot 37 people during encounters with PMI; 25 of those people were fatally wounded (Cordner, 2006). The Treatment Advocacy Center (2005) estimates that people with severe mental illness are four times more likely to be killed by police than the general public. These tragic statistics demonstrate the need for remediation in law enforcement encounters with PMI.

Statement of the Problem

Unfortunately many law enforcement agencies have experienced the discomfoting consequences of an intervention during which an officer has used excessive force – frequently deadly force – against a person whose behavior was a product of or directly influenced by mental illness. As a consequence of these regrettable incidents, agencies have been publicly criticized in the media, aggressively attacked in local political offices, or even sued for negligence for failing to provide their LEOs with adequate training to assist with responses to PMI encounters. As a consequence of enhanced internal and external scrutiny, local law enforcement agencies across the nation have sought out appropriate training for their officers to make certain that incidents such as these will be managed appropriately (Hails & Borum, 2003).

Crisis Intervention Team Training

In 1987, the Memphis Police Department experienced one of these tragic events. Several officers were called to help a mentally ill man who was cutting himself with a knife and was threatening to cut others. The officers fatally shot the man when he did not respond to commands to drop the knife (Compton, Bahora, Watson, & Oliva, 2008; Hanafi, Bahora, Demir, Compton, 2008). The enormous public outcry led the department to look for a better solution. Out of these efforts, the Crisis Intervention Team (CIT) was developed in 1988 by the Memphis

Police Department in collaboration with Memphis Chapter of the National Alliance on Mental Illness (NAMI), the University of Memphis, and the University of Tennessee. The CIT program offers advanced training for LEOs in an effort to teach appropriate responses to people with mental illness (PMI). The standardized CIT training, referred to as the Memphis model, provides 40 hours of intensive training for self-selected officers. The five days of instruction are administered by mental health professionals, mental health advocates from NAMI, and family members of PMI in the community to which the officers belong, ensuring that local culture, requirements, and available resources are included in the curriculum. Through this administration, partnerships are developed between community-based services and LEOs, providing a natural resource when an officer is seeking mental health treatment for a person with a mental or addictive disorder rather than incarceration (Bahora, Hanafi, Chien, & Compton, 2008; Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006; Hanafi, Bahora, Demir, & Compton, 2008). The CIT training curriculum addresses the following goals:

- Train officers to understand and recognize psychiatric signs and symptoms.
- Train officers to understand meanings, basic etiologies, and effects of psychiatric disorders.
- Train officers to use de-escalation skills to calm and reassure people with psychiatric disorders - these skills frequently conflict with tactics learned in criminal justice training programs, where officers are trained with a public safety approach to take immediate control of the situation rather than taking a person-centered approach that benefits a person in crisis. The key competencies focus on the development of discernment/discrimination/differentiation skills required to help officers determine behavioral indicators for a “mental health response.”

- Linking officers with mental health service providers in their local community who can respond quickly to calls for assistance.
- Building on each officer's experience and comfort level in working with individuals with psychiatric disorders
- Networking officers with local mental health and community service providers, families, consumer organizations, and emergency room staff to forge future referral and consultative relationships (Center for Health Policy, Planning and Research, 2007, p. 7).

Crisis Intervention Team (CIT) training has now been implemented in various locales nationwide; the CIT Center at the University of Memphis indicates that CIT training exists in 1050 communities in the United States (Reuland, Schwarzfeld, & Draper, 2009). The general popularity of the programs has led a growing number of communities to begin the steps necessary to put CIT into action. In 2000, the Maine chapter of the National Alliance on Mental Illness (NAMI) secured a grant making it possible to begin development of a CIT program in the city of Portland. The Portland Police Department, in partnership with NAMI Maine, Youth Alternatives Ingraham, and Spring Harbor Hospital, developed and offered the first CIT training in Maine in 2002. By 2003, the CIT training had been adapted and offered to three other communities in Maine: Augusta, Westbrook, and South Portland. Since that time many other areas in Maine have worked to adapt the curriculum to meet their needs. This has been an arduous task given that a large portion of Maine is rural where resources are often scarce. Maine has also been the first state in the U.S. to adapt CIT training to a corrections setting, such as local jails and prisons (NAMI Maine, 2010).

Since 2002, over 900 people have been CIT trained and certified in Maine. The training has reached 65 law enforcement agencies (state, municipal, college, and county level) and three state correctional facilities in the state of Maine to date. In 2008 alone, the city of Portland had 1525 contacts involving a mental health crisis. Thanks to the training of CIT officers, none of the officers nor any of the contacts were severely injured; only 1% of the contacts received a minor injury (from pepper spray or compliance holds), and only 2% of the contacts were arrested – compared to a norm of a 20% arrest rate. It appears that CIT training is benefitting the citizens and LEOs of Portland, Maine with regards to proximal outcomes (NAMI Maine, 2010), but more evaluation is needed. Does the program make a difference, and if so, on what dimensions of a Law Enforcement Officer’s knowledge, attitude, and skills? Specific attention also needs to be given to the role a LEO’s self-efficacy plays in interactions with PMI as a more targeted form of assessing the impact of the training. An additional note of consideration is the question of whether or not the training should remain voluntary if results are assessed to be beneficial for all involved.

Officer-Level Outcomes

A study published by Compton et al. (2006) indicated that LEOs displayed improved attitudes towards individuals diagnosed with schizophrenia after CIT training, by decreasing presumptions that schizophrenia leads to aggressiveness. That study also found that officers’ desire for social distance from people diagnosed with schizophrenia decreased significantly after the training. Studies such as Compton et al. (2006) demonstrate the need to further explore outcome measures related to CIT training. Distal outcomes, specifically those outcomes measuring effects upon PMI, will require passage of time and possibly some modest intrusion into the lives these individuals. These outcomes are essential to determine CIT training efficacy

and justification for the expansion of the program; however, gathering this information is not yet possible for most communities. What is possible is the exploration of officer-level outcomes resultant from CIT training, such as improvements in perceived self-efficacy and changes in attitudes toward PMI, which have been established in the literature as topics requiring further investigation (Bahora, Hanafi, Chien, & Compton, 2008; Compton et al., 2006).

Attitudes Toward People with Mental Illness

Since the 1960's, psychiatric hospitals in the United States have engaged in a trend known as deinstitutionalization, allowing large numbers of people with serious mental illnesses to be reintegrated into their communities. Often, these individuals have been properly supported by community services, making it possible for them to participate in the community, and to lead productive, fulfilling lives (Cotton, 2004). Despite increased contact with PMI, the general public tends to maintain stigmatized and/or negative attitudes toward the mentally ill creating an oppositional force to community integration (Taylor & Dear, 1981). A multitude of studies have made the assertion that "negative attitudes and discrimination deprive victims of human dignity and prevent social participation" (Seo & Kim, 2010, p. 91). Community members with mental illness disorders experience the general public's negative attitudes toward them, often leading to a decrease in self-esteem and increased shame and guilt (Lee, Hanner, Cho, Han, & Kim, 2008). Public stigma often inhibits a high percentage of people with mental illness (PMI) from building rewarding relationships, leading to further isolation and withdrawal (Fung, Tsang, & Corrigan, 2008).

In recent years, budget cuts have steadily led to a reduction in the provision of services and support for PMI living in the community, with the results being an inability for many persons with mental illness to maintain a desired level of functioning, thus, unfortunately, adding

to a vicious cycle resulting in increases in mental health crises and substance abuse (Cotton, 2004; Pinfold et al., 2003). These are the circumstances which often invite or necessitate the involvement of law enforcement. As previously stated, negative attitudes toward PMI have an aversive impact upon these individuals, often leading to a decrease in quality of life.

Unfortunately, LEOs are not immune to stigma and negative attitudes toward the mentally ill, which may produce less-than-desirable behavior from the officer. CIT training attempts to challenge stigmatized beliefs and attitudes about mental illness and addiction disorders through (a) lectures about the causes, effects, and descriptions of various mental illnesses; (b) multiple training encounters with PMI and their families; and (c) such experiential teachings as simulation of auditory command hallucinations. One of CIT training's central goals is attitudinal change, in hopes that more positive attitudes, paired with knowledge and skills, will produce optimal interactions between PMI and LEOs in the future.

Self-Efficacy

Self-efficacy, a concept well-developed by Bandura (1982) is defined as a person's beliefs about "how well one can execute courses of action required to deal with prospective situations" (p. 122). A more applied description would be "situation-specific confidence that a person can overcome barriers and cope with challenges to satisfy specific situational demands" (Bahora, Hanafi, Chien, & Compton, 2008, p.160). An individual with a robust sense of self-efficacy will likely perceive challenges as tasks to be mastered, as opposed to threats to be evaded (Bandura, 1994). People with higher degrees of self-efficacy are also more willing to persevere in the face of adversity, as they "attribute failure to insufficient effort or deficient knowledge and skills which are acquirable" (Bandura, 1994, p. 71). A person with poor self-efficacy tends to believe that he or she does not have the ability to cope with a difficult situation;

they are not empowered to put forth the effort to try and thus are inclined to avoid the situation altogether (Ozer & Bandura, 1990).

In the literature, self-efficacy has been reported to have a strong correlation with personal well-being (Stajkovic & Luthans, 1998). A lack of faith in one's coping efficacy has been found to generate an increase in "subjective distress and physiological arousal" (Ozer & Bandura, 1990, p. 473). The perception of powerlessness to manage life's difficulties results in stress – activation of autonomic reactions, catecholamine secretion, and impaired immune function (Bandura, 1994). A person with a strong sense of efficacy is unlikely to be distressed by a challenge.

Subsequently, poor self-efficacy has been linked to anxious and depressive symptoms. The self-perceived lack of efficacy to manage daunting experiences may play a major part in law enforcement officers' anxiety arousal. Individuals who believe they have the ability to cope with stressful situations do not create as many apprehensive thoughts, and accordingly are not troubled quite as much by such situations. In contrast, people who believe they are not able to exercise some control over potential threats suffer increased levels of anxiety (Ozer & Bandura, 1994). These individuals tend to ruminate about their perceived deficiencies, creating further distress and impairing "their level of functioning" (Bandura, 1994, p.74). These ruminative thoughts can lead to a sense of helplessness and hopelessness that one may not be able to achieve a goal or perform as desired. When this transpires, one's poor self-efficacy can be depressing (Heslin & Klehe, 2006). Consequently, in regards to one's work life, high self-efficacy beliefs have been found to predict desirable performance (effort, persistence, and skill acquisition) and job satisfaction (Carprara, Barbaranelli, Steca, & Malone, 2006; Stajkovic & Luthans, 1998).

A type of self-efficacy often encountered in organizational psychology, role breadth self-efficacy (RBSE), refers to a worker's perceived confidence that he or she will be able to fulfill a more expansive and proactive role within the workplace that extends the position's basic requirements (Parker, 1998). When an individual makes the decision to work as law enforcement officer, he or she is unlikely to know that a generous portion of time on patrol will involve working with PMI. As mentioned earlier, the training academies may be instilling confidence in an officer's abilities uphold the law, but they are not preparing LEOs well enough to be confident in encounters with PMI. CIT training courses provide officers with the knowledge and skills needed to perceive oneself as efficacious in this expanded role as a helper to PMI.

In a 1982 article, Bandura describes four methods of developing self-efficacy: enactive mastery, vicarious experience or modeling, verbal persuasion, and reduction of stress reaction. CIT training provides officers the means to develop self-efficacy directed toward working with PMI. The training begins by verbally encouraging LEOs that they will be able to master the skills which are useful in mental health crises. CIT instruction also involves many people working in various levels of law enforcement who actually provide or participate in the training. They offer narratives about the benefits of CIT training in their professional lives, thus providing vicarious experience. In the midst of didactic training, the professionals leading the course model the CIT skills in action through role-play. The LEOs undergoing the CIT training are then provided the opportunity to role-play themselves, engaging in enactive mastery and working toward reducing the physiological stress produced by engaging in daunting tasks repeatedly.

Purpose of the Study

Crisis Intervention Team (CIT) training is a relatively new approach being used by law enforcement agencies to train officers to better manage encounters with PMI. Early research efforts regarding CIT tend to focus on the initial implementations of CIT, immediate effects for PMI, or incidence data. There have only been a handful of studies published which examined proximal officer-level effects. The current investigation will seek to explore the effects of CIT training on law enforcement officers' self-efficacy related to working with PMI, and attitudinal change toward PMI, thus adding to the collection of research on direct officer-level effects.

The importance of these training and research topics is potentially profound. An officer who believes himself or herself to be inefficacious in his or her ability to manage contacts with PMI is likely to (a) personally experience a range of aversive emotional and physiological reactions and (b) be unhelpful or possibly even harmful to the PMI whom they are trying to help. Additionally, (c) LEOs with negative or stigmatized attitudes toward PMI will be predisposed to worsening a situation which is already at a crisis level. If CIT training is found to significantly increase self-efficacy and improve negative attitudes for LEOs, the implications may be of great interest to law enforcement agencies and law enforcement training centers. Improvements in officer efficacy and well-being may translate to better community relations and financial savings. Discovery of a relationship between CIT training and such officer-level outcomes would likely serve as a great impetus for inspiring LEOs to volunteer for the training in an effort to experience more fulfillment in his or her jobs.

Definition of Terms

Law Enforcement Officer (LEO): In the present study, a law enforcement officer is defined as an individual currently working for a police department, sheriff's office, or state police agency in a law enforcement capacity.

People with Mental Illnesses (PMI): In the present study, a person with mental illness is defined a person with a medical condition that disrupts a person's thinking, feeling, mood, ability to relate to others, and daily functioning (National Alliance on Mental Illness; NAMI, 2008).

Attitudes Toward People with Mental Illness: In the present study, attitudes toward mental illness include authoritarianism, benevolence, social restrictiveness, and community mental health ideology (Taylor & Dear, 1981).

Self-Efficacy: In the present study, self-efficacy refers to a perception of confidence that one can overcome challenges in order to meet specific demands in regards to a particular situation (Bahora, Hanafi, Chien, & Compton, 2008).

II. REVIEW OF THE LITERATURE

Law Enforcement Officers and Persons with Mental Illnesses

In order to have an in-depth exploration of officer-level outcomes from Crisis Intervention Team (CIT) training, it is necessary to begin with an examination of law enforcement officers' (LEOs') involvement with people with mental illness (PMI). To begin the review, there will be a brief discussion of the causes of, legal principles of, and means through which LEOs become involved with PMI. The introduction will go on to discuss the role which CIT training plays in the lives of PMI and LEOs, specifically highlighting the potential effects on LEOs' self-efficacy and attitudinal change. Later in the chapter, important publications on CIT training will be explored across two themes – officer-level outcomes and disposition/incidence reporting. Additionally, the pertinent literature on attitudes, attitude change, and attitudes toward people with mental illness, as well as self-efficacy, potential outcomes of high or low degrees of self-efficacy, and self-efficacy in the work place will be covered as related to the field of law enforcement.

Extent of Engagement

In the 1960's, the United States began a process known as deinstitutionalization – releasing people with mental illness, who had previously been confined to a state mental hospital, into their home communities. This was done in an effort to provide patients with the least restrictive environment possible, and a response to “newly enforced constitutional protections such as due process and freedom from involuntary treatment” (Patch & Arrigo, 1999,

p. 24). Unfortunately many of the PMI now living in communities do not get the appropriate support they need from community based-treatment (either by choice to not engage in treatment or a lack of treatment availability) and there is a general lack of social support from the public, who often maintain a stigmatized attitude toward the mentally ill (Lamb, Weinberger, & DeCuir, 2002). To further compound matters, recent national and state budget cuts for social services have caused a severe reduction of outpatient treatment options resulting in many PMI being denied enough services to help them maintain their desired level of functioning or even a complete termination of services all together (Teplin & Pruett, 1992).

Legal Principles as Framework for Engagement

Because of the increase in number of PMI in communities and the inadequate support they receive, LEOs are becoming involved with PMI in record numbers (Patch & Arrigo, 1999). Law enforcement's engagement with PMI is founded upon two legal principles: 1) the authority and duty of the police to preserve the safety and welfare of the public, and 2) *parens patriae*, the paternalistic function of law enforcement, which provides protections for citizens with a disability who are unable to care for themselves (Teplin & Pruett, 1992). In terms of mental illness, this would translate to an individual who is deemed to be a danger to self or others through suicidal or homicidal intentions or a diminished capacity for functioning which would leave one vulnerable (Lamb, Weinberger, & DeCuir, 2002).

Difficulties Associated with Engagement

Police involvement with PMI can occur through several means: public request for enforcement of the law, police-initiated enforcement of the law, public request for order maintenance, or police-initiated order maintenance (Wilson, 1968, cited in Patch & Arrigo, 1999). A law enforcement officer (LEO) generally has discretion over whether to employ

informal means or legal means to manage the problem being encountered – this is a large responsibility and one that can be precarious.

Finn and Sullivan (1989) report three central issues that create significant difficulties for LEOs in handling calls involving people with mental illness (p. 2):

1. Frustration at being unable either to help people in serious trouble or to respond to pressure from citizens to “do something” about this population.
2. Stress from responding to a problem they are not trained to handle and do not feel is their responsibility to solve.
3. Substantial loss of time trying to find a facility willing to accept these people and then waiting around until they have been evaluated and admitted (or turned away).

As there is often little or no training provided for the appropriate way to deal with criminal behavior from an obviously mentally ill person, a mentally ill person’s non-criminal behavior which is bothersome to another citizen, or a mental health crisis that requires emergency services, LEOs are uneasy and sometimes reluctant to work with these cases. All too often, LEOs turn to unwarranted arrest as a solution because they lack the skills to defuse the situation informally, lack the knowledge and/or resources to make a referral to mental health agencies, or there is a lack of alternative placements that would maintain the safety of a mentally ill person in crisis (Lamb, Weinberger, & DeCuir, 2002). This funneling of PMI into the criminal justice system has come to be known as the “criminalization” of the mentally ill (Patch & Arrigo, 1999). Assessing data since 1965, Teplin (1984) has determined that there is a trend of higher arrest rates for individuals previously hospitalized in a psychiatric facility. Several reasons are cited as possible explanations: 1) There is an increased percentage of PMI in the

community due to deinstitutionalization; 2) increased numbers of people with history of arrest being hospitalized; and 3) LEOs' use of the criminal justice system to remove PMI from the community when the mental health system abstains from involvement (Patch & Arrigo, 1999; Teplin, 1984).

Crisis Intervention Team (CIT) Training

Development. In an effort to better serve PMI in dealings with law enforcement and to better support LEOs in their new roles as *de facto* mental health providers, Crisis Intervention Team (CIT) training was developed. The 40 hours of training for self-selected officers provides knowledge about mental illnesses and addiction disorders, skills for use of de-escalation techniques, resources for mental health referrals, and networking opportunities with mental health professionals and mental illness advocates (Compton, Bahora, Watson, & Oliva, 2008). The gained knowledge, skills, and partnerships are tailored to meet the goals of CIT training: reduction of injuries to civilians and officers, reduction of unwarranted arrest, and an increase in the access and referral to mental health services (Watson, Otatti, Morabito, Draine, Kerr, & Angell, 2010). Since CIT's inception in 1988, it has come to be considered by many in the mental health, criminal justice, and public policy fields to be the most promising means of connecting law enforcement to mental health services (Bahora, Hanafi, Chien, & Compton, 2007; Compton, et al., 2008).

As CIT training is a relatively young venture, research on the topic is scarce. To date there are less than 30 articles published in peer-reviewed journals regarding CIT. The foci of these articles can be divided into three categories: officer-level outcomes resulting from CIT training, incidence and disposition data from calls requiring a CIT officer's involvement, and basic program descriptions or implementations of CIT training (Compton, Bahora, Watson, &

Oliva, 2008). The preponderance of the research has been directed at measuring CIT training efficacy through comparison of incident and dispositional data from years pre-CIT implementation to years post-CIT implementation (Compton, Demir, Oliva, & Boyce, 2009; Skeem & Bibeau, 2008; Steadman, Deane, Borum, & Morrissey, 2000; Strauss et al. 2005; Teller, Munetz, Gil, & Ritter, 2006; Watson, Otatti, Morabito, Draine, Kerr, & Angell, 2010) as well as through changes in knowledge and beliefs resulting from CIT training (Bahora, Hanafi, Chien, & Compton, 2007; Compton & Chien, 2008; Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006; Demir, Broussard, Goulding, & Compton, 2009; Hanafi, Bahora, Demir, & Compton, 2008). The present study aims to augment and expand the focus of the research on officer-level outcomes resultant from CIT training, specifically along the dimensions of officer self-efficacy and attitudinal change.

Officer Self-Efficacy

The construct of officer self-efficacy, specifically as it relates to work involving people with mental illness (PMI), is of great significance to law enforcement officers (LEOs) and PMI alike. The previous chapter discussed the multitude of benefits that an officer might expect from increasing his or her self-efficacy, such as decreased vulnerability to depression, lessened anxiety, improved immune systems, and increased job satisfaction. Police work is inherently stressful and is associated with unpleasant psychological changes in officers. Beutler, Nussbaum, and Meredith report that “with greater time in service, somatic signs of stress and risk of substance abuse increase” for LEOs (1988, p. 506). Increasing an officer’s self-efficacy would provide a coping mechanism for handling one of the most stressful aspects of their work – encounters with PMI (Bahora, Hanafi, Chien, & Compton, 2007).

Law Enforcement Officer Attitudes Toward Mental Illness and Addictions

Crisis Intervention Team (CIT) training purports to achieve the behaviorally defined goals of reducing injuries and unnecessary arrests and increasing referrals to mental health services through changing the stigmatized attitudes of LEOs. The training works to de-stigmatize attitudes through means that parallel research findings in which behavior is predicted by attitudes (Glasman & Albarracin, 2006). For example, decisive attitudes are better predictors of behavior than ambivalent ones and greater attitude-behavior consistency is predicted by attitudes based on direct experience (Kraus, 1995, cited in Glasman & Albarracin, 2006). Given that so much weight is placed upon de-stigmatized attitudes in CIT, it is troubling to find that only one published study to date has examined attitude change (Compton, Esterberg, McGee, Kotwicki, and Oliva, 2006).

Outcome Assessment

In an effort to examine the effects of CIT training on knowledge, attitudes, and stigma related to schizophrenia, Compton, Esterberg, McGee, Kotwicki, and Oliva (2006) assessed 159 officers in the Atlanta, Georgia area. A pre-test, post-test design was used, administering the pre-test on the morning of the first day of training (prior to any education) and the post-test on the afternoon of the last day of training, after course completion. The tests contained measures gauging attitudes about violent and aggressive behavior from PMI diagnosed with schizophrenia, level of support for treatment programs PMI in one's neighborhood, knowledge about schizophrenia, and desired social distance from individuals diagnosed with schizophrenia. The results indicated an improvement of attitudes regarding violence potential, increased level of support for local treatment facilities, improved knowledge of schizophrenia, and a decrease in desired social distance after CIT training, all at a statistically significant level when compared to

baseline. Compton and colleagues suggest that their findings are indicative of the efficacy of CIT programs to potentially “correct myths, enhance understanding and support, and reduce reports consistent with holding stigmatized attitudes in the context of officers’ responding to calls involving individuals with schizophrenia” (p. 1201). The authors also posit that the changes in attitude, knowledge and stigma may lead to an improvement in rapport-building, communicative abilities with PMI, and more appropriate dispositions for PMI, i.e., referrals to mental health services in the stead of incarceration.

In 2009, Demir, Broussard, Goulding, and Compton published an article regarding the effects of CIT training upon LEOs’ beliefs about causes of schizophrenia. The data for this article was actually collected at the same time in the same manner of the previously described study. This particular endeavor was based upon other research demonstrating that causal beliefs about mental illness (mentally ill individuals not being personally responsible for their illness) are connected with positive attitudes and helping behaviors (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2004; Phelan, Yang, & Cruz-Rojas, 2006). It is thought that these public beliefs would translate to LEO beliefs, thus improving interactions between PMI and LEOs. The results indicated that CIT training indeed had an effect upon LEOs’ causal beliefs about schizophrenia – post-training, LEOs were less likely to endorse causes of personal, family, and social stressors; causes inconsistent with modern conceptions of risk; and causes of external or environmental damage to the brain. Additionally the LEOs were more likely to endorse causes of heredity and biochemical disturbances of the brain (Demir, Broussard, Goulding, and Compton, 2009).

The only qualitative study on CIT published to date came from the results of several focus groups comprised of 25 CIT officers conducted in the Atlanta, Georgia area. Assurances

of proper facilitation were established by the use of licensed psychologists with prior focus group facilitation experience. After a guarantee of anonymity, each group began a discussion based on one question: “How has CIT training been useful in your daily experiences on the job?” (Hanafi, Bahora, Demir, & Compton, 2008, p. 429). Two distinct categories came from the discussions – “increased knowledge and awareness of mental illnesses” and “application of learned skills” (p. 428). The officers reported that the knowledge acquired from CIT training regarding signs, symptoms, and causes of mental illnesses provided a “greater ability to recognize and respond to an individual in crisis, reduced stigma and stereotyping of individuals with mental illnesses, greater empathy for those individuals and their caregivers, more patience when dealing with consumers, and fewer arrests and more redirection toward treatment for consumers” (p. 429). In addition to these PMI-level benefits of CIT, the officers reported that using the skills taught in the course helped to put officers at ease, reduce the anxiety around the unpredictability of crisis, and reduced the chances that he or she will get injured during a call involving a mental health crisis. From the qualitative information derived from these focus groups, it appears that CIT training is beneficial to the community and helpful at an officer-level as a means of decreasing anxiety, increasing self-efficacy, and providing a sense of controllability in interactions with PMI.

In another study examining CIT training’s effects on an officer-level, Bahora, Hanafi, Chien, and Compton (2007) looked at changes in self-efficacy and social distance. The same methods were used as described in the previously mentioned quantitative studies. The authors employed four vignettes, each describing a potential interaction with hypothetical individuals diagnosed with the following conditions: depression, cocaine addiction, psychosis consistent with schizophrenia, and alcohol dependence. Each of the 58 officers were asked to complete two

scales with reference to the vignettes, one measuring self-efficacy pertaining to encountering PMI on the job, and another measuring desired social distance. Post-CIT training, the mean group scores for self-efficacy increased significantly across all four vignette conditions. Likewise, the mean group scores for desired social distance decreased significantly among all conditions. The authors state that “the findings highlight the relevance of CIT training in enabling police officers to have greater confidence in their ability to interact” with PMI and in experiencing “greater comfort with closeness to individuals with mental illness”(p. 165). The discoveries of this study are of particular importance when considering the nature of law enforcement work; officers are not afforded the luxury of choosing the individuals or situations to which they will respond. If CIT training can provide increased confidence and comfort in an officer’s daily work – it should be deemed a worthy endeavor.

Disposition and Incidence Data

As a method of determining the extent to which Crisis Intervention Team (CIT) trained officers were more likely to transport an individual experiencing a mental health crisis to a treatment facility as compared to non-CIT officers, Teller, Munetz, Gil, and Ritter (2006) analyzed police dispatch logs for the Akron, Ohio Police Department. The logs for two years prior to CIT implementation in Akron and four years post implementation were screened to determine an average number of general and CIT-related calls per month. The authors report that the average number of total calls per month remained steady over the six year period; however the average number of calls relating to mental illness increased significantly post-CIT implementation. The article offers two possible explanations – increased mental health knowledge on the part of the dispatcher resulting in a CIT officer being sent to a call versus a non-CIT officer and the community’s knowledge of the CIT program may have provided

increased comfort and a sense of accessibility for citizens and PMI involved in a mental health crisis. The ultimate findings of the study indicate that CIT-trained officers are significantly more likely to transport PMI to a treatment facility than non-CIT officers.

In 2005, Strauss et al. sought to investigate the practical application of CIT training's objective of educating officers about indications of mental illnesses and when an individual should be connected to mental health services. The authors accomplished this task by examining all patient records over the course of a month for the only emergency psychiatric service center in Louisville, Kentucky. There are only three ways an individual may be admitted to the emergency psychiatric service for evaluation: court-ordered assessment, referral by police officer, and self-referral. The records were inspected for patient characteristics noted upon intake as well as final disposition. The authors found no significant differences between the CIT-referred patients and patients otherwise referred – the patients were similar in terms of presentation symptoms and severity as well as receiving dispositions of hospitalization or intensive outpatient treatment. This finding was interpreted as an indication that the CIT-trained officers are skilled at recognizing signs and symptoms of mental illness in addition to making appropriate referrals for treatment.

In Chicago, Watson et al. (2010) employed the methods of officer interview and reviewing dispatch log records in an effort to examine the impact CIT-trained officers have on contact resolution as compared to non-CIT officers. A random sample of 333 officers was taken for either dispatch record analysis or an interview from the Chicago Police Department. The authors discovered that CIT officers are significantly more likely to transport PMI to treatment facilities than their non-CIT counterparts. Conversely, CIT officers are far less likely to have a “contact only” disposition when encountering PMI than non-CIT officers, i.e., they are more

likely to make a referral for treatment. There was one unexpected result reported – there was not a significant difference found in arrest rate between CIT-trained and non-CIT trained officers. There are several possible reasons given for the unforeseen result, several pertaining to a possible lack of CIT effectiveness or poor implementation in Chicago. The most plausible reason, reported by the authors, is a recent trend in the Chicago Police Department to avoid arresting anyone with a possible mental illness. The shift in usual arrest patterns is due to a tragic event occurring after a mentally ill woman was arrested for public disturbance and released the next evening in a high-crime area, resulting in her rape and murder. After the incident, the shift commanders were given direction to avoid approval for arresting PMI if possible. The absence of a difference in arrest rate could be attributed to the general avoidance by all officers, CIT and non-CIT alike, for arresting PMI (2010).

Summary of CIT Research

The literature previously described suggests that CIT training and CIT model implementation are an effective means of linking PMI who are experiencing a crisis necessitating LEO involvement to appropriate mental health treatment. Although the research is quite limited, it appears that CIT training has many positive officer-level effects, such as increases in confidence/self-efficacy, de-stigmatized attitudes, and improved knowledge regarding mental illness. While there is much enthusiasm from mental health professionals and advocates, law enforcement agencies, and correctional facilities about CIT training, the particular aspects of the program which create success have yet to be uncovered. Furthermore, the variations in implementation by locality have yet to be submitted to examinations of efficacy. The use of CIT models and training are promising thus far, but clearly further research is warranted (Compton, Bahora, Watson, & Oliva, 2008).

Attitudes

For nearly a century researchers have been unable to agree on one specific definition of attitudes. While most concur that evaluation represents a fundamental feature of attitudes, the following definitions of attitude from several influential theorists will be considered applicable to the present study: “a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Olsen, 1993, p. 119), the emotions associated with a psychological object, knowledge comprised evaluations and affects, and a personal state that predisposes an approval or disapproval of an object or idea (1993). The aforementioned definitions do not act as contradictions, and as such they should be considered as complementary to one another. In their aggregate form, the multiple definitions align with the three component model of attitudes, which proposes that “an attitude is based upon the evaluation of three classes of information: cognitive, affective, and behavioral” (Rosenberg & Hovland, 1960, cited in Addison & Thorpe, 2004, p. 229). The model indicates that there are three factors which are significant for the construction of attitudes: cognitive information, facts and beliefs associated with the attitude object; affective information, emotions aroused by the attitude object; and behavioral information, awareness of previous, current, and potential experiences with the attitude object (Addison & Thorpe, 2004).

Social psychologist, Gordon Allport, initially became interested in attitudes as he believed them to be mental directors of behavior. However, early research in the area failed to reveal an attitude-behavior connection. Since that time researchers have demonstrated many reliable connections between attitudes and behavior; the missing piece was the conditions under which attitudes would successfully predict behaviors (Gray, 2002). In a meta-analysis of the relationship of influential factors to attitudes that predict behavior, Glasman and Albarracin

(2006) discovered that: “attitudes influence future behaviors when they are easy to retrieve from memory and stable over time,” “expressing attitudes repeatedly and having direct experience with the attitude object influence the attitude-behavior relation by inducing higher attitude accessibility,” and “being motivated to think about an object or an issue promotes attitudes associated with one-sided and behavior-relevant information” (p. 818).

Attitudes Toward Mental Illness

People with mental illness (PMI) have many obstacles to functioning at his or her own desired level. Compacting those difficulties are negative and stigmatized attitudes toward mental illness and PMI from the general public. Stigmatized attitudes can be defined as perceptions of mental illness as an unfavorable attributes that discredit an individual and may bring about social distancing and discriminatory behaviors (Kobau, DiIorio, Chapman, & Delvecchio, 2010; Link & Phelan, 2001). Stigma can serve as a barrier to seeking and maintaining treatment for PMI by means of a desire to avoid bringing stigmatized attitudes upon oneself. The stigmatized attitudes associated with many psychiatric illnesses and addictive disorders have the potential to prevent the obtainment of quality housing, limit employment opportunities, and increase social isolation, thus exacerbating existing psychiatric symptoms (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Kobau, DiIorio, Chapman, & Delvecchio, 2010; Link & Phelan, 2001). Phelan, Link, Stueve, and Pescolido (2000) report that there has been a significant improvement in public understanding of mental illness since the 1950’s, but there remains a powerful inclination toward avoidance.

The stigmatized attitudes held toward PMI by the public can be separated into three elements: stereotypes, prejudice, and discrimination. Stereotypes are common beliefs about members of a group that allow the observer to quickly and efficiently generate ideas and

expectations about particular individuals who belong to said group. Stereotypes commonly attributed to PMI are that individuals belonging to this group are unpredictable, dangerous, and responsible for their own illness (Link, Monahan, Stueve, & Cullen, 1999). Stereotypes are not believed by all who are aware of them; people who do endorse negative stereotypes are prejudiced. Prejudicial attitudes cause negative evaluations of the object or person and in turn lead to negative emotional reactions. The behavioral response resultant from prejudicial attitudes, known as discrimination, could be detrimental to the welfare of targeted group members. Discrimination toward PMI frequently takes several forms, such as “coercion, segregation, hostile behaviors (physical harm or threats of harm), withholding help, or avoidance” (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003, p. 164).

Attribution theory, a valuable model used to explain the relationship between stigmatized attitudes and discrimination, states that the development of attributions toward others, and thus the direction of our behavior, is determined by both a cognitive and an emotional process. When an observer encounters an individual with a mental illness or an addictive disorder, the observer attempts to make attributions about the cause and controllability of that individual’s affliction which leads to forming inferences about personal responsibility for the illness. The inferences then produce an emotional reaction, e.g., pity or anger, that influence the probability of engaging in helping or punishing behaviors (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Weiner, Perry & Magnusson, 1988). If an observer attributes the cause of a person’s diagnosis of Bipolar Disorder to many years of cocaine abuse (a cause within the individual’s control), the observer will be apt to determine that the person is responsible for his/her own illness. This determination of personal responsibility is likely to produce emotions such as anger or disgust, decreasing the likelihood that the observer will engage in helping behaviors toward this person.

Accordingly, if the observer were to attribute the cause of illness to a genetically inherited chemical imbalance, the person would not be determined to be responsible for his/her own illness, increasing the chances of helping behaviors from the observer.

This application of Attribution Theory to the stigma surrounding psychiatric disorders inspired Corrigan, Markowitz, Watson, Rowan, and Kubiak to design a study to investigate the relationships “among causal attributions for mental illness (e.g., controllability and personal responsibility beliefs), dangerousness, emotional responses (e.g., pity, anger and fear), and the likelihood of helping and rejecting behavior” (2003, p. 167). The authors’ findings were consistent with the tenets of attribution theory. The results indicated that attributing the cause of one’s mental illness to personal responsibility as well as the perception that people with mental illness are dangerous predicted an unwillingness to engage in helping behaviors, a preference for avoidance, and support for mandatory treatment. It was also discovered that familiarity with psychiatric disorders predicted a willingness to engage in helping behaviors and a decreased desire for avoidance.

Law Enforcement Officers’ Attitudes Toward Mental Illness

As previously mentioned in this chapter, law enforcement officers (LEOs) frequently encounter PMI in their daily work and often serve as gatekeepers, i.e., directing PMI to treatment or incarceration or possibly doing nothing to help said individuals. It has been noted in the literature that PMI support the assertion that “police officers are a significant source of stigmatization and discrimination against persons with mental illness” (Watson, Corrigan, & Ottati, 2004, p. 49). Looking to attribution theory again, Watson, Corrigan, and Ottati set out to investigate whether or not LEOs would consider individuals diagnosed with schizophrenia to be less accountable for their actions than individuals with no mental health diagnosis; whether or

not LEOs would feel pity and express a desire to engage in helping behaviors for a person diagnosed with schizophrenia as compared to a person with no mental illness diagnosis; and whether or not LEOs would perceive an individual diagnosed with schizophrenia as more dangerous than an individual reported to have similar behavior, but no diagnosis. The authors found that a person diagnosed with schizophrenia was perceived by the LEOs surveyed as less responsible for their behavior, more worthy of pity, more deserving of help, and more dangerous than a person without a mental health diagnoses. Two important indications come from this study: 1) If having knowledge of a person's mental health diagnosis serves to moderate a LEOs behavior, more efforts should be made to help LEOs learn the signs and symptoms of mental illnesses, as most encounters do not come previously labeled; 2) The tendency for LEOs to presume a person with mental illness as more dangerous than a person without mental illness is likely to be an escalating factor in interactions with PMI. An increased sense of danger often leads officers to behave more aggressively and authoritatively than is indicated, exacerbating the situation to the point of a physically violent contact (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2004).

Also in 2004, Cotton conducted a study designed to identify and measure attitudes that are influential to the discretionary decisions of LEOs in Canada. There were some surprising results found that are contrary to many portrayals of LEOs, attitudes toward PMI. The data indicated that the officers surveyed did not report having a strong belief that PMI needed firm control, discipline, and institutionalization. Nor did they identify beliefs that PMI are dangerous and should be segregated from the general community. In fact, their beliefs appeared to be very much aligned with the set of comparison data taken from the general public in developing the instrument used (Taylor & Dear, 1981). Additionally, the majority of officers surveyed agreed

with the notion that dealing with PMI is a part of law enforcement work; however, half reported believing there is a need for special training in order for them to fulfill this role appropriately. Also of note was the finding that half of the LEOs participating in the study believe that “the mentally ill take up more than their fair share of time” (Cotton, 2004, p. 144).

Self-Efficacy

One of the most fundamental components of human motivation is the belief of one’s efficacy. Self-efficacy, as stated earlier, can be construed as a situation-specific confidence that one “has the power to produce effects by one’s actions” (Bandura, 2001, p. 10). Without that belief, one has little incentive to put forth effort or to persist in the midst of difficulty. Those with a sound sense of efficacy attempt to conquer challenges without trepidation and maintain commitment in the face of adversity. After failures they tend to recover rapidly, crediting the set-back to a lack of knowledge, skills, or effort – all of which can be obtained. For these individuals, approaching life’s tasks with the confidence that they have the ability to exert some control serves to reduce stress and susceptibility to depression (Bandura, 1994).

Conversely, individuals who do not possess a strong sense of efficacy are apt to avoid challenges, as they are perceived as a threat. When difficult tasks are presented, these individuals have a tendency to wallow in thoughts of their personal inadequacies and imagine a variety of dreadful outcomes instead of focusing their thoughts on successful problem-solving. Accordingly, when these difficulties are undertaken, they are often readily abandoned. These individuals attribute failures to inability and often do not recover confidence, easily falling victim to stress and depression (Bandura, 1994; 2001).

Ozer and Bandura state that “perceived self-efficacy to exercise control over potentially threatening events plays a central role in anxiety arousal. Threat is not a fixed property of

situational events” (1990, p. 473). More accurately, threat is a resultant discernment of the divergence between perceived coping abilities and potentially harmful features of the given situation. People who lack self-efficacy, believing that they do not have what it takes to exert control over the task that lies ahead, will generate fearful thoughts and experience subsequent anxiety. It is purely the cognitive aspect of preparing to complete a task that is distressing for these individuals and the anxiety that it produces results in impaired functioning. In a study examining how increases in perceived self-efficacy impact cognitive and affective manifestations of anxiety, Ozer and Bandura found that various means of helping others to increase their perceptions of efficacy led to a decrease in negative thoughts and fear and anxiety (1990).

In another study designed to investigate the effects of increases in self-efficacy upon cognitive, affective, and now physical manifestations of anxiety, Bandura, Reese, and Adams (1982) manipulated the degree to which participants could gain a sense of predictability and controllability over feared situations. When the participants were allowed to gain sufficient knowledge to predict and exercise control over their feared situation, the participants experienced a significant decrease in or complete relief from anticipatory rumination, anxiety and dejection, and increased blood pressure and heart rate. These findings have great implications for application to the real world, specifically those of the physiological realm. The authors report that even when the participant experienced a low level of anxiety arousal, their heart rate and blood pressure were elevated to a level of concern.

Self-Efficacy and Physical Health

The anxiety arousal produced from believing oneself to be incapable of managing the challenge in front of them can also be referred to as stress. “Stress is not just a stimulus or response. It is the process by which we appraise and cope with environmental threats and

challenges” (Myers, 2010, p. 528). The physical observance of stress begins with a flood of stress hormones, epinephrine, norepinephrine, and glucocorticoids, elevating heart rate and blood pressure and releasing sugars, in an effort to prepare the body for action. If these actions are persistent or chronic, the body will become depleted, increasing vulnerability to illness. This occurs through energy being diverted from the immune system to the heart and skeletal muscles, thus weakening immune functioning and making the body susceptible to infection and at greater risk for heart disease. The human body is not designed to cope with prolonged stress; the effects often manifest as physical deterioration. Even minimal and moderate stressors can compound and create the same physical experience as a significant stressor (2010).

Self-Efficacy and Work

Research conducted over the past 30 years has indicated that self-efficacy has many applications within the world of work, such as skill acquisition, adaptability to new technologies, and coping with changes in the organizational environment (Parker, 1998; Stajkovic & Luthans, 1998). Stajkovic and Luthans conducted a meta-analytic study to determine specific factors of the relationship between self-efficacy and work-related performance. The most important finding was that self-efficacy is positively and strongly related to work performance. “Given the scope of this meta-analysis, and the extensive theoretical foundation of the whole research stream (Bandura, 1986; 1997), the above findings represents something that usually skeptical practicing professionals may rely on with a reasonable amount of confidence” (Stajkovic & Luthans ,1998, p. 255). The authors go on to provide practical suggestions for increasing employee self-efficacy, as the evidence for such implications came to light from the data. For one, they state that “employees should be instructed as to what means are necessary for successful performance and how to use those means” (p. 255). Next, employees should be

provided with programs designed to enhance their self-efficacy, building their confidence by exploring the many things they can accomplish with skills already in place. Last, employees should be provided with additional training to help them develop coping skills for use when encountering difficult tasks (1998).

Self-efficacy in the workplace has also become notably advantageous in current organizational climates where employees are being required to take on additional roles. With the expansion of performance requirements from employers, it is particularly salient that employees develop a type of self-efficacy termed role breadth self-efficacy (RBSE). RBSE refers to a worker's perceived confidence that he or she will be able to fulfill a more expansive and proactive role within the workplace that extends the position's basic requirements (Parker, 1998). In a 1982 publication, Bandura describes four methods through which self-efficacy can be developed or bolstered: enactive mastery, modeling or vicarious experience, verbal persuasion, and improved physiological states. In Parker's study, she verifies that three of the means which Bandura suggested are applicable in developing RBSE. First, enactive mastery provides the opportunity for employees to begin to master new skills in a gradual manner, reinforcing successes along the way. Second, vicarious experience shows employees how to master new tasks by having others model successful task completion. Third, verbal persuasion will work to encourage employees to try new tasks because they already have many necessary skills to be successful. The encouragement may come from managers or other employees viewed as successful at broad task-mastery. These are useful tactics, easily adapted and applied at the workplace.

Self-Efficacy Correlates and Law Enforcement Officers

There is no doubt that the field of law enforcement can create an extremely stressful work environment for officers. Law enforcement officers (LEOs) work “in a unique social system that requires the ability to adapt to unusual demands” (Beutler, Nussbaum, & Meredith, 1988, p. 503). It is believed that police work affects the personal adjustment of officers, resulting in alcoholism and suicide rates that surpass those of the general population. Through an investigation of longitudinal psychological effects of LEOs measured by the Minnesota Multiphasic Personality Inventory (MMPI), it was discovered that after only two years of service, officers indicated a significant increase in vulnerability to addictive behavior. At four years of service, the results showed a significant change in the scores of Hypochondriasis, Hysteria, and the MacAndrews Alcoholism Scale, indicating psychopathology suggestive of being at risk for stress-related somatic complaints and substance abuse. Due to these findings, the authors suggest that law enforcement agencies actively engage in introducing or enhancing coping skills for LEOs geared toward stress management and substance abuse (Beutler, Nussbaum, & Meredith, 1988). It would likely be beneficial to assist officers in developing their perceived self-efficacy for handling the troubling aspects of their work.

Law enforcement officer self-efficacy and the workplace. There has been a variety of research that a strong sense of self-efficacy is highly correlated with job satisfaction (Bandura, 1997; Caprara, Barbaranelli, Borgogni, & Steca, 2003). It has been noted that “employees who are satisfied with their jobs will be more motivated to perform necessary tasks, will have fewer absences, be more inclined to assist others, and more likely to commit themselves to the overall mission of the organization” (Miller, Mire, & Kim, 2009, p. 419). In 2006, over 2000 teachers were surveyed in order to test a proposed model of the relationship between perceptions of self-

efficacy at work and job satisfaction, along with various other correlates. The authors report finding a strong correlation between perceived teacher self-efficacy to job satisfaction, as well as to student achievement (Caprara, Barbaranelli, Steca, & Malone, 2006).

As stated above, LEOs tend to experience their work as stressful and conducive to developing unhealthy coping strategies. Job satisfaction among LEOs is not a well-researched field; however Miller, Mire, and Kim found that officers with more years of experience reported lower levels of job satisfaction (2009). They also discovered that finding one's work to be meaningful and important, a higher level of autonomy, and freedom of discretion significantly predicted job satisfaction. Given the nature of police work, administrators of law enforcement agencies and those in government and public policy roles would be remiss if they did not attend to the topic with concern. Hoath, Schneider, and Starr outline salient reasons:

1. Negative worker attitudes, including officers who are not satisfied, may adversely affect job performance, that is, both the quantity and quality of the law enforcement service an organization provides.
2. Negative police attitudes may adversely affect the attitudes and views the public develops about a law enforcement organization and its officers, thus undermining police community relations.
3. A police organization has a moral obligation to demonstrate concern for its employees and promote positive work-related attitudes among them.
4. Job satisfaction promotes lower stress levels and, accordingly, fewer symptoms of stress (e.g., absenteeism, burnout, and alcoholism) (1998, p. 339).

Another variable of consideration for leaders of law enforcement agencies is that of officer's perceived self-efficacy on the job, given the strong correlate to job satisfaction. It appears that

all means known to be predictive of job satisfaction should be carefully explored as options in attempts to improve officer well-being.

Law enforcement officer self-efficacy and well-being. Another topic previously discussed is that of the relationship between physical well-being and self-efficacy. It was demonstrated that there is a strong connection between stress, which results when there are disparities between perceived coping abilities (self-efficacy) and the challenge(s) at hand, and physical compromise, i.e., cardiac conditions and impaired immune function. Considering the reported stress that officers experience, it is no surprise that “police officers suffer high rates of heart disease and stomach disorders” (Miller, Mire, & Kim, 2009, p. 420). Closely related, officers often report symptoms of psychological distress congruent with depression and anxiety when they are in positions deemed stressful (Evans, Coman, & Stanley, 1992). As Bandura suggests, mood strongly affects one’s judgments of personal efficacy – positive moods serve to enhance self-efficacy and negative moods diminish it (1994). An alarming fact is that police officers “have suicide rates two to six times the national average” (Miller, Mire, & Kim, 2009, p. 420). LEOs also have extraordinarily high divorce rates, near twice the rate of other occupations (2009).

Law enforcement officers have significant struggles with stress at work, officer job satisfaction, and health problems – mental and physical; all of which are demonstrated to be highly predictable by perceived self-efficacy. Officers have reported that one of the most stressful aspects of their work, also being the aspect they are least prepared to handle, is encounters with PMI. Preliminary evidence suggests that officers who undergo CIT training report significant increases in self-efficacy regarding work with PMI, thus laying the ground work for decreases in anxiety arousal, or stress (Bahora, Hanafi, Chien, & Compton, 2007). If

CIT training has a main effect upon perceived self-efficacy, it is possible to benefits could trickle down to general stressors at work, job satisfaction, and health impairments.

Summary

Deinstitutionalization of people with mental illness has led to an increase of PMI living in community settings. Frequently these individuals are not receiving the professional support required to improve or even maintain a desired level of functioning (Lamb, Weinberger, & DeCuir, 2002; Patch & Arrigo, 1999; Teplin & Pruett, 1992). The rising numbers of people with mental illness (PMI) now residing in communities and the lack of appropriate support has led to an increase in the number of instances law enforcement officers (LEOs) become involved with such individuals (Patch & Arrigo, 1999). There are a number of reasons why a LEO would have contact with a person with mental illness, but the major grounds for contact is when crises arise – legal or mental health. The responsibility to help PMI in crisis falls upon the patrol officer, leading to significant difficulties and frustration for the LEOs, who are often not properly trained and/or ready to handle every issue that arises. The lack of training and skills to better enable LEOs to work with PMI can lead to exacerbation of the crisis and often to unwarranted arrests (Finn & Sullivan, 1989; Lamb, Weinberger, & DeCuir, 2002; Teplin & Pruett, 1992).

In order to better manage the aforementioned difficulties, Crisis Intervention Team (CIT) training was developed. The 40 hours of training provides officers with knowledge about mental illnesses and addiction disorders, skills for de-escalation techniques, resources for mental health referrals, and networking opportunities with mental health professionals and mental illness advocates (Compton, Masuma, Watson, & Oliva, 2008; Watson, Ottati, Morabito, Draine, Kerr, & Angell, 2010). Since its inception, CIT training has been considered to be the most promising

way to bring together law enforcement agencies and mental health services (Bahora, Hanafi, Chien, & Compton, 2007).

Among its many upsides, the literature indicates that CIT training has led to a reduction in injuries and unnecessary arrests along with an increase in referrals to mental health services (Compton, Demir, Oliva, & Boyce, 2009; Skeem & Bibeau, 2008; Steadman, Deane, Borum, & Morrissey, 2000; Strauss et al. 2005; Teller, Munetz, Gil, & Ritter, 2006; Watson, Otatti, Morabito, Draine, Kerr, & Angell, 2010). It has also changed the way LEOs think of the PMI they encounter by reducing stereotypes and pre-determined stigmas the officers admittedly applied to such individuals (Bahora, Hanafi, Chien, & Compton, 2007; Compton & Chien, 2008; Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006; Demir, Broussard, Goulding, & Compton, 2009; Hanafi, Bahora, Demir, & Compton, 2008). One of the greatest obstacles PMI face is the stigmatized attitude the general public has towards mental illness, which has been demonstrated to potentially prevent an individual from seeking help, leading to an aggravation of symptoms (Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2003; Kobau, DiIorio, Chapman, & Delvecchio, 2010; Link & Phelan, 2001).

Studies conducted regarding LEOs and their attitudes towards individuals with recognizable mental illness revealed that LEOs saw such people as less responsible for their behavior, more worthy of concern, and more deserving of help (Watson, Corrigan, & Ottati, 2004). Also evidenced was the general desire LEOs have to be better trained to be helpful to PMI (Cotton, 2004). A more alarming finding was that LEOs tend to perceive PMI as more dangerous than a person without a mental health diagnosis (Watson, Corrigan, & Ottati, 2004). CIT training has the ability to educate LEOs about signs and symptoms of mental illnesses and addictive disorders, thus correcting attributions about causes of behavior. CIT training has also

been shown to dispel myths about the dangerousness of PMI, which reduces the likelihood an LEO will behave more aggressively than the situation warrants, thus decreasing the chances of the contact becoming physically violent.

A strong sense of self-efficacy has been found to play an important role in human motivation, achievement, and well-being. Those who have confidence in their ability to master a challenge tend to approach the challenge more readily and often experience greater success in their efforts. Those who lack confidence in their efforts have a tendency to generating fearful thoughts and experience anxiety, thus making themselves vulnerable to depression and illness (Bandura, 1994; 2001). High degrees of self-efficacy, on the other hand, have been found to correlate strongly with success in one's job and job-satisfaction (Bandura, 1997; Caprara, Barbaranelli, Borgogni, & Steca, 2003; Caprara, Barbaranelli, Steca, & Malone, 2006; Miller, Mire, & Kim, 2009).

Perceiving oneself as highly efficacious is extremely important for LEOs. Working in the field of law enforcement is very stressful and has been shown to be a major contributor to the higher alcoholism, suicide, and divorce rates LEOs have in comparison to the general population (Miller, Mire, & Kim, 2009). One of the major stressors for LEOs is working with PMI, as there is a universal lack of training and guidelines for serving these populations (Finn & Sullivan, 1989). Preliminary evidence from one study has suggested that officers who undergo CIT training report significant increases in self-efficacy regarding work with PMI, thus laying the ground work for decreases in anxiety arousal and stress and potentially limiting the onset of depression, substance abuse, and serious physical illness (Bahora, Hanafi, Chien, & Compton, 2007). Law enforcement agencies, the employers of LEOs, may have a vested interest in improving the self-efficacy of their officers, as more efficacious employees are often satisfied

employees, resulting in a more productive workforce that is able to build stronger relationships with the community they service (Hoath, Schneider, & Starr, 1998).

The potential benefits of CIT training at an officer-level have been discussed in this chapter. The aim of this study is to explore further the relationship between CIT training and attitudinal change toward PMI as well as self-efficacy in working with PMI for LEOs in Maine. If this relationship is found to increase self-efficacy and de-stigmatize attitudes toward PMI as hypothesized, the knowledge will potentially serve to benefit 1) PMI in the community through improving access to necessary services and decreasing unwarranted arrests; 2) LEOs by making funding for training more accessible, encouraging more officers to volunteer for the training, and improving officer well-being, and 3) law enforcement agencies through creating better relationships and images within the community and reducing payroll costs by having a healthier work force.

III. METHODOLOGY

Design

The present study employed the use of an experimental/control group design to test the hypotheses derived from the basic research questions. The experimental group participated in a comprehensive Crisis Intervention Team (CIT) training program and was given a pre-test and post-test on key measures related to specific elements of the instructional program, and to target post-training behavior. CIT training is a 40 clock-hour course, taught over five days, that educates law enforcement officers (LEOs) about mental illnesses and addictive disorders, de-escalation communication skills, crisis resolution skills, professional resources available for people struggling with mental illness, and other variables that may moderate or exacerbate encounters with people with mental illness (PMI). The training consisted of didactic classes and skill-building exercises. The implementation of CIT training in Maine differs only slightly from the standardized “Memphis Model” that is most often employed nationwide (Sample Schedule provided in Appendix G). Maine’s CIT training curriculum consists of the following courses:

Experimental Group Intervention: The Curriculum Model of the CIT program

- **Mental Illness Basics**

- An introduction to mental health that covers basic descriptions of common mental illnesses, discusses the prevalence of mental illness, and presents data to counter common myths and misunderstandings.
- The course briefly covers the following specific mental illnesses:
 - Schizophrenia
 - Lectures include a presentation of the different varieties of Schizophrenia and an exploration of associated positive and negative symptoms.

- Depression
 - Lectures focus on the signs/symptoms of the disorders and associated behaviors.
 - Bipolar Disorder
 - Lectures focus on the signs/symptoms of the disorders and associated behaviors.
 - Generalized Anxiety Disorder
 - Lectures focus on the signs/symptoms of the disorders and associated behaviors.
 - Obsessive-Compulsive Disorder
 - Lectures focus on the signs/symptoms of the disorders and associated behaviors.
 - Posttraumatic Stress Disorder
 - Lectures focus on the signs/symptoms of the disorders and associated behaviors.
- **Risk Assessment and Prevention**
 - Provides education about suicide prevalence and rates, presents data relative to the variety of myths about suicide, and discusses the phenomenon of suicide-by-cop.
 - Educates participants about factors to assess when determining risk of harm or lethality to self or others
 - Informs officers of the components of a credible safety plan
 - Provides education about self-injurious behavior, including the various methods and causes, as well as related demographic information
- **Child and Adolescent Mental Health**
 - Educates LEOs about childhood and adolescent etiology, and about mental illness development
 - Provides diagnostic criteria, symptoms, and manifestation by age for the following disorders:
 - Attention-Deficit Disorders
 - Oppositional Defiant Disorder
 - Conduct Disorder
 - Eating Disorders
 - Discusses de-escalation strategies specific to children and adolescents in crisis.
- **Trauma**
 - Provides education about various causes of traumatic response, how traumatic stress affects the brain, and how traumatic stress can manifest and affect functioning.
 - Teaches LEOs how to respond to people experiencing traumatic stress – acute and chronic.

- **Consumer Perspectives**
 - Educates officers about the principles of recovery from mental illness and the impact that officers have upon PMI in crisis.
 - Provides officers the opportunity to listen to consumers who have recovered from or are managing mental illness discuss the challenges of daily life and obtaining treatment when struggling with a severe mental illness.
- **Legal Issues and Consumer Rights**
 - Provides officers with information about protective custody laws and the involuntary commitment process.
 - Educates officers about health care confidentiality requirements and reasons for exceptions to confidentiality.
 - Discusses the rights of recipients of mental health services, including resources available when a consumer believes their rights have been violated, the principle of the least restrictive setting for treatment, and a consumer's right to refuse treatment.
- **Personality Disorders**
 - Discusses the bio-psycho-social aspects, diagnostic criteria, symptoms, and common comorbid disorders of the following specific personality disorders:
 - Borderline Personality Disorder
 - Antisocial Personality Disorder
 - Narcissistic Personality Disorder
- **Substance Abuse and Co-Occurring Disorders**
 - Provides information about diagnosis, common treatments, and outcome expectancies for substance abuse and substance dependence, focusing on substances commonly problematic in Maine (alcohol, opioids, cannabis, and benzodiazepines).
 - Educates officers about the relationship between mental illness and substance abuse disorders.
 - Discusses common misconceptions about substance abuse/addiction.
- **Family Perspectives**
 - Provides officers with the opportunity to gain an understanding of the challenges families face when helping a family member seek treatment for a mental illness.
 - Allows officers to learn how they can be more helpful when collaborating with a family member of a person with mental illness in a crisis situation.
- **Psychiatric Medications and Toxicology**
 - Educates officers about the most commonly used psychiatric medications focusing on the following:
 - Understanding the different classes and uses for medications.
 - Understanding the impact of side effects from medications.

- Understanding the issues that interfere with medication compliance.
- **Developmental Disorders**
 - Provides education about the manifestation and symptoms of Mental Retardation, Autism, and Pervasive Developmental Disorders.
 - Discusses the challenges people diagnosed with these disorders face in communicating and interacting with others.
 - Inform officers of common ways in which law enforcement will have contact with people diagnosed with a developmental disorder.
 - Educate officers about helpful ways to de-escalate a person who has developmental disorder, focusing on:
 - Sensory issues
 - Eye contact
 - Social cues/deficits
- **Diversity Issues**
 - Explores issues of diversity in the general population – including race, ethnicity, gender, religion and sexual identity.
 - Educates officers about the impact diversity may have on mental illnesses and treatment
 - Addresses local issues of diversity for the community
- **Resources**
 - Informs officers about the operation of the mental health service network in Maine
 - Provides information about statewide resources for support and local resources and contacts. Often, representatives are present from various resources to provide the officers with a more personal contact.
- **Issues of Aging**
 - Educates officers about the diagnoses of Alzheimer’s Disease and Dementia. Onset, causes, symptoms, and treatments are discussed.
 - Informs officers of common ways in which law enforcement will have contact with aging populations.
 - Provides information about helpful ways to de-escalate a person who has Dementia and the ways in which an officer can be more helpful when collaborating with a family member of a person with Dementia.
- **De-escalation Techniques**
 - Teaches officers about the Crisis Cycle and potential causes of aggressive, agitated, and escalated behavior.
 - Provides suggestions and specific techniques for better communication with a person in crisis

- Provides officers with multiple opportunities to observe instructors involved in a role play with persons in crisis as well to participate in role plays themselves.

Control Group

The control group did not participate in the Crisis Intervention Team (CIT) training program. Moreover, members of the control group had not participated in the program at any previous time. Both groups' members (experimental and control) were administered the pre-training survey. The data was examined for within-subject effects for the experimental group along the dimensions of self-efficacy and attitudinal change as well as for between-subjects effects of the experimental and control groups for baseline self-efficacy and attitude scores. Additionally, demographic characteristics for both groups were examined for interaction effects with outcome variables.

Research Questions

Key research questions guided the examination of the impact of CIT training on law enforcement officers' attitudes toward people with mental illness and the degree to which law enforcement officers (LEOs) who participate in the training program improve their sense of self-efficacy regarding working with PMI in a law enforcement capacity.

1. Do LEOs demonstrate authoritarian and socially restrictive attitudes toward PMI on the Community Attitudes Toward Mental Illness (CAMI; Taylor & Dear, 1981) scale prior to training?
2. Does CIT training impact law enforcement officers' authoritarian and socially restrictive attitudes toward PMI as measured by pre-post scores on the CAMI scale (1981)?
3. Do LEOs demonstrate benevolent attitudes and positive community mental health ideologies toward PMI on the CAMI scale (1981) prior to training?

4. Does CIT training impact law enforcement officers' benevolent attitudes and positive community mental health ideologies toward PMI as measured by pre-post comparisons of scores on the CAMI scale (1981)?
5. Does CIT training impact LEOs' self-efficacy in regards to working with PMI as measured by pre-post scores on the Self-Efficacy Scale (2010)?

Hypotheses

Several hypotheses were developed to be tested in the present study based on the literature review and above-listed general research questions. The research hypotheses listed below identify statistical relationships between Crisis Intervention Team (CIT) training and law enforcement officers' perceived self-efficacy and their attitudes toward mental illness.

Self-Efficacy Hypotheses

Hypothesis 1: There will be no significant difference in measures of reported self-efficacy in regard to working with PMI in a law enforcement capacity between Pre-CIT officers in the experimental group and officers in the control group.

Hypothesis 2: The experience of undergoing CIT training will predict significant pre-post increases in reported self-efficacy in regard to working with a person with symptoms of a mental illness in a law enforcement capacity.

Attitudinal Change Hypotheses

Hypothesis 3: There will be no significant difference in measures of reported attitudes toward mental illness between Pre-CIT officers in the experimental group and officers in the control group.

Hypothesis 4a: The experience of undergoing CIT training will predict significant pre-post decreases in law enforcement officers' reported authoritarian attitudes toward people with mental illness.

Hypothesis 4b: The experience of undergoing CIT training will predict significant pre-post increases in law enforcement officers' reported benevolent attitudes toward people with mental illness.

Hypothesis 4c: The experience of undergoing CIT training will predict significant pre-post decreases in law enforcement officers' reported socially restrictive attitudes toward people with mental illness.

Hypothesis 4d: The experience of undergoing CIT training will predict significant pre-post increases in law enforcement officers' reported positive community mental health ideologies toward people with mental illness.

Participants

Participants for the experimental group were recruited from CIT training sessions conducted throughout the Fall and Winter of 2010/2011 in several counties in Maine. All who participated in CIT training were self-selected volunteers; CIT training is not a job requirement, but occasionally may be considered by participants to be a requirement for promotions to supervisory positions in some agencies. Not every individual enrolled in CIT training was a law enforcement officer. In Maine, participation is open to anyone working in emergency services, including firefighters, paramedics, emergency room medical staff, and 911 dispatchers. For the purposes of this study, only law enforcement officers currently working for a police department, sheriff's office, or state police agency in the state of Maine were evaluated. To select only LEOs for data analysis, participants were asked to report their occupation in the demographics portion

of the survey so that non-LEOs could be excluded from analysis. The participants for the control group were recruited from two law enforcement agencies in the state of Maine during pre-shift roll calls. The only requirement for the control group that has not yet been specified is that the LEO will have no past CIT training experience. To select only LEOs who had no prior exposure to CIT training, participants were asked to answer “Yes” or “No” to the question, “Have you had Crisis Intervention Team (CIT) training in the past?” All participation was voluntary and anonymous.

Completion of the surveys was attempted by 117 law enforcement officers; 58 by the experimental group and 59 by the control group. The control group was initially found to have 19 participants with prior CIT training experience that had to be excluded from analysis, leaving 40 LEOs in the Non-CIT control group. Six of the remaining total 98 participants had missing items from parts of the survey, which resulted in these participants being excluded from various analyses. A detailed description of the demographic variables is reported in Chapter Four.

Procedure

The National Alliance on Mental Illness chapter in Maine granted permission for the researcher to recruit participants from any CIT training session offered. The researcher was introduced on the first morning of training prior to the beginning of instruction, at which time she explained that the scales to be administered before and after training would be used to shape future training sessions. Outcome data would be shared with the sponsors, but identifying data was not obtained, therefore the outcome data is anonymous. The participants were asked to develop a personal code by providing the first two letters of their middle name and the last two digits of their social security number. The participants were asked to use their personal code on both pre-training assessment and post-training assessment data to enable the researcher to match

pre-post protocols. The researcher then gave the potential participants the Information Letter (Appendix E) to read. Once the letter was read, the trainees had the option to choose whether or not to participate and ask any questions. Completion of the survey served as an indication of consent and was noted on the Information Letter. At this point, the researcher gave out the surveys to all trainees, asked them to complete the surveys if they wished to participate and then place the surveys in a box located at the front of the room. The box had a small opening through which to place the survey into the box, ensuring that responses remained anonymous to fellow trainees as well. The trainees were also informed that if they did not wish to participate, they could place an incomplete survey inside the box if they wish, as to avoid being identified as a non-participant with their fellow trainees. The researcher and all other instructors present excused themselves from the room, remaining nearby in the hallway in case anyone had a question. After the passage of 15 minutes, one of the instructors returned to the room to make sure that no one was still working on their survey. At two collection sites, several participants took longer than 15 minutes for completion, but were finished after 20 minutes, when the instructor returned to check for completion. The researcher then collected the box of surveys to be opened later in a private location.

On the last day of training, after all material had been taught or experienced, the researcher returned for post-training administration of the assessment instruments. The researcher informed the participants that this was a follow-up survey, to be completed in the same manner as the previous survey. The researcher again informed the potential participants that completing the survey was voluntary. The same procedure for returning the completed surveys was enacted. In order to match the individual pre-tests to post-tests, the participants

were asked to use their own code (explaining its derivation again) to help the researcher to match pre-post scores, while retaining participants' anonymity.

For the control group, permission was granted for data collection from the Bangor Police Department, the Hallowell Police Department, and the Augusta Police Department. The researcher attended roll calls for these agencies in December of 2010. After being introduced by the command officer, the researcher informed the officers who were present about the study's purpose – to better understand a law enforcement officer's thoughts about and experience with people with mental illnesses. The researcher then gave the potential participants the Information Letter (Appendix F) to read. Once the letter was read, the LEOs were able to choose whether or not to participate and ask any questions. Completion of the survey served as an indication of consent and was noted on the Information Letter. The Information Letter described the survey and its purpose, made known the voluntary nature, and ensured anonymity by not asking for a signature or identifying information. The potential participants were instructed to return the surveys, whether complete or incomplete, in the same manner described above.

Both the experimental group (training program participants) and control group members were informed that the researcher would make a donation of \$20 to the *Jeffrey S. Parola Foundation for law enforcement officer support*, for every 10 completed surveys received, up to a maximum of \$500. Surveys for both groups asked the demographic questions of age, gender, race/ethnicity, marital status, education level, years in service at one's occupation, and experience working with PMI.

Instrumentation

Community Attitudes Toward the Mentally Ill

The Community Attitudes Toward the Mentally Ill (CAMI) (Taylor & Dear, 1981) scale was used to assess LEOs' attitudes toward people with mental illness. The scale was originally developed to measure Toronto, Canada community members' attitudes toward people with mental illness in order to predict reactions in places where community integration of the mentally ill would take place. The CAMI is a self-report survey that consists of 40 items with responses ranging on a 5-point Likert scale from "strongly disagree" to "strongly agree." The CAMI is broken down into four subscales: *Authoritarianism*, *Benevolence*, *Social Restrictiveness*, and *Community Mental Health Ideology* (CMHI). The authors, Taylor and Dear, describe the subscale of *Authoritarianism* as the beliefs that (1) the mentally ill need to be hospitalized, that (2) there is a noticeable difference between the mentally ill and normal people, and that (3) the mentally ill need to be controlled and disciplined as a young child would. The *Benevolence* subscale indicates beliefs of (1) a societal responsibility for the mentally ill, that (2) the mentally ill should be treated with sympathy and kindness, and that (3) the mentally ill should not be treated in prison-like settings. The *Social Restrictiveness* subscale displays the sentiments that (1) the mentally ill are dangerous, that (2) the mentally ill cannot handle responsibility, and that (3) the mentally ill should be avoided. Finally, the *CMHI* subscale indicates beliefs that (1) the community is a therapeutic place for the mentally ill and that (2) the mentally ill should be de-institutionalized.

The CAMI asks participants to consider statements about people with mental illness and rate their level of agreement with each statement. There are 10 statements for each of the four subscales described above, scored by assigning a value between 1 ("strongly disagree") and 5

(“strongly agree”). Half of the items for each subscale are reverse coded “to minimize the possibilities of response set bias” (Hinkelman & Granello, 2003). For each subscale, the 10 responses are added together and then calculated into a mean subscale score. Mean scores for each subscale can range from 1 to 5, a high score indicating a high degree of endorsement with the subscale themes and a low score indicating overall disagreement with the subscale themes.

The original norming of the instrument was based on a data set derived from Toronto residents (n = 1090). Taylor and Dear (1981) found that two of the CAMI’s four subscales had high internal consistency reliability: *Social Restrictiveness* ($\alpha = .80$) and *CMHI* ($\alpha = .88$) for this particular data set. The subscales of *Benevolence* ($\alpha = .76$) *Authoritarianism* ($\alpha = .68$) have alphas that are not high, but satisfactory. A factor analysis was used to determine internal construct validity, finding adequate divergence between contrasting subscales, $r = -.63$ between *Authoritarianism* and *Benevolence* and $r = -.77$ between *Social Restrictiveness* and *CMHI*. The authors also found “a reasonable degree of correspondence between the *a priori* and factor scales – the desired result from a constant validity standpoint” (Taylor & Dear, 1981).

External validity for the scale was determined in two ways – construct and predictive validity. The construct validity was measured through a correlational analysis between the instrument subscales and personal characteristics, such as gender, age, marital status, number of children, education level, occupational status, household income, religious affiliation, and familiarity with mental illness. Predictive validity was assessed through a correlational analysis between the subscales and the participants’ reported desirable proximity to a community mental health center (results are reported in Table 1). The results of the correlations assessed to find external validity were consistently positive when the variable of interest was hypothesized to be in accordance with the principle(s) of the subscale. Alternatively, the relationship between

variables of interest and the subscales were found to be negative in nature when the operant values were divergent.

Table 1

Relationships between attitudes and judged desirability of potential community mental health facility (Taylor & Dear, 1981)

Subscale	<u>Distance Zone</u>		
	7 – 12 blocks	2 – 6 blocks	< 1 block
<i>Authoritarianism</i>	-.28	-.36	-.40
<i>Benevolence</i>	.33	.36	.40
<i>Social Restrictiveness</i>	-.34	-.44	-.48
<i>CMHI</i>	.45	.57	.61

Pearson correlation coefficients. All coefficients are significant beyond .001 level.

The CAMI has been used successfully in many published studies: to test the effectiveness of education programs aimed at reducing negative attitudes toward people with mental illness (Seo & Kim, 2010), analyzing the relationship between adherence to gender roles and attitudes toward people with mental illness (Hinkelman & Granello, 2003), investigating the impact of various means of media on attitudes toward mental illness (Diefenbach & West, 2007; Thornton & Wahl, 1999), and examining nurses' attitudes towards people with mental illness (Chambers et al., 2010; Guise, Chambers, Valimaki, & Makkonen, 2010). Most importantly, for the purposes of the present study, the CAMI was used to assess the attitudes of Canadian police officers towards people with mental illness (Cotton, 2004). The results of this publication were discussed in Chapter Two, but important to note at this point is the fact that Cotton found modest, but

adequate internal consistency reliability (*Benevolence* ($\alpha = .68$), *Social Restrictiveness* ($\alpha = .76$), *CMHI* ($\alpha = .52$), and *Authoritarianism* ($\alpha = .60$)).

Self-Efficacy Scale

The *Self-Efficacy Scale* (SES) was originally developed by Bahora, Hanafi, Chien, and Compton (2007) to measure changes in perceived self-efficacy among LEOs before and after completion of CIT training. In 2011, the SES was altered in order to improve its use for measuring CIT training effects on LEO self-efficacy (Broussard et al.). The authors took a vignette from the MacArthur Mental Health Module of the 1996 General Social Survey (Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999) and adapted it to represent a law enforcement officer interaction with a person displaying symptoms of a psychotic disorder with paranoid features (Bahora, Hanafi, Chien, & Compton, 2007; Broussard et al., 2011). In an attempt to avoid introducing confounding variables, “race/ethnicity, educational level and other sociodemographic characteristics were not described” (2007, p. 161) in the vignette.

The SES has 16 items, asking the participant to respond to such questions as “How confident would you feel interacting with someone like David?” and “How confident would you feel talking to someone like David about his medications?”. The responses are scored on a four-point Likert scale, with a four representing “Very Confident” and a one representing “Not at All Confident”. Total scale scores may range from 16 to 64, with low scores representing low overall confidence and high scores representing a high level of confidence in hypothetically interacting with the person with mental illness depicted in the vignette.

The SES is reported to have high internal consistency reliability with Cronbach’s α values of .89 for the pre-CIT group, .95 for the post-CIT group, and .94 for the non-CIT group (Broussard et al., 2011). Five day test-retest reliability was assessed to be $r = .86$. Construct

validity was assessed by comparing mean pre-CIT and post-CIT scores to examine anticipated differences associated with CIT training. The author found that the mean scores significantly increased from 48.36 ± 6.5 for the pre-test to 57.59 ± 6.61 for the post-test ($t=9.65$, $df=65$, $p<.001$).

IV. RESULTS

Overview

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 demographic descriptions of the participants. The second section reports reliability data on the instruments used in the current study. The remainder of the chapter presents the results of the ANOVAs and MANOVA used to test the four research hypotheses.

Participants

Completion of the surveys was attempted by 117 law enforcement officers – 58 by the experimental group and 59 by the control group. The control group, taken from LEOs who volunteered to participate during roll call at two Maine police departments, was found to have 19 participants with prior CIT training experience who had to be excluded from analysis, leaving 40 LEOs in the Non-CIT control group. Out of the 98 remaining participants (control and experimental groups), six had missing items from parts of the survey, which resulted in these participants being excluded from various analyses. The final number (n) for the demographic data and scales are as follows: Gender, Race, Marital status, Education, County of work, Years worked in law enforcement, Encounters with PMI while working, Average number of PMI encountered per month, and Arrests of PMI (N = 98); Age (N = 97); SES (Pre and Non-CIT N = 96, Post-CIT N= 57); CAMI *Benevolence*, *Social Restrictiveness*, and *CMHI* (Pre and Non-CIT N = 94, Post-CIT N= 55); and CAMI *Authoritarianism* (Pre and Non-CIT N = 93, Post-CIT N= 55).

The final overall sample consisted of 10 females (10.2%) and 88 males (89.8%) with a mean and median age of 37 and 36 years, respectively (ranging from 23 to 60, $SD = 9.71$). Ninety-seven participants identified as Caucasian and one as Native American. Unmarried participants comprised 17.3%, married or living with a partner 68.4%, separated 2.0%, and divorced 12.2% of the sample. Additionally, 10.2% of the sample had only a high school education, 86.7% attended and/or completed college, and 3.1% attended graduate school. The largest portion of the sample reported that they work in Penobscot County (36.7%), followed by York (20.4%) and Androscoggin counties (14.3%). The following counties make up the remainder of the sample: Kennebec (11.2%), Sagadahoc (6.1%), Cumberland (4.1%), Lincoln (4.1%), and Aroostook (3.1%). The LEOs surveyed had worked in the law enforcement field a minimum of nine months and a maximum of 43 years ($M = 11.82$ years, $SD = 9.99$). All but one of the LEOs questioned indicated that they had encountered a person with an obvious mental illness while working, and 88.8% of the sample report that they have arrested a person with an obvious mental illness. When asked for an average estimate of contacts per month, only one LEO reported that he or she has had no encounters with people with obvious mental illnesses. The remainder of the sample reported working with at least one PMI per month, up to a maximum number of 50 PMI per month ($M = 11.29$, $SD = 11.31$).

Table 2

Demographic Characteristics of Control and CIT-officers

Variable	Control (n = 40)	CIT (n = 58)
Age, years	39.00 (<i>SD</i> = 10.99)	35.74 (<i>SD</i> = 8.61)
Gender		
Female	4 (10%)	6 (10.3%)
Male	36 (90%)	52 (89.7%)
Race/ethnicity		
Native American	--	1 (1.7%)
Caucasian	40 (100%)	57 (98.3%)
Marital Status		
Single/Never married	9 (22.5%)	8 (13.8%)
Married/with partner	27 (67.5%)	40 (69.0%)
Separated	1 (2.5%)	1 (1.7%)
Divorced	3 (7.5%)	9 (15.5%)
Education		
High school or GED	4 (10%)	6 (10.3%)
Some College	15 (37.5%)	24 (41.4%)
Completed College	19 (47.5%)	27 (46.6%)
Graduate School	2 (5.0%)	1 (1.7%)

Table 3

Work-related Demographic Characteristics of Control and CIT-officers

Variable	Control (n = 40)	CIT (n = 58)
Maine County of Employment		
Penobscot	65.0%	17.2%
Sagadahoc	--	10.3%
Cumberland	5.0%	3.4%
Aroostook	--	5.2%
Androscoggin	--	24.1%
York	2.5%	32.8%
Lincoln	--	6.9%
Kennebec	27.5%	--
Years as LEO		
0 - 5	37.5%	36.2%
6 -10	5%	27.4%
11 -20	22.5%	27.3%
21 - 30	22.5%	6.8%
31+	12.5%	2.3%
Mean Monthly PMI Encounters		
0 - 5	56.9%	22.5%
6 - 15	29.3%	50.0%
16 - 30	12.1%	40.0%
31+	1.7%	10.0%

Reliabilities

Table 4 provides a comparison of obtained reliability data of the *Self-Efficacy Scale* (SES, Broussard et al., 2011) and the *Community Attitudes Toward the Mentally Ill* scale's four subscales (CAMI, Taylor & Dear, 1981) with those of the original normative samples.

Table 4

Reliability Analysis for SES and CAMI

	Compton (2010)	Current Study
	Cronbach's Alpha	Cronbach's Alpha
<i>SES</i>		
Pre-CIT	.89	.93
Post-CIT	.95	.91
	Taylor & Dear (1981)	Current Study
	Cronbach's Alpha	Cronbach's Alpha
<i>CAMI</i>		
(Pre-CIT) <i>Authoritarianism</i> subscale	.68	.69
Post-CIT <i>Authoritarianism</i> subscale	--	.59
(Pre-CIT) <i>Benevolence</i> subscale	.76	.80
Post-CIT <i>Benevolence</i> subscale	--	.83
(Pre-CIT) <i>Social Restrictiveness</i> subscale	.80	.80
Post-CIT <i>Social Restrictiveness</i> subscale	--	.79
(Pre-CIT) <i>CMHI</i> subscale	.88	.91
Post-CIT <i>CMHI</i> subscale	--	.91

The present study's reliability data for the SES (2010) was found to be strong for both groups assessed, Pre-/Non-CIT and Post-CIT, indicating that the reliability of the instrument is adequate for the purpose of this study. The use of the CAMI (1981) in the current study resulted in low coefficient alphas for several of the subscales. However, these low scores were found to be consistent with or exceeding the reliabilities found in the original normative sample. This suggests that the reliability of this measure, while not ideal, is comparable to the reliability found in other studies that deemed the measure sufficient.

Hypothesis Testing

Hypothesis 1: There will be no significant difference in measures of reported self-efficacy in regard to working with PMI in a law enforcement capacity between Pre-CIT officers in the experimental group and officers in the control group.

An ANOVA was performed to examine differences between Pre-CIT officers and Non-CIT officers on mean scores of self-efficacy in regards to working with people with mental illness (PMI) in a law enforcement capacity as measured by the total Self-Efficacy Scale (SES) score (Broussard et al., 2011). A significant difference between Pre-CIT officers and Non-CIT officers on SES scores was found, $F(1, 94) = 9.75, p = .002, \eta_p^2 = 0.094$. The Non-CIT officers scored higher on the SES, indicating higher levels of reported self-efficacy ($M = 54.67, SD = 6.70, n = 39$) than the Pre-CIT officers ($M = 50.26, SD = 6.84, n = 57$). These results fail to support the hypothesis, possibly indicating that officers seeking CIT training have lower levels of confidence in their ability to work with PMI than those officers who do not seek out CIT training. Additionally, it is feasible that those officers who do not seek out CIT training have different opinions and/or knowledge of mental illnesses than the officers who do seek out CIT training.

Hypothesis 2: The experience of undergoing CIT training will predict significant pre-post increases in reported self-efficacy in regard to working with a person with symptoms of a mental illness in a law enforcement capacity.

A repeated-measures ANOVA was performed to examine differences between Pre-CIT and Post-CIT officers on mean scores of self-efficacy in regards to working with PMI in a law enforcement capacity as measured by the total SES score (Broussard et al., 2011). A significant difference between officers' Pre-CIT and Post-CIT on SES scores was found, $F(1, 56) = 85.94$, $p = .001$, $\eta_p^2 = 0.605$. The officers scored higher on the SES after CIT training, indicating higher levels of reported self-efficacy ($M = 59.37$, $SD = 4.90$, $n = 57$) than they did prior to CIT training ($M = 50.26$, $SD = 6.84$, $n = 57$). These results suggest that CIT training increases the self-efficacy of LEOs when working with PMI.

Hypothesis 3: There will be no significant difference in measures of reported attitudes toward mental illness between Pre-CIT officers in the experimental group and officers in the control group.

A MANOVA was performed to examine differences between Pre-CIT officers and Non-CIT officers on mean scores of attitudes toward people with mental illness (PMI) as measured by the Community Attitudes Toward the Mentally Ill's (CAMI) four subscale scores (Taylor & Dear, 1981). There were no significant differences between Pre-CIT and Non-CIT scores, $F(4, 88) = 1.24$, $p = .30$, $\eta_p^2 = 0.053$ across all four subscales: paternalistic views of people with mental illness (*Authoritarianism*), caring and compassion for people with mental illness (*Benevolence*), distrust and fearfulness of people with mental illness (*Social Restrictiveness*), and

beliefs that people with mental illness should be welcomed into the community (*Community Mental Health Ideology (CMHI)*). Table 5 provides detailed results.

Table 5

Comparison of Differences in Officer Group along CAMI subscales

	Pre-CIT Officers	Non-CIT Officers
Subscale	Mean (SD)	Mean (SD)
<i>Authoritarianism</i>	2.45 (0.41)	2.55 (0.44)
<i>Benevolence</i>	3.55 (0.40)	3.40 (0.49)
<i>Social Restrictiveness</i>	2.55 (0.53)	2.56 (0.50)
<i>CMHI</i>	3.26 (0.58)	3.14 (0.63)

Hypothesis 4a: The experience of undergoing CIT training will predict significant pre-post decreases in law enforcement officers' reported authoritarian attitudes toward people with mental illness.

Repeated-measures ANOVAs were performed to examine differences between officers' pre-CIT and post-CIT mean scores of the four subscales of the CAMI (Taylor & Dear, 1981). Significant differences between pre and post were not found for the *Authoritarianism* subscale, $F(1, 52) = 0.17, p = .68, \eta_p^2 = 0.003$. The change was a decrease of only 0.02 points after training (Pre $M = 2.45, SD = 0.42$; Post $M = 2.43, SD = 0.37, n = 53$), suggesting that the officers' moderate endorsement of paternalistic treatment of PMI did not change over the course of CIT training.

Hypothesis 4b: The experience of undergoing CIT training will predict significant pre-post increases in law enforcement officers' reported benevolent attitudes toward people with mental illness.

A significant difference was found between pre- and post-test scores on the *Benevolence* subscale, $F(1, 52) = 17.40, p = .001, \eta_p^2 = 0.251$. The officers had higher average scores on this subscale after CIT training ($M = 3.80, SD = 0.49, n = 53$) than they did prior to training ($M = 3.57, SD = 0.41, n = 53$). This finding suggests that there was a higher degree of self-reported caring and compassionate attitudes toward PMI following CIT training.

Hypothesis 4c: The experience of undergoing CIT training will predict significant pre-post decreases in law enforcement officers' reported socially restrictive attitudes toward people with mental illness.

For the *Social Restrictiveness* subscale of the CAMI (Taylor & Dear, 1981), a significant difference between officers' pre-CIT and post-CIT scores was found, $F(1, 52) = 11.47, p = .001, \eta_p^2 = 0.181$. The officers had lower average scores on the *Social Restrictiveness* subscale after CIT training ($M = 2.37, SD = 0.51, n = 53$) than they did prior to training ($M = 2.56, SD = 0.54, n = 53$). This result is indicative of a lowered degree of endorsement of distrusting and fearful attitudes toward PMI after CIT training.

Hypothesis 4d: The experience of undergoing CIT training will predict significant pre-post increases in law enforcement officers' reported positive community mental health ideologies toward people with mental illness.

Again, a significant difference was found between officers' results pre- and post-CIT training on mean scores of the *Community Mental Health Ideology (CMHI)* subscale of the CAMI (Taylor & Dear, 1981), $F(1, 52) = 16.86, p = .001, \eta_p^2 = 0.245$. The officers had higher

average scores on the *CMHI* subscale post-CIT training ($M = 3.52$, $SD = 0.63$, $n = 53$) than they did prior to training ($M = 3.26$, $SD = 0.60$, $n = 53$). This outcome suggests that officers possess a higher degree of endorsement of community-inclusive attitudes toward PMI after CIT training.

V. DISCUSSION

A summary of the current study is presented in this chapter as preface to a more comprehensive discussion of the results. The study's hypotheses will direct the discussion of the analysis and implications. Lastly, limitations of the study, recommendations for future directions of research, and conclusions are presented.

Overview of the Study

Self-efficacy has long been found to strongly impact motivation, achievement, and well-being. Perceiving oneself as highly efficacious creates a tendency to approach challenges more readily; conversely, a lack of perceived efficacy has been shown to generate fearful thoughts and anxiety, increasing stress levels and making oneself vulnerable to depression and illness (Bandura, 1994; 2001). A strong sense of self-efficacy is extremely important for law enforcement officers (LEOs). The field of law enforcement is inherently stressful and has been shown to be a major contributor to the higher alcoholism, suicide, and divorce rates LEOs have in comparison to the general population (Miller, Mire, & Kim, 2009). One of the major stressors for LEOs is working with people with mental illness (PMI). There is generally insufficient training for officers when it comes to serving these populations, resulting in discomfort, anxiety, and unsatisfactory interactions (Finn & Sullivan, 1989).

Crisis Intervention Team (CIT) training was developed to better educate and train LEOs to successfully assist and respond to PMI in a crisis situation. Officers who undergo CIT training report significant increases in self-efficacy regarding work with PMI, thus laying the ground work to decrease negative internal reactions to these stressful situations (Bahora, Hanafi,

Chien, & Compton, 2007). Law enforcement agencies, medical and mental health providers who work with officers, and officers themselves should have a vested interest in improving the self-efficacy of LEOs given the multitude of positive results that are potentially attainable.

When considering the target population for CIT training's original beneficiaries, it is well known that people with mental illnesses can have many internal obstacles to living their lives as desired. Exacerbating those difficulties are negative and stigmatized attitudes about mental illness from the general public. A stigmatized attitude can be defined as perceiving a mental illness as an unfavorable attribute that discredits an individual and may bring about social distancing and discriminatory behaviors (Kobau, DiIorio, Chapman, & Delvecchio, 2010; Link & Phelan, 2001). Phelan, Link, Stueve, and Pescolido (2000) report that there has been a significant improvement in public understanding of mental illness since the 1950's, but there remains a powerful inclination toward avoidance. It has been noted in the literature that persons with mental illness support the assertion that "police officers are a significant source of stigmatization and discrimination against persons with mental illness" (Watson, Corrigan, & Ottati, 2004, p. 49). Studies conducted regarding LEOs and their attitudes toward PMI reveal that officers saw such people as less responsible for their behavior, more worthy of concern, and more deserving of help when mental illness symptoms were recognizable to the officer (Watson, Corrigan, & Ottati, 2004). CIT training has the ability to educate LEOs about signs and symptoms of mental illnesses – correcting attributions about causes of behavior. CIT training has also been shown to dispel myths about the dangerousness of PMI, which reduces the likelihood that an officer will behave more aggressively than the situation warrants, thus decreasing the chances of the contact becoming physically violent (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006).

The aims of the present study were threefold: (1) to examine the effects of Crisis Intervention Team (CIT) training on law enforcement officers' (LEOs') self-efficacy in relation to working with people with mental illness (PMI) in Maine, (2) to determine if CIT training would impact LEOs' attitudes toward PMI in Maine, and (3) to determine if differences existed between LEOs who self-selected to volunteer for CIT training (Pre-CIT) and LEOs who opted not to participate in CIT training (Non-CIT) in Maine. The *Self-Efficacy Scale* (SES) (Broussard et al., 2011), designed to measure LEOs' confidence in working with PMI in a law enforcement capacity, and the *Community Attitudes Toward the Mentally Ill* scale (CAMI), which measures positive and negative attitudes toward PMI through four subscales: *Authoritarianism*, *Benevolence*, *Social Restrictiveness*, and *Community Mental Health Ideology (CMHI)*, were used to measure results of the surveyed population. The SES is interpreted by totaling the scores from each of 16 questions, resulting in scores ranging from 16 (poor self-efficacy) to 64 (high self-efficacy). The CAMI is scored by taking the average from the totals of each of the four subscales.

Support was found for the prediction that CIT training would increase LEOs' self-efficacy. This finding is encouraging for LEOs and law enforcement agency administrators. Discussed in greater detail later in this chapter, these results serve as indicators that CIT training is effective when it comes to increasing LEOs' confidence in their abilities to respond appropriately to PMI. Also it appears that LEOs become more certain of their knowledge of mental illness-related behavior after CIT training.

Positive attitudes toward PMI were also found to increase, indicating that CIT training served to strengthen compassion and caring for PMI as well as beliefs that PMI should be welcomed into communities. CIT training was found to decrease fear and distrust toward PMI as

well. It was expected that CIT training would serve to decrease authoritarian attitudes toward PMI; however, support for this prediction was not found. LEOs prior to and after CIT training maintained scores on the *Authoritarianism* subscale, which indicates mild disagreement to neutrality with the concept of coercive, paternalistic treatment of PMI. Further discussion in the chapter will elaborate on implications and possible reasons for the results.

Also discovered was a significant difference between pre-CIT officers and non-CIT officers on measures of self-efficacy when working with PMI. The non-CIT officers' scores indicated that, as a group, they were more confident in their abilities to work with PMI than the pre-CIT officers. On measures of attitudes toward PMI, no differences were found to exist between pre-CIT and non-CIT officers.

Discussion

Difference in self-efficacy for pre-CIT and non-CIT officers

The first hypothesis was tested by examining mean differences between pre-CIT group scores non-CIT group scores on the SES from the sample obtained from the state of Maine. Contrary to the prediction of *Hypothesis 1* and the results from a previous CIT experiment (Bahora, Hanafi, Chien, & Compton, 2007), there were significant differences on measures of self-efficacy in working with PMI found between pre-CIT officers and non-CIT officers in the Maine sample. The present study found that on average, the group of officers choosing not to participate in CIT training reported higher degrees of self-efficacy when working with PMI than did the officers who chose to engage in the training. In the study conducted by Bahora, Hanafi, Chien, and Compton (2007) in Atlanta, GA, there were no significant differences found between their pre-CIT and non-CIT groups, despite having very similar testing conditions, CIT training course content, and number of participants as the current study conducted in Maine (Atlanta's

control group n = 34, experimental group n = 58; Maine's control group n = 39, experimental group n = 59).

This surprising finding that non-CIT officers reported higher levels of self-efficacy when working with PMI than did pre-CIT officers has three possible explanations. First, those officers who feel less efficacious in their dealings with PMI may seek out the opportunity to build their confidence in this area of their work. Officers who already believe themselves to be efficacious in their work with PMI likely would not volunteer for such training. Second, in moderate to larger municipalities, officers are generally assigned to work certain "beats" or areas/sectors of town. Some beats may regularly have more involvement with PMI than others due to environmental influences. Areas near community mental health centers, homeless shelters, bars, or places with a high-crime concentration (e.g., neighborhoods known for drug trafficking) typically have more PMI per capita than other parts of town. This observation occurs largely due to the vulnerability of many PMI to substance abuse, homelessness, and criminal activity when not receiving the support needed to function at a desirable level within the community (Brekke, Prindle, Bae, & Long, 2001; Levin, 2005). Additionally, officers generally have a set shift they work – there are certain times of the day or days of the week, in most areas, which are more likely to produce a mental health crisis. Depending on an officer's beat, schedule, and shift, he or she may encounter almost no calls involving PMI or encounter almost nothing but calls involving PMI. An officer who encounters a higher number of PMI while working may feel more stress and anxiety than another officer who works a beat or shift that produces a low number of encounters with PMI. The officer experiencing more distress at work may seek a means to improve his or her situation, thus seeking out CIT training. Third, LEOs who self-select to participate in CIT training may have very different views, experience, or knowledge

pertaining to mental illnesses than those officers who choose not to participate in the training. Having an accurate understanding of mental illness may allow an officer to appreciate that specialized training is necessary for appropriate response to PMI in crises, resulting in a diminished sense of efficacy for working successfully with PMI. An officer's limited awareness or lack of factual knowledge regarding mental illness may lead to beliefs that calls involving PMI should be responded to in the same manner as any other call. This mindset would allow the officer's confidence to remain undaunted about his or her abilities to respond to PMI in crises. Each of these possible explanations for unanticipated results relative to the difference between the pre-scores by control and experimental groups has merit; however, further study will need to be undertaken to truly inform any firm conclusion.

Effects of CIT training on self-efficacy scores

The prediction of *Hypothesis 2*, that CIT training would serve to increase scores on the SES (Broussard et al., 2011) was supported. There were significant differences found between the officers at pre-CIT testing and post-CIT testing, suggesting that CIT training is effective at improving officers' confidence in their knowledge and abilities to better work with PMI. This finding follows that of the study mentioned previously by Bahora, Hanafi, Chien, and Compton (2007). The Atlanta CIT group was also found to have significant increases in self-efficacy pre- and post-CIT training.

Difference in attitudes toward people with mental illness for pre-CIT and non-CIT officers

Hypothesis 3, which predicted that there would be no significant differences in measures of reported attitudes toward mental illness between LEOs choosing not to participate in CIT training (non-CIT) and LEOs volunteering to participate in CIT training (pre-CIT), was supported by the results. The two groups were assessed by administering the four subscales of

the *Community Attitudes Toward the Mentally Ill* scale: *Authoritarianism, Benevolence, Social Restrictiveness, and Community Mental Health Ideology (CMHI)* (Taylor & Dear, 1981). Both groups had very similar mean results across all four subscales, indicating that prior to CIT training, officers did not significantly differ on attitudes toward PMI from the officers who chose not to participate in training.

Effects of CIT training on authoritarian attitudes

Hypothesis 4a, which predicted that there would be a significant difference between scores obtained on the *Authoritarianism* subscale of the CAMI from officers prior to CIT training to those obtained after CIT training, produced a surprising result. There was not a significant difference found across mean scores on pre- and post- measures – the difference was less than 0.02 between the groups. Across measurements, the officers, on average, reported mild disagreement to neutral opinions toward the construct of *Authoritarianism*, which can be characterized as believing that PMI should not be allowed to make decisions for themselves and that they require coercive treatment. It was hoped that CIT training would produce not mild, but strong disagreement with the concept.

The finding that CIT training did not produce change in scores of the *Authoritarianism* subscale for the present sample taken throughout the state of Maine is puzzling. Through consideration, it seems that the notion of PMI requiring paternalistic treatment should be strongly refuted by the experiential and didactic content of CIT training. There has not been any research published to date examining the effects of CIT training on authoritarian attitudes toward PMI, so a comparison between previous studies and this one is not possible at this point in time. The possibility of the implementation of CIT training resulting in differing reports of authoritarian views (and other dimensions) by location (county) was considered, but upon examination, no

significant differences by course location were found. Additionally, there were no significant correlations between endorsement of *Authoritarianism* and the demographic variables.

A potential explanation of the unexpected findings may be that police culture is authoritarian in nature, and thus, difficult to counter. A study conducted by Butler (2009) suggests that many individuals in the military subscribe to an authoritarian ideology and display “strong submission to authority, adhere to social conventions established by authorities, and are aggressive towards deviants” (p. 49). Butler also notes that people tend to shift toward authoritarianism when threatened or in the midst of a crisis. Simply put, those who embrace militaristic values will have a propensity for holding authoritarian attitudes (Nicol & Chrabonneau, 2007). Police culture mimics that of the military – an enforcement of obedience to authority, adherence to hierarchical power structures, belief in a right and wrong way to behave, and little tolerance for deviance (Genz & Lester, 1977). A law enforcement officer’s purpose is to protect those being threatened and to restore order in a crisis. It may be possible that an authoritarian culture in the field of law enforcement is inherent, or at the very least serves a vital purpose.

Effects of CIT training on benevolent and community-inclusive attitudes

The prediction in *Hypothesis 4b*, that CIT training would increase scores on the *Benevolence* subscale of the CAMI for LEOs, was supported. Endorsement of this subscale reflects an attitude of compassion and a humanistic view of PMI. *Hypothesis 4d* also predicted that the positive attitudes captured by the CMHI subscale would increase with CIT training. This hypothesis was found to be supported as well. The strengthened endorsement of the CMHI subscale indicates a belief in the healing value of “belonging to a community.” The increased

endorsement of these two subscales is a positive and informative outcome for advocates of CIT training.

Effects of CIT training on socially restrictive attitudes

Hypothesis 4c, which predicted that participation in CIT training would decrease endorsement of the negative attitude reflected in the subscale *Social Restrictiveness*, was found to result in a significant difference. Thus, CIT training significantly strengthened LEOs' expressed opposition to the idea that PMI are to be feared and avoided. The findings from *Hypotheses 4b, 4c, and 4d* are in accord with previous research conducted by Compton, Esterberg, McGee, Kotwicky, and Oliva (2006), suggesting that CIT training has the ability to increase support for and acceptance of PMI while decreasing fear and distrust of those diagnosed with a mental illness. Compton and colleagues suggest that their findings are indicative of the efficacy of CIT programs to potentially "correct myths, enhance understanding and support, and reduce reports consistent with holding stigmatized attitudes in the context of officers' responding to calls involving individuals" (p. 1201) with mental illnesses.

Limitations of the Study

Several methodological limitations should be taken into consideration when interpreting the results and planning for future research. First, the sample size was relatively small, especially for the control group. Control group officers from rural areas were unable to be obtained for the study due to limitations outside of the researcher's control. However, both the experimental and control groups contained a sufficient number of participants to obtain significant results. While the sample was demographically representative of Maine's law enforcement officers state-wide, it lacks diversity of gender and race/ethnicity. Therefore, the results of the present study should be considered with caution when attempting generalization.

Also of note, the control group was not given a second assessment, as the experimental group was. Future research would likely be well-served to administer a retest to the control group in an effort to determine any extraneous results due to test-retest factors. Moreover, results were obtained solely on the basis of self-report, which is always subject to social desirability bias. It has been noted in previous research with law enforcement populations that LEOs have a difficult time reporting a lack of confidence in their job duties (Bahora, Hanafi, Chien, & Compton, 2008). If that is true for this sample, an over-reporting of self-efficacy may have been present for both the control and experimental groups. This possibility would likely not negate the difference found between pre and post measures, but would lower the overall indications of degree of self-efficacy.

It is greatly concerning that the content of CIT training in Maine is not tightly standardized from county to county. There are very basic goals and objectives for each topic that all presenters are requested to meet, but there are no regulated presentation materials or a list of detailed information that presenters are required to use or teach. The lack of standardization may result in a student missing important information on various topics, thus diminishing the effectiveness of the training. It was also discovered that the qualifications and experience of volunteer instructors/presenters used in Maine are not always consistent with those suggested by the developers of the Memphis Model of CIT training (Dupont, Cochran, & Pillsbury, 2007). It is vitally important that the CIT instructors are dispensing accurate information to those participating in the class. If an instructor lacks accurate knowledge about or does not possess necessary expertise in the topic being presented, it is possible that the course may do more harm than good. For example, the topics of “Substance Abuse and Co-Occurring Disorders,” “Child and Adolescent Mental Health,” and “Psychiatric Medications and Toxicology” require the use

of instructors who are experts within those fields, such as substance abuse counselors, child counselors or psychologists, and psychiatrists, respectively, in order to impart accurate and current information. The courses of CIT training which are experiential in nature have less stringent needs for presenter qualifications – one would only need to have sufficient experience in working with PMI in crisis. It is known that Maine’s implementation of CIT training is not as well-established as that in other states which have had the training in place for over 20 years. Thus, it is acknowledged that CIT training in Maine has not been afforded the time and funding necessary to meet the best-practice standards employed by several other states. It is hoped that, with time and funding, Maine can achieve the standardized training that those states are now able to utilize. Having a consistent set of materials, expectations, and qualified instructors across location and implementations would also enable a more accurate assessment of program efficacy.

The *Self-Efficacy Scale* (Broussard et al., 2011), while reliable and valid to measure self-efficacy in regards to working with a male individual with symptoms indicative of psychosis with paranoid features, may not generalize to work with females or other mental illnesses. LEOs in Maine do experience a number of calls resulting from crises due to psychosis and/or paranoid ideation, but they experience an equal number of calls about crises from PMI diagnosed with opioid and alcohol dependences, Borderline Personality Disorder, Bipolar Disorder, Dementia, and Posttraumatic Stress Disorder. It would benefit future researchers to consider the addition of the other gender (females) and/or the other described disorders frequently observed by LEOs, for self-efficacy assessment.

The surprising results obtained on the *Authoritarianism* subscale of the CAMI (Taylor & Dear, 1981) may be authentic, but there is a possibility that the lack of significant change from

pre-CIT to post-CIT is due to poor reliability within the instrument. The *Authoritarianism* subscale was only found to have an alpha coefficient of .68 for the original normative sample, .69 for pre-CIT assessment, and .59 for post-CIT assessment. The limited reliability of the subscale may have resulted in non-significant findings.

Another limitation to the interpretation of the results is that measured attitudes and self-perceptions do not necessarily predict behavior. The results presently obtained may give the readers a valid picture of LEO attitudes toward PMI and perceptions of efficacy on the job, but it is unknown whether or not these beliefs will remain constant over time or if they will translate into desired behavior change. Longitudinal studies of not only self-report, but observable behavior will need to take place. Studies of this nature will take a great deal of time, planning, funding, assistance of many capable individuals, and cooperation of law enforcement agencies. At the present time, it is likely not possible to obtain results from such a complex and involved study. What is possible, however, is the smaller-scale study presently conducted, which will lay the groundwork for further undertakings.

Implications

The implications of the results from the present study regarding officer self-efficacy are of great importance to organizations that are responsible for training and employing LEOs, mental health care providers, and officers themselves. For those LEOs who believe themselves to be less efficacious than desired when working with PMI, the findings regarding CIT training are encouraging. It has been observed that CIT training has the ability to improve self-efficacy in this regard, thus reducing experienced anxiety when encountering PMI. Reductions in anxiety arousal, rumination about inadequacy, and predictions of failure will have a trickle-down effect for the emotional, physical, and professional well-being of an officer. Increases in self-efficacy

can be expected to prevent or limit the onset of depressive symptoms (Bandura, 1994) and substance abuse (Beutler, Nussbaum, & Meredith, 1988); maintain or improve physical health, directly impacting blood pressure and immune functioning (Myers, 2010); and improve job satisfaction (Bandura, 1997; Caprara, Barbaranelli, Borgnogni, & Steca, 2003).

Bandura's well-known research on self-efficacy has shown that there are four methods by which perceptions of efficacy can be improved: *enactive mastery, modeling or vicarious experience, verbal persuasion, and improved physiological states* (1982). CIT training provides officers with these means to improve self-efficacy directed toward working with PMI. The CIT course makes use of *verbal persuasion* in the initial phases of training by discussing the facilitators' beliefs that all trainees will be capable of mastering the skills which are useful in mental health crises. CIT training also involves many instructors working in various levels of law enforcement who provide or participate in the training. They offer many narratives about the benefits of CIT training in their professional lives, thus providing *vicarious experience*. In the midst of didactic training, the professionals leading the course *model* the CIT skills in action through role-play. The LEOs participating in the CIT training are then given the opportunity to role-play themselves, engaging in *enactive mastery*. It is through the repeated role-play that officers' anxiety begins to diminish and subside, resulting in an *improved physiological state*.

Many officers have reported that the uncertainty of dealing with a person with a mental illness is anxiety provoking – not only does he or she not know what an appropriate response would be for the situation being encountered, he or she does not have the knowledge or skills that would allow him or her to make meaning of the symptoms and behavior being observed. Having a more solid base of appropriately targeted knowledge would enable an officer to define the problem, thus providing direction in formulating an appropriate response to the situation and

the individuals concerned. When given the tools to create a sense of predictability and controllability in situations involving PMI, it is likely that officers will experience a significant decrease in anticipatory rumination, anxiety, and stress-aroused physiological symptoms (Bandura, Reese, & Adams, 1982). The results of the current study indicate that the CIT training offered to the participants equips officers with the necessary tools that give rise to a strengthened sense of efficacy when working with PMI. Of particular interest for government officials and law enforcement administrators is the link between increases in self-efficacy and job satisfaction and physical health. A happier, more satisfied, and healthier work force results in higher productivity and less strain on municipal budgets due to decreased need for sick days and decreased use of health insurance.

The findings on attitudinal change in LEOs resultant from CIT training have many promising implications, despite the lack of change in authoritarian attitudes. Primarily, through CIT training's reduction of stigma and stereotypes, PMI in the community will be better served. Officers will hold more accurate views of mental illness, bringing them into closer alignment with views of mental health professionals. Research has shown that having knowledge of the causes and manifestations of mental illnesses results in LEOs having increased concern and compassion, an increased desire to be helpful, an understanding that having a mental illness is not under an individual's direct control, and an awareness that PMI are no more dangerous than any average person who may be encountered (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006; Demir, Broussard, Goulding, & Compton, 2009; Corrigan, Markowitz, Watson, Rowan, & Kubiak, 2004; Phelan, Yang, & Cruz-Rojas, 2006). Having a more accurate understanding of mental illness will likely also manifest as LEOs making appropriate referrals to mental health treatment as opposed to unnecessary arrest. Finally, better community relations will be

developed between PMI and local law enforcement agencies as LEOs become more user-friendly to individuals or families in the midst of a mental health crisis.

In the present study, it was discovered that CIT training did not significantly decrease scores on the *Authoritarianism* subscale of the *CAMI*. It was previously discussed that police culture is authoritarian by nature and that endorsement of authoritarian attitudes may have a purpose in the law enforcement world. Given that potential, attempts to alter authoritarian attitudes in LEOs may not be viable venture. Impacting the construct of *Authoritarianism* may not be possible through CIT training, thus causing a reconsideration of the usefulness of administering this particular subscale belonging to the *CAMI* to law enforcement populations.

It is recommended that future research attend to limitations of the present study. In addition to the recommendations already made, it is suggested that several courses of action be implemented to explore the possible reasons for the surprising results obtained through the comparison of pre-CIT and non-CIT officers by self-efficacy scores. First, a brief test of knowledge regarding facts about mental illness should be administered to the control group as well as the experimental group before and after training. These results may provide some insight into the question of why non-CIT LEOs report higher degrees of self-efficacy than pre-CIT LEOs. It would be helpful to discover if this finding was due to non-CIT LEOs possessing greater knowledge about PMI, resulting in greater confidence, or if the opposite is true – that the non-CIT LEOs possess very little knowledge of PMI. The addition of this type of instrument would also serve as a program efficacy measure other than attitudinal change. It is possible for attitudes to remain unchanged even if CIT training is meeting the goals of dispensing factual information regarding mental illness. Second, it is suggested that information be gathered about an officer's particular "beat," and/or typical schedule in order to investigate the potential

interaction between the prevalence/incidence of LEO encounters with PMI on self-efficacy. This data would be correlated with the prevalence/incidence data that local law enforcement agencies gather in order to understand concentrations of crime and crisis encounters in relation to location and time for their catchment area.

While CIT training appears to be beneficial to LEOs in terms of increasing self-efficacy and improving attitudes toward PMI, at this point in time it is recommended that CIT training remain voluntary for emergency-services personnel. This opinion was arrived at through observation of CIT training courses. In some instances, LEOs are required by their respective agencies to be CIT certified in order to advance their careers. These officers were observed to be dismissive of the material presented as well as disrespectful to instructors and advocates. It seems that nothing is gained by training officers who do not want the training for personal reasons. In fact, it likely does harm to the program by diminishing the experience of fellow LEOs who want to be there as well as creating an unpleasant experience for the volunteer presenters.

Also derived from anecdotal evidence is the recommendation that the content of the courses which comprise CIT training be scrutinized for their usefulness and applicability to LEOs and other emergency service professionals. In some cases, it seems that the courses are more academic than practical and that attempts are being made to teach officers the skills that master's level counselors possess. Of the didactic mental health-based content, officers primarily need to know the basic causes, signs, and symptoms of commonly encountered mental illnesses; signs, symptoms, and misconceptions about substance abuse and co-occurring disorders; the manifestation of symptoms and special needs of those with developmental disorders; basic information about the function and potential side effects of psychotropic

medications; and age-related mental health concerns. In the author's opinion, it is the experiential portions of CIT training that have the greatest impact upon the officers. It is through practicing de-escalation skills and having an open communication with people recovering from mental illness or the family members of PMI that the fear and anxiety dissipate and internal realizations occur about the ability to interact with and help PMI. If it were possible to implement a small portion of CIT training into law enforcement academies, the author would recommend that one day be dedicated to the didactic teachings mentioned above and one day for the experiential portions of CIT. Having this information and practicing these skills would likely place new officers in an advantageous position.

Finally, it is recommended that a longitudinal study be put into place that would measure the impact of CIT training on the potential long-term benefits for LEOs. Information gathered about depressive, anxious, and substance abusive symptoms as well as questions regarding the condition of one's physical health and overall well-being experienced by the officer would be informative. A longitudinal study would also have the ability to assess whether or not positive attitudes toward PMI and self-efficacy are maintained over time. A correlational analysis of reported symptoms and outcome measures would provide useful information for further attempts to implement CIT training.

Conclusions

Overall, the results of the current study serve as evidence that CIT training implemented in Maine is indeed effective at increasing law enforcement officers' confidence when working with people with mental illness. Additionally indicated is that CIT training in Maine is achieving goals of increasing positive attitudes toward people with mental illness and conversely refuting negative stereotypes and myths about mental illness. Because CIT training is in the beginning

stages of implementation in many areas nationwide, there is a paucity of research on program efficacy. The present study examined CIT training's efficacy through potential benefits gained from an officer's perspective and from the perspective of a person with mental illness receiving law enforcement services. There were no results observed which would contraindicate CIT training. The findings of this study support the implementation of CIT training in more communities in Maine. It is hoped that the results obtained from this research will add to the knowledge of CIT training's benefits, encourage further exploration of CIT training's impact on officers and the public, and contribute to the improvement of the relationship between law enforcement and members of the mental health community.

REFERENCES

- Addison, S. J., & Thorpe, S. J. (2004). Factors involved in the formation of attitudes towards those who are mentally ill. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 228-234.
- Bahora, M., Hanafi, S., Chien, V. H., & Compton, M. T. (2008). Preliminary evidence of effects of crisis intervention team training on self-efficacy and social distance. *Administration and Policy in Mental Health and Mental Health Services Research*, *35*, 159-167.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*, 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive view*. Englewood Cliffs, NJ: Prentice Hall.
- Borum, R., Deane, M. W., Steadman, H. J., & Morrissey, J. P. (1998). Police perspectives on responding to mentally ill people in crisis: Perceptions of program effectiveness. *Behavioral Sciences and the Law*, *16*, 393-405.
- Brekke, J. S., Prindle, C., Bae, S. W., & Long, J. D. (2001). Risks for individuals with Schizophrenia who are living in the community. *Psychiatric Services*, *52*, 1358-1366.
- Broussard, B., Krishan, S., Hankerson-Dyson, D., Husbands, L., Stewart, T., & Compton, M. T. (2011). Development and initial reliability and validity of four self-report measures used in research on interactions between police officers and individuals with mental illnesses. Manuscript submitted for publication.

- Butler, J. C. (2009). Authoritarianism and fear of deviance. *North American Journal of Psychology, 11*, 49-64.
- Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology, 44*, 473-490.
- Center for Health Policy, Planning and Research. (2007). *Crisis intervention team (CIT) training for correctional officers: An evaluation of NAMI Maine's 2005-2007 expansion program*. Unpublished report, University of New England.
- Chambers, M., Veslemoy, G., Valimaki, M., Botelho, M. A. R., Scott, A., Staniuliene, V., & Zanotti, R. (2010). Nurses' attitudes to mental illness: A comparison of a sample of nurses from five European countries. *International Journal of Nursing Studies, 47*, 350-362.
- Cohen, J., & Struening, E. L. (1962). Opinions about mental illness in the personnel of two large mental hospitals. *Journal of Abnormal Social Psychology, 64*, 349-360.
- Compton, M. T., Bahora, M., Watson, A. C., & Oliva, J. R. (2008). A comprehensive review of extant research on crisis intervention team (CIT) programs. *Journal of the American Academy of Psychiatry and the Law, 36*, 47-55.
- Compton, M. T., & Chien, V. H. (2008). Factors related to knowledge retention after crisis intervention team (CIT) training for police officers. *Psychiatric Services, 59*, 1049-1051.
- Compton, M. T., Demir, B., Oliva, J. R., & Boyce, T. (2009). Crisis intervention team training and special weapons and tactics callouts in an urban police department. *Psychiatric Services, 60*, 831-833.

- Compton, M. T., Esterberg, M. L., McGee, R., Kotwicki, R. J., & Oliva, J. R. (2006). Crisis intervention team training: Changes in knowledge, attitudes, and stigma related to schizophrenia. *Psychiatric Services, 57*, 1199-1202.
- Cordner, G. (2006). People with mental illness. *Problem-Oriented Guides for Police Problem-Specific Guides Series, 40*, U.S. Department of Justice. Washington, DC: Office of Community Oriented Policing Services, 2006.
- Corrigan, P., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2004). An attributional model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior, 43*, 162-179.
- Corrigan, P. W., & Watson, A. C. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal, 43*, 439-459.
- Cotton, D. (2004). The attitudes of Canadian police officers toward the mentally ill. *International Journal of Law and Psychiatry, 27*, 135-146.
- Deane, M. W., Steadman, H. J., Borum, R., Veysey, B. M., & Morrissey, J. P. (1999). Emerging partnerships between mental health and law enforcement. *Psychiatric Services, 50*, 99-101.
- DeCuir, W., & Lamb, H. R. (1996). Police response to the dangerous mentally ill. *The Police Chief, 10*, 99-106.
- Demir, B., Broussard, B., Goulding, S. M., & Compton, M. T. (2009). Beliefs about causes of schizophrenia among police officers before and after crisis intervention team training. *Community Mental Health Journal, 45*, 385-392.

- Diefenbach, D. L., & West, M. D. (2007). Television and attitudes toward mental health issues: Cultivation analysis and the third-person effect. *Journal of Community Psychology, 35*, 181-195.
- Dupont, R., Cochran, S., & Pillsbury, S. (2007). *Crisis Intervention Team Core Elements*. Unpublished report, University of Memphis.
- Evans, B. J., Coman, G. J., & Stanley, R. O. (1992). The police personality: Type A behavior and trait anxiety. *Journal of Criminal Justice, 20*, 429-441.
- Finn, P., & Sullivan, M. (1989). Police handling of the mentally ill: Sharing responsibility with the mental health system. *Journal of Criminal Justice, 17*, 1-14.
- Fung, K. M. T., Tsang, H. W. H., & Corrigan, P. W. (2008). Self-stigma of people with schizophrenia as predictor of their adherence to psychosocial treatment. *Psychiatric Rehabilitation Journal, 32*, 95-104.
- Genz, J. L., & Lester, D. (1977). Military service, education and authoritarian attitudes of municipal police officers. *Psychological Reports, 40*, 402.
- Glasman, L. R., & Albarracín, D. (2006). Forming attitudes that predict future behavior: A meta-analysis of the attitude-behavior relation. *Psychological Bulletin, 132*, 778-822.
- Gray, P. O. (2002). *Psychology, 4th edition*. New York: Worth Publishers.
- Green, T. M. (1997). Police as frontline mental health workers: The decision to arrest or refer to mental health agencies. *International Journal of Law and Psychiatry, 20*, 469-486.
- Greenwald, A. G. (1989). Why attitudes are important: defining attitude and attitude theory 20 years later. In A.R. Pratkanis & S.J. Breckler (Eds.), *Attitude structure and function*, (pp. 1-10). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Guise, V., Chambers, M., Valimaki, M., & Makkonen, P. (2010). A mixed-mode approach to data collection: Combining web and paper questionnaires to examine nurses' attitudes to mental illness. *Journal of Advanced Nursing*, *66*, 1623-1632.
- Hails, J., & Borum, R. (2003). Police training and specialized approaches to respond to people with mental illnesses. *Crime & Delinquency*, *49*, 52-61.
- Hanafi, S., Bahora, M., Demir, B.N., & Compton, M.T. (2008). Incorporating crisis intervention team (CIT) knowledge and skills into the daily work of police officers: A focus group study. *Community Mental Health Journal*, *44*, 427-432.
- Heslin, P. A., & Klehe, U. C. (2006). Self-efficacy. In S. G. Rogelberg (Ed.), *Encyclopedia of Industrial/Organizational Psychology* (Vol. 2, pp. 705-708). Thousand Oaks: Sage.
- Hinkelman, L. & Granello, D. H. (2003). Biological sex, adherence to traditional gender roles , and attitudes toward persons with mental illness: An exploratory investigation. *Journal of Mental Health Counseling*, *25*, 259-270.
- Hoath, D. R., Schneider, F. W., & Starr, M. W. (1998). Police job satisfaction as a function of career orientation and position tenure: Implications for selection and community policing. *Journal of Criminal Justice*, *26*, 337-347.
- Kobau, R., DiIorio, C., Chapman, D., & Delvecchio, P. (2010). Attitudes About mental illness and its treatment: Validation of a generic scale for public health surveillance of mental illness associated stigma. *Community Mental Health Journal*, *46*, 164-176.
- Kraus, S. J. (1995). Attitudes and the prediction of behavior: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, *21*, 58-75.
- Lamb, R. H., Weinberger, L. E., & DeCuir, W. J. (2002). The police and mental health. *Psychiatric Services*, *53*, 1266-1271.

- Lee, H. B., Hanner, J. A., Cho, S. J., Han, H. R., & Kim, M. T. (2008). Improving access to mental health services for Korean-American immigrants. *Psychiatry Investigation, 5*, 14-20.
- Levin, A. (2005). People with mental illness more often crime victims. *Psychiatric News, 40*, 16.
- Link, B. G., Monahan, J., Stueve, A., & Cullen, F. T. (1999). Real in their consequences: A sociological approach to understanding the association between psychotic symptoms and violence. *American Sociological Review, 64*, 316-332.
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology, 27*, 363-385.
- Link, B. G., Phelan, J. C., Bresnahan, M., Stueve, A., & Pescosolido, B. A. (1999). Public conceptions of mental illness: Labels, causes, dangerousness, and social distance. *American Journal of Public Health, 89*, 1328-1333.
- McGaha, A. C., & Stiles, P. G. (2001). *The Florida Mental Health Act (The Baker Act) 2000 Annual Report*. Florida: Louis de la Parte Florida Mental Health Institute.
- Miller, H. A., Mire, S., & Kim, B. (2009). Predictors of job satisfaction among police officers: Does personality matter? *Journal of Criminal Justice, 37*, 419-426.
- Myers, D. G. (2010). *Psychology, 9th edition*. New York: Worth Publishers.
- National Alliance on Mental Illness Maine Chapter (NAMI Maine). (2010, February). CIT in Maine. Powerpoint presentation at the Maine Crisis Intervention Team Stakeholder's Meeting, Augusta, ME.
- National Alliance on Mental Illness (NAMI). (n.d.) About Mental Illness. Retrieved September 22, 2010 from http://www.nami.org/Content/NavigationMenu/Inform_Yourself/About_Mental_Illness/About_Mental_Illness.htm

- Nicol, A. A. M., & Charbonneau, D. (2007). Right-Wing authoritarianism and social dominance orientation in a Canadian military sample. *Military Psychology, 19*, 239-257.
- Oliva, J. R., & Compton, M. T. (2008). A statewide crisis intervention team (CIT) initiative: Evolution of the Georgia CIT program. *Journal of the American Academy of Psychiatry and the Law, 36*, 38-46.
- Olsen, J. M. (1993). Attitudes and attitude change. *Annual Review of Psychology, 44*, 117-154.
- Ozer, E. M., & Bandura, A. (1990). Mechanisms governing empowerment effects: A self-efficacy analysis. *Journal of Personality and Social Psychology, 58*, 472-486.
- Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology, 93*, 835-852.
- Patch, P. C., & Arrigo, B. A. (1999). Police officer attitudes and use of discretion in situations involving the mentally ill: The need to narrow the focus. *International Journal of Law and Psychiatry, 22*, 23-35.
- Phelan, J. C., Link, B. G., Stueve, A., & Pescolido, B. A. (2000). Public conceptions of mental illness in 1950 and 1996: What is mental illness and is it to be feared? *Journal of Health and Social Behavior, 41*, 188-207.
- Phelan, J.C., Yang, L.H., & Cruz-Rojas, R. (2006). Effects of attributing serious mental illnesses to genetic causes on orientations to treatment. *Psychiatric Services, 57*, 382-387.
- Pinfold, V., Huxley, P., Thoricroft, G., Farmer, P., Toulmin, H., & Graham, T. (2003). Reducing psychiatric stigma and discrimination: Evaluating an educational intervention with the police force in England. *Social Psychiatry and Psychiatric Epidemiology, 38*, 337-344.

- Reuland, M., & Margolis, G. J. (2003). Police approaches that improve the response to people with mental illnesses: A focus on victims. *The Police Chief*, 70, retrieved on 9-25-2010, http://policechiefmagazine.org/magazine/index.cfm?fuseaction=display_arch&article_id=145&issue_id=112003
- Reuland, M., Schwarzfeld, M., & Draper, L. (2009). *Law enforcement responses to people with mental illnesses: A guide to research-informed policy and practice*. New York: Council of State Government Justice Center.
- Rosenberg M. J., & Hovland C. I. (1960). Cognitive, affective, and behavioural components of attitude. In M. Rosenberg, C. Hovland, W. McGuire, R. Abelson, and J. Brehm (eds). *Attitude organisation and change: an analysis of consistency among attitude components*. (pp 132-151). New Haven, CT: Yale University Press.
- Seo, M., & Kim, H. L. (2010). Effectiveness of an education program to reduce negative attitudes toward persons with mental illness using online media. *Asian Nursing Research*, 4, 90-101.
- Skeem, J., & Bibeau, L. (2008). How does violence potential relate to crisis intervention team responses to emergencies?. *Psychiatric Services*, 59, 201-204.
- Stajkovic, A. D., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124, 240-261.
- Steadman, H. J., Deane, M. W., Borum, R., & Morrissey, J. P. (2000). Comparing outcomes of major models of police responses to mental health emergencies. *Psychiatric Services*, 51, 645-649.
- Strauss, G., Glenn, M., Reddi, P., Afaq, I., Podolskaya, A., Rybakova, T., Saeed, O., Shah, V., Singh, B., Skinner, A., & El-Mallakh, R. S. (2005). Psychiatric disposition of patients

- brought in by crisis intervention team police officers. *Community Mental Health Journal*, 41, 223-228.
- Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, 7, 225-240.
- Taylor, S. M., Dear, M. J., & Hall, G. B. (1979). Attitudes toward the mentally ill and reactions to mental health facilities. *Social Science and Medicine*, 13, 281-290.
- Teller, J. L. S., Munetz, M. R., Gil, K. M., & Ritter, C. (2006). Crisis intervention team training for police officers responding to mental disturbance calls. *Psychiatric Services*, 57, 232-237.
- Teplin, L. A. (1984). Criminalizing mental disorder: The comparative arrest rate of the mentally ill. *American Psychologist*, 39, 794-803.
- Teplin, L. A., & Pruett, N. S. (1992). Police as street-corner psychiatrist: managing the mentally ill. *International Journal of Law and Psychiatry*, 15, 139-156.
- Thornton, J. A., & Wahl, O. F. (1996). Impact of a newspaper article on attitudes toward mental illness. *Journal of Community Psychology*, 24, 17-25.
- Torrey, E. F. (2000) Reinventing mental health care. *City Journal*, 9, retrieved on 9-25-2010. http://www.city-journal.org/html/9_4_a5.html
- Treatment Advocacy Center (2005). Briefing paper: Law enforcement and people with severe mental illnesses. Retrieved on 9-25-2019, www.psychlaws.org/BriefingPapers/BP16.htm.
- Tucker, A. S., Van Hasselt, V. B., & Russell, S. A. (2008). Law enforcement response to the mentally ill: An evaluative review. *Brief Treatment and Crisis Intervention*, 8, 236-250.

- Vermette, H. S., Pinals, D. A., & Appelbaum, P. S. (2005). Mental health training for law enforcement professionals. *The Journal of the American Academy of Psychiatry and the Law*, 33, 42-26.
- Waldman, A. (2004). The police struggle with approach to the mentally ill: Recent killings have led to calls for better tracking and treatment of the mentally ill and more training for officers. *The Christian Science Monitor*, retrieved on 9-25-2010, www.csmonitor.com/2004/0317/p11s02-usju.htm.
- Watson, A. C., Corrigan, P. W., & Ottati, V. (2004). Police officer attitudes and decisions regarding persons with mental illness. *Psychiatric Services*, 55, 49-53.
- Watson, A. C., Morabito, M. S., Draine, J., & Ottati, V. (2008). Improving police response to persons with mental illness: A multi-level conceptualization of CIT. *International Journal of Law and Psychiatry*, 31, 359-368.
- Watson, A. C., Ottati, V. C., Morabito, M., Draine, J., Kerr, A. K., & Angell, B. (2010). Outcomes of police contacts with persons with mental illness: The impact of CIT. *Administration and Policy in Mental Health*, 37, 302-317.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Journal of Personality and Social Psychology*, 55, 738-748.
- Wilson, J. Q. (1968). *Varieties of police behavior: The management of law and order in eight communities*. Cambridge, MA: Harvard University Press.
- Wolff, G., Pathare, S., Craig, T., & Leff, J. (1996). Community attitudes to mental illness. *British Journal of Psychiatry*, 168, 183-190.

APPENDIX A

DEMOGRAPHICS QUESTIONNAIRE and SELF-EFFICACY SCALE (SES) PRE/POST

Thank you for agreeing to be a part of this survey! We would like to ask you a variety of questions about yourself and your work. Please answer each question as honestly as possible. Thank you!

So that we can assign you an identification number (only for the purpose of this survey and the follow-up survey), please complete the following questions:

What are the first two letters of your middle name? (ex. middle name Jason, enter "JA") (if no middle name, enter "XX"): _____

What are the last two digits of your Social Security Number?: _____

Please answer the following questions about yourself.

1) How old are you? _____

2) What is your gender?

- Female Male Other

3) What is your race/ethnicity?

- Black or African American White or Caucasian
 Hispanic or Latino Native American Other: _____

4) What is your marital status?

- Single, Never Married Married or Living with a Partner
 Separated Divorced Widowed

5) What was your highest level of education?

- Did not complete 12th grade
 Completed 12th grade / graduated from high school / GED
 Some college , Years completed _____
 Completed college, Years completed _____
 Graduate training after college Years completed _____

6) What county do you currently work in? _____

7) What is your occupation?

- Corrections Officer
- EMT or Paramedic
- Fire Fighter
- Law Enforcement Officer
- RN or LPN
- Other _____

8) How many years have you worked in this field? _____

9) While working, have you ever dealt with someone with an obvious mental illness?

- Yes
- No

10) At your job, how many people with an obvious mental illness do you deal with during an average month? _____

11) If you are a police officer, have you ever arrested someone with an obvious mental illness?

- Yes
- No

Please read the vignette 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.”*

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

12) How confident would you feel interacting with someone like David?

Not at all confident Not very confident Somewhat confident Very confident

13) 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

14) How confident would you feel calming down someone like David?

Not at all confident Not very confident Somewhat confident Very confident

15) 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

16) How confident would you feel interacting with family members of someone like David?

Not at all confident Not very confident Somewhat confident Very confident

17) 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

18) 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

19) 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

20) How confident would you feel talking to someone like David about his medications?

Not at all confident Not very confident Somewhat confident Very confident

21) 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

22) 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

23) 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

24) 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

25) How confident would you feel expressing understanding towards someone like David?

Not at all confident Not very confident Somewhat confident Very confident

26) 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

27) 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 B
SELF-EFFICACY SCALE (SES) POST-TEST

Thank you for agreeing to continue the survey! Please answer each question as honestly as possible.

So that we can assign you an identification number (only for the purpose of this survey and the follow-up survey), please complete the following questions:

What are the first two letters of your middle name? (ex. middle name Jason, enter "JA") (if no middle name, enter "XX"): _____

What are the last two digits of your Social Security Number?: _____

Please answer the following questions about yourself.

1) How old are you? _____

2) What county do you currently work in? _____

3) What is your occupation?

- Corrections Officer
- EMT or Paramedic
- Fire Fighter
- Law Enforcement Officer
- RN or LPN
- Other _____

4) How many years have you worked in this field? _____

Please read the vignette 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.”*

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 calming down 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 interacting with family members of someone like David?

Not at all confident Not very confident Somewhat confident Very confident

6) 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

7) 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

8) 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

9) How confident would you feel talking to someone like David about his medications?

Not at all confident Not very confident Somewhat confident Very confident

10) 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

11) 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

12) 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

13) 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

14) How confident would you feel expressing understanding towards someone like David?

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 C

SELF-EFFICACY SCALE (SES) CONTROL GROUP

Thank you for agreeing to be a part of this survey! We would like to ask you a variety of questions about yourself and your work. Please answer each question as honestly as possible. Thank you!

Please answer the following questions about yourself.

28) How old are you? _____

29) What is your gender?

- Female Male Other

30) What is your race/ethnicity?

- Black or African American White or Caucasian
 Hispanic or Latino Native American Other: _____

31) What is your marital status?

- Single, Never Married Married or Living with a Partner
 Separated Divorced Widowed

32) What was your highest level of education?

- Did not complete 12th grade
 Completed 12th grade / graduated from high school / GED
 Some college , Years completed _____
 Completed college, Years completed _____
 Graduate training after college Years completed _____

33) What county do you currently work in? _____

34) What is your occupation?

- Corrections Officer
 Law Enforcement Officer
 Other _____

35) How many years have you worked in this field? _____

36) While working, have you ever dealt with someone with an obvious mental illness?

Yes

No

37) At your job, how many people with an obvious mental illness do you deal with during an average month? _____

38) Have you ever arrested someone with an obvious mental illness?

Yes

No

Please read the vignette 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 baricash 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.”*

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 calming down 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 interacting with family members of someone like David?

Not at all confident Not very confident Somewhat confident Very confident

6) 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

7) 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

8) 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

9) How confident would you feel talking to someone like David about his medications?

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10) 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

11) 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

12) 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

13) 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

14) How confident would you feel expressing understanding towards someone like David?

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

28a) Have you had Crisis Intervention Team (CIT) Training in the past?

Yes

No

28b) If so, how long ago was the full week of training in which you participated?

< 6 months

<1 year

1-2 years

2-3 years

3 years or more

APPENDIX D

COMMUNITY ATTITUDES TOWARD THE MENTALLY ILL SCALE (CAMI)

- The following statements express various opinions about mental illness and the mentally ill. The mentally ill refers to people needing treatment for mental disorders but who are capable of independent living outside a hospital. Please circle the response which most accurately describes your reaction to each statement. It's your first reaction which is important. Don't be concerned if some statements seem similar to ones you have previously answered. Please be sure to answer all statements.
- a. As soon as a person shows signs of mental disturbance, he should be hospitalized.
SA A N D SD
- b. More tax money should be spent on the care and treatment of the mentally ill.
SA A N D SD
- c. The mentally ill should be isolated from the rest of the community.
SA A N D SD
- d. The best therapy for many mental patients is to be part of a normal community.
SA A N D SD
- e. Mental illness is an illness like any other.
SA A N D SD
- f. The mentally ill are a burden on society.
SA A N D SD
- g. The mentally ill are far less of a danger than most people suppose.
SA A N D SD
- h. Locating mental health facilities in a residential area downgrades the neighbourhood.
SA A N D SD
- i. There is something about the mentally ill that makes it easy to tell them from normal people.
SA A N D SD
- j. The mentally ill have for too long been the subject of ridicule.
SA A N D SD
- k. A woman would be foolish to marry a man who has suffered from mental illness, even though he seems fully recovered.
SA A N D SD
- l. As far as possible mental health services should be provided through community-based facilities.
SA A N D SD
- m. Less emphasis should be placed on protecting the public from the mentally ill.
SA A N D SD
- n. Increased spending on mental health services is a waste of tax dollars.
SA A N D SD
- o. No one has the right to exclude the mentally ill from their neighbourhood.
SA A N D SD
- p. Having mental patients living within residential neighbourhoods might be good therapy, but the risks to residents are too great.
SA A N D SD
- q. Mental patients need the same kind of control and discipline as a young child.
SA A N D SD
- r. We need to adopt a far more tolerant attitude toward the mentally ill in our society.
SA A N D SD
- s. I would not want to live next door to someone who has been mentally ill.
SA A N D SD
- t. Residents should accept the location of mental health facilities in their neighbourhood to serve the needs of the local community.
SA A N D SD
- u. The mentally ill should not be treated as outcasts of society.
SA A N D SD
- v. There are sufficient existing services for the mentally ill.
SA A N D SD
- w. Mental patients should be encouraged to assume the responsibilities of normal life.
SA A N D SD
- x. Local residents have good reason to resist the location of mental health services in their neighbourhood.
SA A N D SD
- y. The best way to handle the mentally ill is to keep them behind locked doors.
SA A N D SD
- z. Our mental hospitals seem more like prisons than like places where the mentally ill can be cared for.
SA A N D SD

SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Disagree

SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Disagree

- sa. Anyone with a history of mental problems should be excluded from taking public office.
SA A N D SD
- sb. Locating mental health services in residential neighbourhoods does not endanger local residents.
SA A N D SD
- sc. Mental hospitals are an outdated means of treating the mentally ill.
SA A N D SD
- sd. The mentally ill do not deserve our sympathy.
SA A N D SD
- se. The mentally ill should not be denied their individual rights.
SA A N D SD
- sf. Mental health facilities should be kept out of residential neighbourhoods.
SA A N D SD
- sg. One of the main causes of mental illness is a lack of self-discipline and will power.
SA A N D SD

- sh. We have the responsibility to provide the best possible care for the mentally ill.
SA A N D SD
- si. The mentally ill should not be given any responsibility.
SA A N D SD
- sj. Residents have nothing to fear from people coming into their neighbourhood to obtain mental health services.
SA A N D SD
- sk. Virtually anyone can become mentally ill.
SA A N D SD
- sl. It is best to avoid anyone who has mental problems.
SA A N D SD
- sm. Most women who were once patients in a mental hospital can be trusted as baby sitters.
SA A N D SD
- sn. It is frightening to think of people with mental problems living in residential neighbourhoods.
SA A N D SD

SA=Strongly Agree A=Agree N=Neutral D=Disagree SD=Strongly Disagree

COMMUNITY ATTITUDES TOWARDS THE MENTALLY ILL

APPENDIX E

INFORMATION LETTER – EXPERIMENTAL GROUP

INFORMATION LETTER

for a Research Study entitled:

Emergency Services Personnel: Work-Related Interaction with People with Mental Illness

You are invited to participate in a research study that is designed to gather information about the impact of Crisis Intervention Team training. This study is being conducted by Salena King, B.S., a doctoral candidate, under the supervision of her advisor, Dr. John Dagley at Auburn University. You were selected as a possible participant because you are employed in the emergency services and/or corrections field and undergoing Crisis Intervention Team training.

If you decide to participate in this research study, you will be asked to complete a questionnaire. **All answers will be anonymous.** The questionnaire will take approximately 12 minutes to complete (a trial run of this survey found that participants took 10-15 minutes to complete the survey). Questions will be asked about contact with people with mental illness and/or addictive disorders while working and thoughts about mental illness. If you are unsure of how to answer a question, please give your best possible answer. There are no right or wrong answers to this survey. If you do not wish to participate in the study, you may return the questionnaire unanswered.

For every ten completed surveys returned, I will make a donation of \$20 (up to a maximum of \$500) to the Jeffrey S. Parola Foundation, a non-profit organization that aids law enforcement agencies and family members of law enforcement officers who have been injured or have died in the line of duty.

Your participation is voluntary and you may discontinue participation at any time. There is no penalty for not participating. There are no risks anticipated with the completion of this questionnaire, but if you feel uncomfortable at any time, you may discontinue your participation. There are also no immediate benefits associated with completing the survey, but the information you provide may benefit others who undergo Crisis Intervention Team training in the future.

Information gathered in this survey may be used to fulfill an educational requirement of the investigator, may be published in a professional journal, and may be presented at professional meetings. As your responses are anonymous, any information obtained in connection with this study will be kept anonymous.

If you have any questions I invite you to ask them now. If you have questions later, Salena King, 207-356-0852, kingsal@auburn.edu or Dr. John Dagley, 334-844-2978, will be happy to answer them.

For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu .

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Investigator's signature

Date

Salena M. King

Print Name

APPENDIX F
INFORMATION LETTER – CONTROL GROUP

INFORMATION LETTER

for a Research Study entitled:

Law Enforcement Officers and Work-Related Interaction with People with Mental Illness

You are invited to participate in a research study that is designed to gather information about thoughts about people with mental illnesses or addictive disorders. This study is being conducted by Salena King, B.S., a doctoral candidate, under the supervision of her advisor, Dr. John Dagley at Auburn University. You were selected as a possible participant because you are a law enforcement officer employed in the state of Maine.

If you decide to participate in this research study, you will be asked to complete a questionnaire. **All answers will be anonymous.** The questionnaire will take approximately 12 minutes to complete (a trial run of this survey found that participants took 10-15 minutes to complete the survey). Questions will be asked about contact with people with mental illness and/or addictive disorders while working and thoughts about mental illness in general. If you are unsure of how to answer a question, please give your best possible answer. There are no right or wrong answers to this survey. If you do not wish to participate in the study, you may return the questionnaire unanswered.

For every ten completed surveys returned, I will make a donation of \$20 (up to a maximum of \$500) to the Jeffrey S. Parola Foundation, a non-profit organization that aids law enforcement agencies and family members of law enforcement officers who have been injured or have died in the line of duty.

Your participation is voluntary and you may discontinue participation at any time. There is no penalty for not participating. There are no risks anticipated with the completion of this questionnaire, but if you feel uncomfortable at any time, you may discontinue your participation.

Information gathered in this survey may be used to fulfill an educational requirement of the investigator, may be published in a professional journal, and may be presented at professional meetings. As your responses are anonymous, any information obtained in connection with this study will be kept anonymous.

If you have any questions I invite you to ask them now. If you have questions later, Salena King, 207-356-0852, kingsal@auburn.edu or Dr. John Dagley, 334-844-2978, will be happy to answer them.

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HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

Investigator's signature

Date

Salena M. King

Print Name

APPENDIX G
MAINE CIT SAMPLE SCHEDULE



Maine Crisis Intervention Team (CIT) Training Program

	Monday	Tuesday	Wednesday	Thursday	Friday
	12/13	12/14	12/15	12/16	12/17
8:00 AM	Introduction	Legal Issues	Community Visits, to include a working lunch	Family Perspectives	Diversity
8:30 AM	Mental Health Basics				
9:00 AM				Consumer Perspectives	
9:30 AM					
10:00 AM		Suicide Prevention		Autism and Developmental Disorders	Psychiatric Medications and Toxicology
10:30 AM	Aging and Dementia	Trauma & PTSD			
11:00 AM					
11:30 AM					
12:00 PM	Lunch	Lunch		Lunch	Lunch
12:30 PM					
1:00 PM	Child/Adolescent Mental Health	De-escalation Skills		Community Resources	De-escalation Skills and Role Play
1:30 PM					
2:00 PM		De-escalation Skills and Role Play			
2:30 PM	Personality Disorders				
3:00 PM					
3:30 PM	Substance Abuse & Co-occurring d/o				De-escalation Skills and Role Play
4:00 PM					
4:30 PM					