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Perceptions of Efficacy in Responding to the Mentally Ill**

Chelsea Jordan Bennett

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ASSESSING THE IMPACT OF CRISIS INTERVENTION TEAM (CIT)  
TRAINING AND LOCAL MENTAL HEALTH RESOURCE  
AVAILABILITY ON OFFICER PERCEPTIONS OF EFFICACY IN  
RESPONDING TO THE MENTALLY ILL

by

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A doctoral research project submitted to  
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for the degree of

Doctor of Psychology

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We the undersigned committee hereby approve the attached doctoral research project in partial fulfillment for the degree of Doctor of Clinical Psychology.

Assessing the Impact of Crisis intervention Team (CIT) Training and Local Mental Health Resource Availability on Officer Perceptions of Efficacy in Responding to the Mentally Ill

by

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## **Abstract**

Title: Assessing the Impact of Crisis Intervention Team (CIT) Training and Local Mental Health Resource Availability on Officer Perceptions of Efficacy in Responding to the Mentally Ill

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Police officers are often the first responders to emergency mental health and crisis situations, with almost one-third of all mental health referrals stemming from law enforcement interaction. As a result of deinstitutionalization, a large number of mentally ill individuals have become involved in the criminal justice system and brought to police attention, resulting in unnecessary arrests and an overrepresentation of individuals with mental illness in jail populations. Recent decarceration trends have now placed the focus on diverting individuals with mental illness into treatment. However, officers often lack the proper skills, training, and knowledge of how to interact with individuals with mental illness.

Due to this discrepancy in training and roles, the Memphis Police Department developed Crisis Intervention Team (CIT) training. This current study comprised of law enforcement officers from six law enforcement agencies in central and northern Florida (N=64) examined the impact CIT training and availability of local mental health resources have on law enforcement officer perceptions of effectiveness in responding to the mentally ill. The study's goals included (a) examining group differences between CIT and non-CIT trained officers with respect to level of comfort in responding to mental health calls, level of preparedness, and attitudes toward treatment of mental illness; (b)

exploring the impact of perceived agency importance of CIT and mental health training on officer perceptions of the benefits of mental health training; and (c) exploring the role of a local emergency evaluation facility and local community resource availability on officer perceptions regarding the benefits of mental health treatment. Descriptive statistics, preliminary analyses between covariates and primary outcomes, group differences between CIT trained officers and non-CIT trained officers on primary study outcomes using Mann-Whitney analyses, and multiple linear regressions examining potential predictor variables for officer comfort and officer preparedness were utilized. Overall, this study found officers who were CIT trained were better prepared to respond to the mentally ill. However, no significant differences were found between CIT trained officers and non-CIT trained officers on level of comfort or attitudes toward mental health treatment. In addition, officers with positive perceptions of community resources had significantly more positive perceptions regarding the benefits of mental health treatment than those with negative perceptions of community resources. Exploratory analyses utilizing linear multiple regression also found that officer preparedness significantly predicted officer comfort in responding to mental health calls for service. Contributions and limitations of these findings, as well as future research directions, are discussed.

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Assessing the Impact of Crisis intervention Team (CIT) Training and  
Local Mental Health Resource Availability on Officer Perceptions of Efficacy in  
Responding to the Mentally Ill

In recent years, conflicts between law enforcement and the mentally ill have continued to garner national media attention, becoming a hot topic issue in regards to both citizen and officer safety. In 2014, Dontre Hamilton, a 31-year-old man in Milwaukee diagnosed with schizophrenia, was shot 14 times during a struggle after being awakened from sleeping in a park, later dying of his injuries (Mulvey & Schubert, 2017). In North Carolina, 18-year-old Keith Vidal was fatally shot by law enforcement after his family called 911 asking for help, informing dispatchers their son was diagnosed with schizophrenia and refused to take his medication (Botelho, 2014). Three law enforcement officers (LEOs) from different agencies responded to the scene, where Keith was wielding a screwdriver (Botelho, 2014). Though Keith was known to local law enforcement officers, these officers were not familiar with his mental illness, and responded with lethal force (Botelho, 2014). In Charlotte, the controversial police shooting of Keith Lamont Scott achieved national attention after his wife was heard on video informing law enforcement that her husband suffered from a traumatic brain injury moments before they opened fire (Madhani, 2016). It is important to keep in mind that while these stories are sobering and receive wide media coverage, they are unrepresentative and misleading regarding the link between mental illness and violence, as well as between law enforcement and the mentally ill (Kerr, Morabito, & Watson, 2010). Instead, these high profile cases are beneficial for demonstrating what negative consequences may arise when public agencies ignore their responsibilities to the mentally

ill and when individuals with severe mental illness do not receive the necessary and appropriate treatment (Mulvey & Schubert, 2017). A study by the Virginia-based Treatment Advocacy Center found one-quarter of individuals fatally shot by law enforcement officers had *untreated* serious mental illness (SMI), concluding that individuals with *untreated* mental illness are 16 times more likely to be killed by law enforcement officers than those without mental illness (Fuller, Lamb, Biasotti, & Snook, 2015).

More and more, law enforcement comes into contact with mentally ill individuals during the process of their job duties, though many have not received adequate training and do not feel knowledgeable about mental illness. In fact, previous research indicates that between 6% and 10% of all law enforcement public contacts and calls for service relate to mental illness, and nearly one-third of all mental health referrals, come from law enforcement (Engel & Silver, 2001; Franz & Borum, 2011; Ruiz & Miller, 2004; Teplin, 1984; Teplin & Pruett, 1992). This frequent interaction, coupled with lack of community resources for mental health treatment as a result of de-institutionalization, leads to unnecessary arrests resulting in individuals with mental illness being overrepresented in jail populations (Ellis, 2014; Wood & Watson, 2017). In response, Crisis Intervention Team (CIT) Training was developed and is being implemented in cities and agencies nationwide with the goals of increasing officer knowledge of mental illness, increasing safety, and providing linkages to treatment rather than arrest when needed (Vickers, 2000). However, a review of the literature indicates that although many law enforcement officers are provided with training in mental health, the effectiveness of CIT and other mental health trainings depends greatly upon the availability of community resources and

partnership with mental health agencies in that area. As such, this project seeks to examine how CIT training and availability of local mental health resources impact officer perception regarding the importance of mental health training for law enforcement, the effectiveness of mental health treatment, and feelings of confidence and capability in responding to the mentally ill.

### **Literature Review**

While it is generally known that the central duties of law enforcement are to maintain community safety and order, provide service to citizens in need, and respond to accidents and injuries, it may be unknown to most that their job requirements entail considerable contact with the mentally ill population. A review of factors proposed to have resulted in this increased contact between law enforcement and the mentally ill, new diversion trends to fight criminalization of the mentally ill, a review of CIT training, as well as available research and current limitations of CIT training effectiveness will follow.

### **The Deinstitutionalization Movement**

In the 1960's, a movement termed deinstitutionalization raced through the United States with the goal of eliminating large state psychiatric hospitals and asylums (Ben-Moshe, 2017; Browning, Van Hasselt, Tucker, & Vecchi, 2011). According to Harcourt (2006), the highest rate of institutionalization in the United States was in 1955, when 640 persons per 100,000 adults over age fifteen were institutionalized in asylums, mental hospitals, and prisons. In fact, at this time there was one psychiatric bed for every 300 Americans (Torrey, Kennard, Eslinger, Lamb, & Pavle, 2010). Due to concerns regarding the living conditions of institutionalized individuals, the deinstitutionalization movement

was meant to be a humane solution to the asylums and mental hospitals operating in the country at the time, offering the alternative of life in the community for individuals with severe mental illness (Chaimowitz, 2012; Torrey et al., 2010). Additional goals for deinstitutionalization included solving the problem of overcrowding and deterioration of state hospitals, as well as reducing the financial costs of keeping these institutions up and running (Torrey et al., 2010). Moreover, at the same time, new psychotropic medications were available, allowing for improvement of symptoms in patients (Chaimowitz, 2012; Fuller et al., 2015; Markowitz, 2006; Torrey et al., 2010).

With deinstitutionalization came new ideas about how mental health services should be organized and offered in a community setting. The initial plan was to use the money saved by closing state institutions to federally fund outpatient mental health centers in the community that would be able to service these individuals' needs, with the end goal of the community being able to fund these services and keep them running (Ben-Moshe, 2017; Browning et al., 2011). However, the ideals of this movement were never fully recognized, and communities allocated the funds needed for these outpatient community mental health centers to thrive to other areas (Chaimowitz, 2012). As a result, more people with chronic mental illness were released into the community without the necessary services and resources, contributing to a rise in homelessness and a lack of resources available to those individuals requiring more long-term mental health care (Browning et al., 2011; Chaimowitz, 2012; Draine, Blank Wilson, & Pogorelski, 2007; Fuller et al., 2015; Teplin, 1984). As a result, critics, such as Torrey (1995), assert that the "deinstitutionalization of seriously mentally ill individuals has been the largest failed social experiment in twentieth century America" (p.1612).



It has been presumed the deinstitutionalization movement failed to take into account the financial implications that shifting vast numbers of individuals into the community would bring, as many communities did not have the funds necessary to take on community mental health facilities, contributing to the closure of many outpatient facilities (Browning et al., 2011; Draine et al., 2007). The few outpatient facilities that remained were suited to provide acute outpatient care, but were not necessarily equipped to provide long-term care to the individuals with severe mental illness who previously resided in residential mental health institutions (Browning et al., 2011). Compared to one psychiatric bed for every 300 Americans in 1955, in 2005 there was now only one psychiatric bed for every 3,000 Americans (Torrey et al., 2010). As a result, severely mentally ill individuals in need of hospitalization encountered a large degree of difficulty in finding a bed, and did not receive appropriate and timely treatment (Peternelj-Taylor, 2008; Torrey et al., 2010).

Moreover, a shift advocating a more liberal position on confinement led states to adopt more stringent legal standards for involuntary commitment, requiring dangerousness to self and others (Chaimowitz, 2012; Markowitz, 2006; Teplin, 1984). The more stringent civil commitment criteria, intended to safeguard the rights of those with mental illness, had the unintended consequence of shorter lengths of stay and treatment. While the length of stay in psychiatric hospitals was approximately six months in 1960, in the early 1990s, this timeframe declined to around 15 days, resulting in an increase in admissions, discharges, and readmissions, referred to as the “revolving-door phenomenon” (Chaimowitz, 2012; Markowitz, 2006). While the steep decline in public psychiatric hospital capacity may have been offset to some degree by inpatient units in

private psychiatric and general hospitals, they did not provide the long-term treatment previously found in public psychiatric hospitals (Markowitz, 2006). As a result, the capacity to treat those individuals with the most severe mental illness, as well as economically disadvantaged mentally ill patients, had markedly diminished (Markowitz, 2006). The above factors, combined referred to as the deinstitutionalization of the mentally ill, contributed to a fragmented mental healthcare system and an increase in the interaction between law enforcement officers and individuals with mental illness (Browning et al., 2011; Fuller et al., 2015).

### **Increase in Interactions Between Law Enforcement and the Mentally Ill**

It has been estimated as many as one in ten calls for service involve an individual with severe mental illness (Plotkin & Peckerman, 2017). A study by Sellers, Sullivan, Veysey, and Shane (2005) found that officers surveyed had an average of six encounters in the previous month with an individual they believed to be mentally ill. Police are now the first agency called to deal with mental health emergencies and act as “gatekeepers,” one of the main sources of referral into mental health treatment (Huxter, 2012; Lamb, Weinberger, & DeCuir, 2002; Markowitz, 2006; Watson, Morabito, Draine, & Ottati, 2008), and perhaps the only source of immediate service for urgent mental health crises, especially for the poor (Ormston, 2010).

Due to changes in involuntary psychiatric commitment and treatment criteria, dangerousness to self or others is now a requirement before emergency treatment can be initiated (Torrey et al., 2010). This new criteria almost necessitates the need for law enforcement officers to become involved when individuals deteriorate to a dangerous condition before they will be referred for treatment. When these individuals with severe

mental illness become disruptive or dangerous, law enforcement is typically called to respond due to the lack of an alternative (Fuller et al., 2015). Two legal principles outline law enforcement involvement with the mentally ill: a) the duty to protect the public by removing dangerous individuals from the community, and b) *parens patriae*, the authority and duty to help those citizens with disabilities who are unable to help themselves, such as those with mental illness (Lamb et al., 2002; Teplin, 2000; Teplin & Pruett, 1992). While some law enforcement officers accept that a large part of their role is to recognize those with mental illness and refer individuals to proper treatment resources, other officers view this duty with resentment, and reluctantly complete emergency evaluation referrals (Lamb et al., 2002). However, this is not surprising given that officers are provided little training in performing these duties (Lamb et al., 2002).

Although crisis intervention calls make up the majority of all service calls, law enforcement officers generally lack the training, skills, and knowledge necessary to safely and effectively intervene when responding to these calls (Compton et al., 2014a; Compton et al., 2011; Demir, Broussard, Goulding, & Compton, 2009; Hanafi, Bahora, Demir, & Compton, 2008). Most officers receive little education and formal training on interacting and responding to calls involving an individual with severe mental illness (Wells & Schafer, 2006). While a small portion of law enforcement academy training is devoted to instruction in such matters, law enforcement professionals do not receive extensive training in the de-escalation of individuals in crisis with a mental illness (Browning et al., 2011). This disparity between training offered to law enforcement officers and the high frequency of contact between law enforcement officers and those

with SMI can contribute to negative outcomes from these encounters. As illuminated by media reports, on rare occasions, these interactions between law enforcement and mentally ill individuals can end with drastic consequences, as these interactions are often characterized by excessive force and may become deadly on the part of the individual with mental illness or the officer (Browning et al., 2011; Compton et al., 2014a; Ellis, 2014; Watson & Fulambarker, 2012). However, most encounters between police and the mentally ill do not involve major crimes or violence (Wood, Watson, & Fulambarker, 2017). Instead, most calls for service involving mental illness result from behavior that falls under “public nuisance” calls (i.e., trespassing, loitering, vagrancy) or from the individual endangering their own safety (Fuller et al., 2015).

Calls for service involving individuals with mental illness who are in a state of crisis are often viewed as challenging for law enforcement (Lord, Bjerregaard, Blevins, & Whisman, 2011; Watson & Fulambarker, 2012). According to Morabito and Socia (2015), these calls are considered some of the most dangerous calls for service to which law enforcement officers respond. Interactions with this population have been represented as threatening to officer safety. Surveys of officer perceptions indicate they do not feel adequately trained to effectively respond to these crises (DeGue, Fowler, & Calkins, 2016; Wells & Schafer, 2006), as safety is a key element officers consider when responding to mental health calls (Watson, Swartz, Bohrman, Kriegel, & Draine, 2014). Officers perceive these calls to be unpredictable and dangerous, while the individual in crisis fears law enforcement since they have the power to involuntarily commit them for treatment (Ruiz & Miller, 2004). Moreover, officers view these calls to be time-consuming, as they take officers away from their usual patrol duties (Watson et al., 2008;

Wells & Schafer, 2006). Charette et al. (2014) found interactions between law enforcement and an individual with mental illness took twice as much time as interactions with the general population.

### **Criminalization of the Mentally Ill**

Deinstitutionalization has been blamed for a new phenomenon, originally termed by Abramson (1972) as the “criminalization” of the mentally ill (Peternelj-Taylor, 2008; Harcourt, 2006). The term “criminalization” refers to the application of criminal justice sanctions in response to behavior resulting from mental illness (Banks, Pandiani, & Boyd, 2009). Consequently, individuals who previously were treated within the mental health system have been forced into the criminal justice system, with the burden for treatment now resting on jails and prisons (Fuller et al., 2015; Oliva & Compton, 2008; Teplin, 2000). As a result of the deinstitutionalization movement, criminalization of the mentally ill is a very real and widespread occurrence (Chaimowitz, 2012; Laberge & Morin, 1995; Shenson, Dubler, & Michaels, 1990). Before deinstitutionalization, these individuals likely would have been lifetime residents of state hospitals, incurring very little chance for possible arrest and entry into the criminal justice system (Teplin, 1984).

**Statistics supporting criminalization.** Statistics illuminating the large number of mentally ill individuals in prisons and jails, as well as the increased arrest rates for those suspects with mental illness compared to those without, also supports the criminalization hypothesis (Banks et al., 2009; Engel & Silver, 2001; Lamb & Weinberger, 1998). In 1999, the Bureau of Justice Statistics estimated up to 16% of individuals in prisons and jails had a mental illness (Ditton, 1999). However, a recent study by the United States Department of Justice reported about half of all inmates, with an estimated population of

over one million, have a recent history or current symptoms of mental illness (James & Glaze, 2006). When narrowed to serious mental illness, this same study found 479,000 local jail inmates, 705,000 state prisoners, and 78,000 federal prisoners presented with symptoms of a serious mental illness, such as schizophrenia, bipolar disorder, or depression (James & Glaze, 2006). As such, it is estimated that 56% of state prison inmates and 64% of jail inmates have a mental illness (James & Glaze, 2006), whereas somewhere between 15 to 20% of all inmates in jails and prisons suffer from a *serious* mental illness (Torrey et al., 2010).

A study by Steadman, Morrissey, Braff, and Monahan (1986) reported an increase in the percentage of prison inmates with prior mental health hospitalizations following deinstitutionalization, increasing from 8% in 1968 to 11% in 1978. These trends suggested that those with mental illness were increasingly being entered into the criminal justice system rather than the mental health system. In 1995, Torrey concluded there were now more persons with mental illness in jails and prisons than in psychiatric hospitals. Annually, American jails have contact with approximately 1.7 million seriously mentally ill individuals and daily responsibility for 112,000 (Mulvey & Schubert, 2017). Similarly, approximately 1.6 million inmates in state and federal prisons suffer from a serious mental illness, with prisons maintaining daily responsibility for 320,000 seriously mentally ill individuals (Mulvey & Schubert, 2017). In fact, over 685,000 mentally ill individuals are taken to U.S. jails every year (Torrey et al., 1992).

The comparison of arrest rates between those with mental illness and individuals in the general population is also support for the criminalization hypothesis. The likelihood of a seriously mentally ill individual being in a jail or prison versus a hospital

from 2004 to 2005 was 3.2 to 1 (Torrey et al., 2010). Additionally, a large scale study conducted by Teplin (1984) which observed police encounters with 506 suspects in Chicago, found the rate of arrest for suspects with mental illness was 46.7% as compared with 27.9% for suspects without mental illness. As a result, the author suggested those individuals exhibiting symptoms and behaviors of a mental illness have a higher probability of being arrested than those who do not exhibit such signs, indicating we tend to treat the mentally ill in a criminal manner (Teplin, 1984). Moreover, research completed by Banks et al. (2009), found adults with serious mental illness were more than 2.6 times as likely as adults without mental illness to be charged with a crime, and were 3.8 times as likely to be incarcerated. As such, it seems the criminal justice system has become America's new mental health hospitals (Torrey et al., 2010).

### **Factors Contributing to Criminalization of the Mentally Ill**

**Unavailability of Local Treatment Resources.** Lack of local treatment resources, as well as difficulty securing treatment for individuals in need due to more stringent commitment criteria, have been implicated as factors in the criminalization of the mentally ill. In fact, law enforcement officers may face more obstacles in finding mental health treatment for individuals than entering the individual into the criminal justice system (Engel & Silver, 2001; Laberge & Morin, 1995; Lamb & Weinberger, 1998; Lamb et al., 2002; Teplin, 1984; Watson et al., 2008). This is often due to the lack of appropriate treatment facilities, including facilities that accept police referrals, as officers attempt to link an individual with serious mental illness with services involuntarily (Browning et al., 2011). As a result, officers often feel that their disposition options are greatly limited. Their familiarity with the arrest process, as well as the

assurance that the arrest process will be successful, unlike the referral for emergency evaluation, often leads officers to choose to arrest the individual (Browning et al., 2011; Teplin, 1984). Consequently, arrest may become the default option and only alternative in handling mental health calls in communities where a no-refusal, police friendly emergency evaluation facility is not available or is too difficult to obtain. Law enforcement officers are aware individuals will receive at least basic treatment in jails and that jails cannot say no. Therefore, officers often feel they have no choice but to complete a “mercy booking” in order to secure mental health treatment for individuals in need (Engel & Silver, 2001; Lamb et al., 2002; Markowitz, 2006; Shapiro et al., 2014; Watson et al., 2008). According to Lamb & Weinberger (1998), “if social control through the mental health system is impeded because of constraints such as fewer long-term state hospital beds, community pressure will result in placement of some of these persons in the criminal justice system” (p.485). As such, criminalization of the mentally ill may first be impacted by availability and receptivity of local mental health resources, as well as ease of treatment linkages, as higher rates of arrest may be expected in areas with fewer or more inaccessible mental health resources (Watson et al., 2008).

**Homelessness.** Homelessness may also be a contributory factor to incarceration and criminalization of the mentally ill (Engel & Silver, 2001). Previous studies indicate approximately one-third of homeless individuals meet criteria for a major mental illness (Markowitz, 2006). Homelessness, often associated with mental illness, has been shown to increase the risk of arrest (Engel & Silver, 2001). Moreover, Ditton (1999) found that mentally ill offenders were more likely than other inmates to have been homeless at the time of their arrest. As a result of the combination of a lack of community treatment



resources, personal financial resources, and social support, mentally ill individuals who are homeless are likely to be at increased risk of police encounters and arrest for nuisance offenses, including intoxication or disorderly conduct, as well as for more serious crimes (Markowitz, 2006; Shenson et al., 1990; Teplin & Pruett, 1992). Additionally, many urban areas have recently adopted a more aggressive approach to maintain community order, including less visibility of homelessness and panhandling, which likely includes higher arrest rates and overrepresentation of the mentally ill in jails and prisons.

**Mentally ill viewed as erratic, bizarre, or dangerous.** Additionally, deinstitutionalization is hypothesized to have resulted in an increase in publicly troublesome behavior, as a result of mental illness, subsequently creating a burden for the criminal justice system (Markowitz, 2006). As a result, the mentally ill become a more visible presence in the community, appearing odd and not fitting into the “norm,” resulting in calls to law enforcement (Teplin, 1984). The lack of necessary mental health treatment results in an individual with mental illness engaging in unusual behavior, substance use, or petty criminal behavior that likely brings them to the attention of law enforcement officers, who transfer this population into jails and prisons (Draine et al., 2007; Mulvey & Schubert, 2017; Shenson et al., 1990). Additionally, the behavior of individuals with SMI can sometimes appear bizarre or erratic (i.e., responding to internal stimuli, exhibiting paranoia), leading officers to incorrectly interpret their actions as dangerous and aggressive (Browning et al., 2011; Teplin, 1984). This bizarre or disturbing behavior, which previously would have been treated medically in state psychiatric hospitals, is now at an increased risk of being treated as criminal behavior

(Charette, Crocker, & Billette, 2014; Markowitz, 2006; Teplin, 1984), as the perception remains that people with serious mental illness are more dangerous to the public and to officers than the general population (Ruiz & Miller, 2004). For example, a commonly cited example in past literature includes an individual experiencing a psychotic episode, where they may misperceive the actions of others, increasing the risk of violence and aggression to themselves and others (Huxter, 2012; Markowitz, 2006; Watson et al., 2010). Teplin (1986) found those individuals exhibiting signs of mental illness were more than 67 percent more likely to be arrested than those who were not apparently mentally ill. The misperception of the behavior of individuals with mental illness might also make them more vulnerable to injury during interactions with law enforcement (Kerr et al., 2010).

**Substance use.** Following deinstitutionalization, some critics argue the lack of treatment resources left many patients on the streets without sufficient social supports and financial means to meet their treatment needs (Ormston, 2010). As a result, many self-medicated with street drugs, which were more financially accessible than psychotropic medications (Ormston, 2010). Individuals with serious mental illness often have co-occurring substance use disorders, increasing their likelihood of arrest for low-level drug offenses, or they may associate with individuals who are more likely to engage in criminal activity (Engel & Silver, 2001). This, combined with the increase in prosecution for drug crimes during the war on drugs, often brought individuals with mental illness into contact with police and the criminal justice system (Ormston, 2010). Studies have shown over half of jail and prison inmates have a substance use disorder (Mulvey & Schubert, 2017). Moreover, as mentioned previously, those with mental illness are often

perceived to be aggressive by officers (Teplin, 1984). Mental illness, coupled with substance abuse increased the likelihood of injury to both law enforcement officers and mentally ill individuals during interactions, though mental illness alone was not predictive of violence (Morabito & Socia, 2015). This suggests it is not mental illness that may lead some law enforcement interactions with the mentally ill to become injurious due to use of force, but substance use. However, due to the increased risk of force and injury during these interactions, they are likely to result in higher arrest rates.

### **Summary on Criminalization of the Mentally Ill**

In sum, though deinstitutionalization may have been the first action affecting increased contact of the mentally ill with the criminal justice system, it is likely other factors (i.e., inadequate community care and lack of treatment resources, more stringent civil commitment criteria, homelessness, substance use) collectively contribute to the criminalization of the mentally ill (Engel & Silver, 2001; Laberge & Morin, 1995; Lamb & Weinberger, 1998; Mulvey & Schubert, 2017; Shapiro et al., 2014). Due to these factors, many have argued mental illness has become “criminalized,” as mentally ill suspects are more likely to be arrested than those suspects without a mental illness (Banks et al., 2009; Markowitz, 2006). Evidence of this concept is supported in research by Teplin (1984), which found mentally ill suspects are about 20% more likely to be arrested than their counterparts. However, it is important to note there are contradictory findings as well. A study by Engel and Silver (2001) utilizing a study of police-citizen encounters in twenty-four police departments found police are not more likely to arrest mentally ill subjects. Instead, the authors concluded other factors, such as the influence of drugs, noncompliance, fighting with officers or others, and seriousness of the offense at

hand, predict the likelihood of arrest rather than mental illness alone (Engel & Silver, 2001). As such, the overrepresentation of mentally ill individuals within the criminal justice system may likely be due to more arrest-generating behaviors within this population (Markowitz, 2006).

### **Law Enforcement as Mental Health First Responders**

It is important to remember the criminalization of the mentally ill is not the goal of law enforcement. Law enforcement officers do not usually initiate interactions with the mentally ill, but are instead called upon to intervene in situations by an individual who reports the incident (Lalonde & Morin, 1995). However, law enforcement generally has a large amount of discretion when responding to mental health calls and determining the disposition for an individual in a mental health crisis (Lamb et al., 2002). When responding, law enforcement officers are often faced with three options in decision-making when responding to a crisis call. They can choose to handle the situation formally through either arrest or involuntarily hospitalization, or they can choose to resolve the situation informally at the scene through the use of de-escalation techniques or recommendations for resources (Oliva & Compton, 2008; Teplin, 1984; Watson et al., 2014). In Florida, state law under the Baker Acts allows law enforcement to take individuals with a mental illness, who due to his or her mental illness pose a danger to themselves or others, or will likely suffer from neglect or refuse to care for themselves if not treated, into custody for the purposes of treatment (FLA. STAT. §§394.463 (2018)). (For more information regarding the Florida Statute 394.463, Baker Act criteria, please see Appendix A.)

Disposition decisions by law enforcement often need to be made in a time-sensitive fashion with limited information available to the officers (Dempsey, 2016; Laberge & Morin, 1995; Watson et al., 2008; Watson et al., 2014). Generally, law enforcement tends to favor informal resolution to service calls, rather than arrest or involuntary commitment (Teplin & Pruett, 1992). However, since treatment options for individuals with mental illness are difficult to find, situations involving mental illness often are resolved with an arrest for a generally nonviolent criminal offense, causing many people to unnecessarily enter the criminal justice system (Oliva & Compton, 2008).

Previous literature indicates that the decision to involuntarily hospitalize an individual is made difficult due to admission criteria set by the emergency evaluation facility or hospital, as well as the prolonged amount of time it takes officers to resolve calls using this disposition (Browning et al., 2011; Dempsey, 2016; Laberge & Morin, 1995; Lamb et al., 2002; Teplin, 1984). Stringent admission criteria may include the facility refusing to take individuals who are violent or considered dangerous, or those individuals with substance abuse disorders or who are intoxicated at the time (Browning et al., 2010; Engel & Silver, 2001; Teplin, 1984). It is important to note, however, that individuals with SMI often have co-morbid substance use disorders due to attempts to self-medicate, further complicating the dispositional options of the officer at the scene. Officers also become frustrated with complicated admission procedures and mental health professionals questioning their judgment when individuals are no longer in the state of crisis they were on scene (Laberge & Morin, 1995; Lamb et al., 2002; Steadman et al., 2001). Additionally, in locales with limited treatment resources, law enforcement officers may sometimes travel far distances just to wait hours to get a person admitted for

mental health treatment only to find he was quickly released, as the few available hospital beds were given to someone deemed to be in greater need for treatment (Dempsey, 2016; Laberge & Morin, 1995; Lamb et al., 2002; Ormston, 2010; Steadman et al., 2001). Wood et al. (2017) found officers had regular encounters with individuals known to them to have mental illness, which is an additional frustration regarding the effectiveness of mental health treatment for these individuals, especially when considering the barriers faced while attempting to get them treatment. As a result, these factors may lead law enforcement officers to choose disposition options that are less constraining, require less time, are more familiar and for which they have more control, and do not require devaluating their judgment and competence, such as arrest (Laberge & Morin, 1995). Officers also know that even when arrested, these individuals will be subjected to some type of mental health management while in jail (Laberge & Morin, 1995).

Although some disposition decisions may be constrained by treatment resources, increasing the likelihood of arrest, other factors are likely to influence the decision to transport an individual to mental health treatment. Research by Ritter, Teller, Marcussen, Munetz, & Teasdale (2011) found dispatch codes for calls as well as officer on-scene assessments were associated with disposition decisions of law enforcement officers. The authors found calls dispatched as suspected suicides were more likely to result in transportation for emergency mental health evaluation than other dispatch calls. Additionally, the authors investigated factors contributing to officer on-scene disposition decisions, finding that suspicion of alcohol, drugs, or not taking prescribed medication increased transportation to treatment (OR= 1.84, 1.74, and 1.871). They additionally

discovered that violence to self (OR= 14.99), violence to others (OR= 3.35), psychotic symptoms (OR= 1.36), and physical health symptoms (OR= 2.12) increased the odds of transport for mental health treatment as well (Ritter et al., 2011). As such, officer assessments of the individual while on scene, as well as dispatcher classification of calls, affect the likelihood of the officer transporting the individual to treatment.

### **Deficiency in Continued Mental Health Training for Law Enforcement Officers**

In order to improve the interactions between law enforcement and the mentally ill, and to help officers to better assist in crisis situations, standards for mental health training have been developed in nearly all states (Plotkin & Peckerman, 2017). Training should meet the following goals: enhance the safety of all individuals involved, use resources more effectively, divert people to treatment when appropriate, build and restore trust in law enforcement, and encourage officers to treat individuals in crisis with compassion (Plotkin & Peckerman, 2017). However, research reveals the average number of training hours spent on mental health, crisis intervention, and de-escalation techniques is just over 14 hours per agency (Plotkin & Peckerman, 2017).

A study by Hails and Borum (2003), in a survey of 70 agencies, found the average number of hours of recruit training devoted to responding to calls involving individuals with mental illness was nine hours, ranging from 0 to 41 hours. Only 42 agencies provided data on continued in-service training regarding responding to mental health calls, resulting in a median of one hour of training, although more than a third of agencies did not provide any post-academy training on this topic (Hails & Borum, 2003). Though nearly all law enforcement academies offer mental health training as part of entry-level training, far fewer states have standards requiring in-service or specialized training on

encounters involving people with mental illness and de-escalation (Plotkin & Peckerman, 2017; Vermette, Pinals, & Appelbaum, 2005). However, in a study by Vermette and colleagues (2005), over 90% of officers surveyed reported the topic of mental illness was fairly important or very important to their work. A study by Plotkin & Peckerman (2017) found that 21 of 42 states responding to a survey required in-service or specialized training regarding mental health, with standards in those states requiring 2 to 24 hours of training. Additionally, 11 of the 42 states responding certify or provide officers with a 40-hour CIT training course or some modification (Plotkin & Peckerman, 2017).

A recent possible Florida Statute, 943.17161, F.S., was brought to the attention of the Senate, requiring the Department of Law Enforcement to establish continued employment training for officers relating to mental illness, with the goal of this statute to begin October 1, 2018. The statute described the training should include, but not be limited to, recognition of symptoms characteristic of individuals with mental illness and appropriate responses to individuals exhibiting such mental health symptomatology (<http://www.flsenate.gov/Session/Bill/2018/1440>). However, this statute died in appropriations and was withdrawn from consideration, further highlighting the disparity in mental health training provided to law enforcement officers.

### **Diversion and Specialized Responses**

In recent years, as an attempt to provide more humane and cost-effective mental health care, diversion programs have been adopted in some jurisdictions in order to help those with mental illness who come into contact with the criminal justice system be diverted to treatment programs or mental health courts (Peternelj-Taylor, 2008). These



de-carceration trends have placed the focus on diverting individuals with mental illness into treatment, rather than placing them in jails or prison (Kubiak et al., 2017). Additionally, it has been proposed the most effective way to divert individuals from the criminal justice system is to divert them at the front end, before jail entry (Mulvey & Schubert, 2017). Researchers have stressed the need for these diversion programs to be an active collaboration by individuals in both the criminal justice and mental health systems (Mulvey & Schubert, 2017).

In response to concerns regarding criminalization and media reports of tragic fatal shooting encounters between law enforcement and those with mental illness, police diversion programs are now being implemented to reduce the number of arrests and jail admissions, and to improve interactions between law enforcement and the mentally ill. Advocates argue police could respond more safely and efficiently, and could better facilitate necessary access to mental health services, if they were informed about mental illness and response strategies to mental health calls for service (Teller, Munetz, Gil, & Ritter, 2006) and felt confident local mental health resources were available for them (Steadman et al., 2001). The goals of police diversion programs are to divert individuals away from jail and toward necessary mental health treatment (Draine et al., 2007) by increasing the capability of law enforcement officers to recognize and divert mentally ill individuals (Mulvey & Schubert, 2017). Currently, diversion programs can be classified into pre-booking and post-booking diversion (Draine et al., 2007). Pre-booking diversion programs place an emphasis on police-based strategies to avoid arrest of an individual with mental illness. On the other hand, post-booking diversion programs attempt to identify individuals with mental illness after arrest and during the court proceedings

process, with mental health courts and mental health treatment occurring during probation and parole (Draine et al., 2007).

Three primary types of specialized police responses to mental health calls have surfaced in recent years: mental health-based specialized responses, police-based specialized mental health responses, and police-based specialized police responses (Browning et al., 2011; Mulvey & Schubert, 2017). In all three models, the primary goals include recognizing calls involving a mental health crisis, de-escalating the situation, reducing confrontations and violence, and promoting contact with mental health treatment (Mulvey & Schubert, 2017). In mental health-based specialized responses, calls that are suspected of involving an individual with serious mental illness are diverted from police to a mental health crisis facility or treatment center, which then employs a mobile response unit (Browning et al., 2011; Mulvey & Schubert, 2017). These mobile mental health teams work independently but collaboratively with law enforcement (Wood et al., 2017). The police-based specialized mental health response utilizes mental health professionals who are employed by the law enforcement agency to respond to mental health calls, providing consultation to the officers (Browning et al., 2011; Mulvey & Schubert, 2017). Lastly, the police-based specialized police response utilizes law enforcement officers with specific training in mental health to handle mental health calls for service and to provide appropriate treatment options and referrals as necessary (Browning et al., 2011; Mulvey & Schubert, 2017). Currently, the most prominent example of both a pre-booking diversion program and a police-based specialized response is the Crisis Intervention Team (CIT) model, which focuses heavily on officer

training regarding mental illness and partnerships with necessary community resources (Compton, Bahora, Watson, & Oliva, 2008).

### **Crisis Intervention Team (CIT) Training**

The Crisis Intervention Team (CIT) is the most widely known and used police-based specialized response, operating in over 2,600 communities throughout 46 states (<http://cit.memphis.edu/>). CIT training was developed in Memphis, Tennessee in 1988 by the Memphis Police Department following the police shooting of a man with mental illness during response to a call for service, who later died of his injuries (Cochran, Deane, & Borum, 2000; Mulvey & Schubert, 2017; Vickers, 2000). This individual, who had a diagnosis of schizophrenia and was suicidal, was known by many officers in the department to have mental health problems; however, the officers who responded at the scene were unfamiliar with the individual and his illness (Browning et al., 2011; Vickers, 2000). When the man became upset when confronted by officers, who demanded he drop his weapon, he made a sudden move toward the officers, resulting in the officers fatally shooting the individual as they had been trained to do in such situations (Browning et al., 2011; Vickers, 2000). As a result, CIT was developed to enhance the use of criminal justice and mental health partnerships (Mulvey & Schubert, 2017). The training seeks to provide officers with the necessary skills and knowledge to effectively intervene in situations involving mental illness and to be able to de-escalate these situations as well as refer individuals to outside services in the community as needed (Kubiak et al., 2017; Mulvey & Schubert, 2017; Oliva, Morgan, & Compton, 2010; Vickers, 2000; Watson, 2010; Watson & Fulambarker, 2012). Specific program goals for CIT include: improving interactions between consumers and law enforcement officers by reducing violence and

use of force during encounters through the use of de-escalation and crisis intervention skills; decreasing the criminalization of the mentally ill by diverting individuals from being continuously re-entered into the criminal justice system; and providing better and more effective mental health services in the community, including increased referrals for treatment (Browning et al., 2011; Compton, Demir, Oliva, & Boyce, 2009; Vickers, 2000; Watson et al., 2008). CIT has since been adopted as a statewide initiative in states including Maine, Connecticut, Ohio, Georgia, Florida, Utah, Kentucky, Texas, and California, and is utilized around the world, including Australia, Canada, and the United Kingdom (Compton et al., 2008; Dempsey, 2016; Franz & Borum, 2011). The training is now considered a best practice approach to improving law enforcement response to those with mental illness (Franz & Borum, 2011; Wood et al., 2017).

**CIT training curriculum.** CIT was designed to be a 40-hour training course for interested officers who self-select to participate (Cochran et al., 2000; Compton et al., 2008; Watson et al., 2008; Wood & Watson, 2017). The original ‘Memphis model’, modeled after the original model implemented in Memphis, emphasizes partnerships between law enforcement, advocacy groups, and the mental health community. It also contains core operational elements of CIT training for officers, dispatch, and coordinators, as well as a mental health receiving facility to provide emergency services (DuPont, Cochran, & Pillsbury, 2007). The curriculum typically includes recognition of signs and symptoms of mental illness, pharmacological interventions and common side effects, crisis intervention skills, de-escalation skills, treatment modalities, civil

commitment law, as well as knowledge of the mental health resources that are available to consumers in the officer's local area (Cochran et al., 2000; DuPont et al., 2007).

Officers begin the training with didactic lectures provided by volunteers from the mental health community in order to help the law enforcement officers learn to recognize common signs and symptoms of mental illness, as well as how different psychiatric disorders are likely to be manifested in consumers of mental health services (DuPont et al., 2007). Topics covered during the training include: signs and symptoms of mental illness, medications and side effects, alcohol and drug assessment, co-occurring disorders, developmental disabilities, family/consumer perspective, suicide prevention, consumer rights and civil commitment, mental health diversity, equipment orientation, policies and procedures, personality disorders, post-traumatic stress disorders, legal aspects of officer liability, and available community resources (DuPont et al., 2007; Watson & Fulambarker, 2012).

Following didactic lectures, participants take part in role-play scenarios in order to practice de-escalation techniques, including active listening, displays of empathy, and rapport building (Browning et al., 2011; DuPont et al., 2007). These role-play scenarios are often complex, asking officers to apply the knowledge learned in the didactic trainings, as well as practice the applied clinical skills and gain comfort using the new skills. Lastly, a component of CIT training often applauded by officers is the opportunity to visit local mental health treatment and emergency evaluation receiving facilities (Browning et al., 2011; DuPont et al., 2007). During such a visit, officers are able to ask questions of the providers at the site and are exposed to the function and mission of the

facility. At this time, they are also able to interact with consumers who have received treatment, as well as their families, in order to learn the consumer perspective of police interactions with mental illness, as well as their perspective on the effectiveness of treatment.

Following completion of training, other than attending to their usual patrol duties, CIT officers provide a specialized response to calls dispatched as ‘mental disturbance’ crisis calls (Cochran et al., 2000). When dispatchers are notified a call for service may involve an individual with mental illness, this call is dispatched to a CIT officer, who then becomes the officer in charge regardless of rank (Cochran et al., 2000; Watson et al., 2008). This officer responds to the scene, assesses the situation to determine the complaint and risk involved, intervenes as necessary to ensure the safety of those on scene, and then determines the appropriate disposition for the call, including resolve the call on scene, transport to emergency mental health services, or arrest (Cochran et al., 2000; Watson et al., 2008).

**CIT core components.** In addition to training of officers, another core element of the CIT model is training of dispatchers, as these individuals are the first line of communication in emergency calls involving an individual with mental illness (Compton et al., 2010). It is crucial for dispatchers to appropriately identify when a call may involve mental illness or a mental health crisis in order to assign such a call to a mental health officer (Compton et al., 2009; Compton et al., 2011). This dispatcher training typically includes topics such as: recognition and assessment of a CIT crisis event, appropriate questions to ask of the caller, identification of the nearest CIT officer, and relevant policies and procedures (DuPont et al., 2007). However, in some jurisdictions, emergency

dispatch is a separate agency or department, leading some jurisdictions to have not fully implemented training of dispatch personnel (Watson & Fulambarker, 2012).

In addition to training of officers and dispatch, a crisis center with a no-refusal policy is a crucial core component of the successful 'Memphis' model (DuPont et al., 2007; Steadman, Deane, Borum, & Morrissey, 2000; Watson et al., 2008). This central drop-off site, available 24 hours a day, seven days a week, offers law enforcement a single point of entry into the mental health system (DuPont et al., 2007; Steadman et al., 2001). Additionally, this site should combine mental health and substance abuse services, which relieves the burden placed on the officer to distinguish whether the exhibited symptoms are due to substance abuse or mental illness, and removes any clinical barriers to care (DuPont et al., 2007; Steadman et al., 2001). The co-location of these services is particularly important due to the high rate of co-occurring substance use disorders in the mentally ill. Moreover, this centralized drop off location is meant to be a no-refusal site with a streamlined intake process for law enforcement. The streamlined intake process was implemented to address police concerns about time spent away from their duties and public safety responsibilities by minimizing officers' time spent at the center (DuPont et al., 2007; Steadman et al., 2001). The drop-off center should have an entrance separate from other admissions for law enforcement to expedite drop-offs, requiring less than 30 minutes of officers' time (DuPont et al., 2007; Steadman et al., 2001). Finally, regardless of the mental health criteria for involuntary commitment, the no-refusal emergency evaluation center will uniformly accept police referrals, which solves the problem of law enforcement being deterred from transporting a person to the crisis center due to concerns they will not be accepted (Steadman et al., 2001).

**Collaborative CIT framework.** CIT was brought to fruition through active collaboration by the Memphis Police Department, the National Alliance for the Mentally Ill, the University of Memphis, policy-makers, mental health consumers, and local community members (Cochran et al., 2000; Vickers, 2000). Currently, CIT is emphasized to be an active collaboration between local law enforcement, mental health services, and policy-makers, requiring commitment from numerous partners to insure full success in implementation (Watson et al., 2008; Wood & Watson, 2017; Wood et al., 2017). Without such collaboration, it is likely the true effectiveness and benefits of CIT would not be recognized. Teplin (1984) described no-refusal agreements with “police friendly” emergency evaluation facilities are vital for the establishment of a successful partnership between law enforcement and the mental health system, as it eliminates the problem of refusal for treatment. In fact, Steadman et al. (2001) has credited this no-refusal facility as a critical key component of the diversion program’s success. In a national survey of 174 police departments, Steadman et al. (1986) found officers who had access to an emergency evaluation drop-off center were more likely to describe their CIT programs as effective than those departments who did not have access to a center. In addition to a no-refusal emergency evaluation facility, Teller et al. (2006) suggested it is likely CIT program outcomes will differ depending on the local mental health resources available to law enforcement officers. For officers to use mental health resources efficiently, they must perceive the resources in their area as efficient and available (Watson et al., 2008; Wells & Schafer, 2006). These officer perceptions are likely shaped by personal opinions of the benefit of linking an individual in need to appropriate treatment, prior experience with these treatment resources, proximity of the treatment



facility, and the perceived effectiveness of treatment (Watson et al., 2008). Law enforcement officers who view treatment facilities as time consuming and difficult to work with would be less expected to link individuals in need to treatment than those officers who view them as efficient and collaborative (Watson et al., 2008; Wells & Schafer, 2006).

CIT training is typically provided by professional members of the local health community, with mental health consumers and their families also participating in order to assist the officers in gaining perspective when working with individuals with SMI (Browning et al., 2011; Compton et al., 2009; DuPont et al., 2007). Mental health care providers enjoy the positive opportunity to work with law enforcement officers, the involvement of patients and families opens lines of communication, and law enforcement has been receptive to the program since it was developed by their peers, fits their worldview, and is applicable to reduce injury in a range of situations (Mulvey & Schubert, 2017).

**Variation in CIT implementation.** Many jurisdictions have adopted the CIT model, however, with varying levels of commitment to the original ‘Memphis Model’ (Watson & Fulambarker, 2012; Watson et al., 2008). A number of system and policy level challenges can make the successful implementation of CIT difficult, including training of dispatch officers, ease of use of a psychiatric receiving facility, and adapting the CIT Memphis model to a rural setting (Compton et al., 2010).

Some variations in the CIT model are planned due to the needs of the jurisdiction, whereas other localities have restrictions that prevent the full model from being successfully implemented, such as more rural locations without a central drop-off facility

with a no-refusal policy (Watson & Fulambarker, 2012). Unfortunately, a single receiving facility with a no-refusal policy may be absent and may not be feasible in all localities implementing CIT training due to local policies, incomplete coordination with the mental health system, or a small-sized jurisdiction (Compton et al., 2010). While CIT still holds benefit by better equipping officers for interactions with the mentally ill, in localities without such a facility, this likely creates a great amount of frustration for CIT trained officers and limits the potential success of the training (Compton et al., 2010). CIT was designed in an urban setting and was initially launched in urban cities, making it challenging when attempting to implement the model in a more rural county (Compton et al., 2010). Furthermore, large-scale programs such as CIT can be difficult for organizations to fully adopt due to the changes necessary in nearly all areas of law enforcement operations, including training, dispatch, and partnerships with local resources (Watson et al., 2008). It is unclear how the programs differ across communities, and how these variations relate to the overall success of implementing the program and achieving its goals and objectives (Watson et al., 2008).

### **Previous Research Findings on the Effectiveness of CIT Training**

While some research has been conducted on the effectiveness of CIT training, current findings are limited, though the prevalence of this training continues to grow (Ellis, 2014; Oliva & Compton, 2008; Ritter, Teller, Munetz, & Bonfine, 2010). The existing literature indicates that CIT training provides practical and social implications by: increasing officer knowledge of mental illness; helping to decrease the criminalization of the mentally ill by reducing unnecessary arrests and increasing referrals for mental health treatment; providing greater confidence and feelings of

preparedness in handling crisis intervention situations; increasing officer empathy and compassion; reducing stigma toward mental illness among law enforcement officers; and minimizing injuries to both officers and mentally ill individuals by reducing the frequency of police use of force in interactions with this population (Browning et al., 2011; Compton et al., 2014b; Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006; Demir et al., 2009; Ellis, 2014; Hanafi et al., 2008). However, it is important to note studies have not yet been able to determine what specific aspects or components of the CIT program contributes to the individual positive outcomes of the training discussed below.

**Increased officer knowledge and positive attitudes of mental health.** Studies comparing officers' attitudes before and after CIT training have found that participants report increased knowledge regarding the mental health system and its resources following CIT training. Compton and colleagues (2006) compared 159 officers pre- and post-CIT training, finding that officers reported improved attitudes, more support for treatment programs, increased knowledge, and less social distancing toward those individuals with schizophrenia after completion of training. Additionally, the authors concluded CIT training is associated with improvements in attitudes toward mental illness (Compton et al., 2006).

Ellis (2014) similarly studied the effect of CIT training on twenty-five police officers' knowledge about mental illness, perception of mental illness, and attitude toward mentally ill individuals using a pre- and post-test format. The author found knowledge regarding mental illness improved following training ( $M=30.46$  vs.  $M= 37.02$ ,  $p < .05$  after Bonferroni correction), perception scores improved ( $M=15.33$  vs.  $M=18.79$ ,

$p < .05$  after Bonferroni correction), and attitudes toward those with mental illness became more favorable ( $M= 7.5$  vs.  $M= 9.33$ ,  $p < .05$  after Bonferroni correction).

Moreover, in surveys given to 26 newly trained CIT-officers from five law enforcement agencies in one county in Indiana, Wells & Schafer (2006) found CIT officers reported greater knowledge of mental illness, increased knowledge regarding disposition options, and greater knowledge of how to effectively communicate with individuals with mental illness. Similarly, in a study utilizing focus groups to interview 25 CIT-trained officers in Georgia, Hanafi et al. (2008) found participating officers reported CIT training increased their knowledge of mental illness. Specifically, the participants indicated increased ability to recognize and respond to individuals with mental illness.

**Divert individuals to treatment and reduce arrest.** A primary program goal of CIT is to help individuals with mental illness receive treatment, rather than punishment by means of arrest. Numerous studies provide support for CIT increasing referrals for individuals in need to psychiatric treatment (Skeem & Bibeau, 2008; Steadman et al., 2000), though findings on reduction of arrest rates are mixed (Teller et al., 2006; Watson, 2010; Watson et al., 2010). In terms of increasing referrals for treatment, Skeem & Bibeau (2008) found in a sample of 655 police reports involving CIT interactions, the most common disposition was hospitalization (74%), followed by on-site resolution (18%), arrest (4%), and treatment referral (4%). Steadman et al. (2000), in a comparison of models of police response to mental illness, found the Memphis CIT model had the most active procedures for linking individuals in need to treatment, with 75% of all mental disturbance calls resulting in a treatment disposition. Additionally, the authors

found only 2% of mental disturbance calls resulted in arrest in the CIT program in Memphis (Steadman et al., 2000).

Teller et al. (2006), in a study of law enforcement officers in Akron, Ohio, found an association between CIT and increases in number of mental health related calls identified by dispatch, increases in transport to the hospital for psychiatric evaluation by CIT trained officers, and increases in number of transports that are voluntary following implementation of the CIT program. However, the authors found CIT and non-CIT officers did not differ with regard to arrest rates of individuals with mental illness (Teller et al., 2006). Similarly, in a study of 216 CIT and non-CIT trained officers in Chicago, Watson (2010) found CIT officers directed a significantly greater percentage (18%) of individuals to mental health services than did non-CIT trained officers. However, the authors did not find CIT training had an impact on arrest decision (Watson, 2010). Finally, in a study of 112 officers from four Chicago Police districts, Watson et al. (2010) found CIT trained officers were more likely to direct individuals with mental illness toward mental health treatment as compared to their non-CIT trained peers. However, the authors did not find a reduced likelihood of arrest.

In studies specifically examining reduction in rates of arrest, the evidence for CIT effectiveness in this area is mixed. In a study reviewing 1,539 CIT calls from a large, urban county in Central Florida from 2001 to 2005, authors found a 3% arrest rate for individuals with mental illness following implementation of CIT (Franz & Borum, 2011). Similarly, research by Compton et al. (2014b) indicates CIT trained officers arrest mentally ill individuals less often than untrained officers (OR= .47,  $p = .007$ ). Vickers

(2000) also found that following implementation of CIT in Memphis, recidivism of offenders with mental illness was less than 15% on average.

**Increased officer feelings of preparedness and comfort.** Previous research has also indicated that officers' report increased confidence, comfort, and self-efficacy in their ability to respond appropriately to individuals with mental illness after completion of CIT training (Bahora, Hanafi, Chien, & Compton, 2008; Bonfine, Ritter, & Munetz, 2014; Borum, Deane, Steadman, & Morrissey, 1998; Hanafi et al., 2008; Ritter et al., 2010; Watson et al., 2010). In a study of 34 control officers, 58 officers given a survey just before CIT training, and 40 of these officers upon completion of the training, Bahora and colleagues (2008) found officers trained in CIT demonstrated enhanced self-efficacy for interacting with individuals with mental illness, as well as alcohol and cocaine dependence.

In a study of 57 CIT officers' experiences with mental illness and attitudes about CIT, Bonfine et al. (2014) found officers reported high levels of confidence in their ability to handle calls relating to mental illness, and also perceived their department as being effective and capable of handling such calls. The majority of CIT officers (93%) rated their own level of preparedness as either moderately or somewhat prepared, while the majority (89%) also rated non-CIT officers as either not at all or only somewhat prepared. A focus group study of 25 CIT-trained officers in Georgia also found officers reported an increased sense of confidence in their skill and ability to interact effectively with individuals with mental illness following CIT training (Hanafi et al., 2008). These officers reported feeling more capable of putting individuals with mental illness at ease, and a reduced sense of unpredictability of the crisis situation.

Borum and colleagues (1998) sampled 452 patrol officers from programs representing three different approaches to police response to mental illness, one program being the CIT program in Memphis. Officers from Memphis (N=207) were included in the study; 171 were non-CIT officers and 36 were CIT-officers. The authors found CIT officers were more likely to indicate feeling prepared to respond to situations involving persons with mental illness compared with their non-CIT peers (100% vs. 65.4%). These officers also were more likely to rate the mental health system as more helpful than non-CIT officers (69.4% vs. 40.3%). Interestingly, all officers from the Memphis program, even non-CIT officers, rated high confidence in their program to respond to the needs of individuals with a mental health crisis.

Ritter et al. (2010) compared survey responses regarding law enforcement officer perceptions of persons with mental illness, as well as perceptions of police and the preparedness of mental health systems in addressing the needs of the mentally ill, among 38 officers before and one year following completion of CIT training. Results indicated CIT training and experience in the field resulted in officers feeling substantially better prepared to respond to incidents involving mentally ill individuals, as well as greater feelings of their fellow officers' preparedness. The authors found that after CIT training and a year of experience as a CIT officer, 97% of respondents felt moderately prepared or better to respond to mental health calls as compared to only 26% prior to CIT training. Finally, Wells & Schafer (2006), in a study of 26 newly CIT-trained officers from five law enforcement agencies serving one county in Indiana, found CIT training improved officers' confidence in identifying and responding to those individuals with mental illness, as well as communicating with these patients and their family members.

**Reduced stigma and increased officer empathy.** Compton et al.

(2006) compared the attitudes of 159 officers before and after CIT training and found that officers demonstrated more realistic and less stigmatizing attitudes toward mental illness, specifically schizophrenia, after completing CIT training. This reduction in stigma was also mirrored in a study by Compton et al. (2008). Similarly, in a pre- and post-test comparison study by Bahora et al. (2008), mentioned earlier in this paper, authors found that CIT-trained officers reported reduced social distancing toward individuals with depression, schizophrenia, alcohol dependence, and cocaine dependence.

Demir et al. (2009), in a comparison of pre- and post-CIT training scores for 159 officers, found CIT-trained officers exhibited changes in beliefs about causes of schizophrenia, as they were more likely to endorse causes of schizophrenia consistent with modern biological etiological explanations of the disease after completion of CIT training (change in mean “total score” significant,  $z = 2.48$ ,  $p = .01$ ). In a study utilizing focus groups to interview 25 CIT-trained officers in Georgia, Hanafi and colleagues (2008) found officers reported CIT training helped them to identify stereotypes and stigma toward individuals with mental illness, and reduce behaviors based upon these incorrect stereotypes and stigmatizations during interactions with mentally ill individuals. These officers additionally provided more empathic statements toward individuals with mental illness and their caregivers, and reported increased patience in handling mental health crisis situations.

**Reduced use of force and improved safety.** The effect of CIT on the use of force during interactions with individuals with mental illness is unclear. To begin, Skeem and Bibeau (2008) found that use of force in CIT officers was positively correlated with



violence potential of the consumer in crisis, including their access to a weapon, use of substances, and verbal threats. Still, the authors found officers used force in only 15% of the 189 high-risk cases included in the study (Skeem & Bibeau, 2008). Similarly, in a study of Chicago's CIT program, Morabito et al. (2012) found CIT officers used less force as subject resistance increased than did those officers who were not CIT trained. A qualitative study by Hanafi et al. (2008) found officers reported application of their CIT skills reduced the risk of injury to both officers and those with mental illness. Moreover, Compton et al. (2011) surveyed 135 police officers, 48 who were CIT-trained and 87 who were non-CIT trained, on three scenario based vignettes depicting an escalating situation with a mentally ill individual. The authors found CIT-trained officers consistently endorsed lower perceived effectiveness of responding with physical force to all scenarios, identifying nonphysical actions as more effective when responding to the mentally ill (Compton et al., 2010).

While a goal of CIT training is to reduce the potential for violence during interactions between law enforcement and the mentally ill, it is important to note findings are mixed. Kerr et al. (2010), in a study of 865 incidents involving injuries sustained during officer encounters with mental illness in Chicago, found CIT training has no effect on injuries in police encounters with people with mental illness, concluding that these injuries may occur in situations where law enforcement has limited options. Compton et al. (2014b) found CIT officers may be just as likely to use force in an incident. Additionally, Compton et al. (2009) analyzed SWAT callouts in Atlanta, Georgia during 27 four-month intervals and found the implementation of CIT training was not associated with a significant decrease in SWAT callouts.

## **Limitations of CIT**

Although a wealth of research is supportive of the benefits of CIT training, and the training continues to grow nationwide, there are some limitations. To begin, the research conducted on CIT has been somewhat limited, especially in study design, likely due to the newness of the model and the difficulty establishing experimental or quasi-experimental studies regarding the topic (Watson, 2010; Watson & Fulambarker, 2012). Much of the research that has been conducted has been qualitative or descriptive, which is not surprising given the difficulty in accessing the population and data.

One general limitation of CIT training is that the model imposes changes on the culture of law enforcement, as well as the way officers interact with individuals with mental illness. Because of this, some officers may question the necessity of training, especially when those without law enforcement experience provide the training. Another general limitation of CIT is that the success of the program depends on the availability of local mental health services. As a result, the further these resources are geographically, the greater the challenges to the success of the program, a limitation that is of specific concern in rural areas.

Additionally, previous studies have not indicated the role of the mental health system in successful implementation of CIT in communities (Watson et al., 2008). As such, availability of services and other contextual factors have not been thoroughly examined (Watson et al., 2008). Specifically, little research has been completed on the dynamics of cooperation and referrals for treatment between law enforcement and mental health agencies, a factor considered a key measure of success by CIT program originators (Mulvey & Schubert, 2017). The existing research on this topic found that officer training

has historically received more emphasis in CIT trainings than partnerships with mental health agencies (Mulvey & Schubert, 2017; Watson et al., 2008). However, CIT training may only have a sustained effect when it is paired with organizational changes in how law enforcement and mental health agencies cooperate to provide readily available options for police referrals during calls for service involving mentally ill individuals (Mulvey & Schubert, 2017).

Additionally, very few replications of studies have been conducted, particularly in different localities with agencies of various sizes and resources. Many studies take place in larger cities with bigger law enforcement agencies, a more diverse wealth of community resources, and in localities with a no-refusal receiving facility within reasonable distance. Few studies have been conducted in more rural localities where agencies tend to be smaller, employ fewer officers, and where mental health resources and funding are sparse. Still, the existing evidence discussed above indicates the program appears to be effective in linking consumers in need with psychiatric services, improving officer knowledge and attitudes toward mental illness, and increasing officer comfort and preparedness in responding to mental health calls (Compton et al., 2006; Watson & Fulambarker, 2012). However, little evidence exists suggesting CIT has reduced arrests of individuals with mental illness (Watson et al., 2008). As such, CIT training is currently considered a best practice for law enforcement, though more evidence is needed to recognize CIT training as an evidence-based practice (Watson & Fulambarker, 2012).

### **Theoretical Orientation of CIT Training**

Because CIT training was developed by law enforcement officers, it is not linked to any particular theoretical model. However, one could speculate that continued

exposure to individuals with mental illness associated with CIT training might play a role in the benefits found regarding the training model. As such, while previous research has found increased knowledge may be a primary factor in the benefits of CIT training, this researcher also hypothesizes that the increased exposure to the mentally ill and de-sensitization to the fears association with mental illness may contribute to increased feelings of officer comfort and preparedness, as well as positive perceptions toward mental illness and mental health treatment. By changing the thoughts, or perceptions of law enforcement officers regarding mental illness, CIT training is likely also affecting their behaviors, as officers are able to more readily identify mental illness, build rapport with individuals, and refer them for necessary treatment. In sum, this researcher devised this study and the proposed hypotheses regarding CIT training and the resulting effect on officer perceptions from the basis of a cognitive behavioral framework.

### **Rationale and Proposed Contribution**

The overall purpose of the present study is to contribute to the limited research that exists on the effectiveness of Crisis Intervention Team (CIT) training in law enforcement, as well as the role of the mental health system in the successful implementation of CIT programs. The study will examine whether any group differences exist between CIT and non-CIT trained officers with respect to their perceptions toward mental illness, effectiveness of mental health treatment, availability and accessibility of local mental health resources, as well as officer comfort and preparedness when responding to mental health calls. While existing research has provided preliminary support for the benefits of CIT training including reducing use of force, diverting

individuals in need to treatment, and increasing officer knowledge of mental health, studies have primarily focused on simulated exercises or retrospective accounts of the experiences by law enforcement officers. However, no previous research has utilized real-time in vivo survey methodology to assess officers' responses during the service call.

Additionally, few studies have examined how the availability of local mental health resources may impact the effectiveness of CIT training implementation, as well as officer perceptions of mental health treatment in their area. Specifically, the majority of previous research focuses on the quality of the training provided to law enforcement officers as the primary mechanism responsible for change in treatment outcomes for those individuals with whom law enforcement officers interact. However, it is possible that available community resources and the ability to link individuals with appropriate treatment options may mediate the positive outcomes of CIT training. Conversely, the lack of participation from local mental health agencies and absence of an emergency evaluation facility may be primary factors contributing to the arrests of those with mental illness (Compton et al., 2010; Watson et al., 2008). As suggested by Engel and Silver (2001), the availability and accessibility of mental health services in the local area may play a large role in how officers handle encounters with the mentally ill. However, most prior studies have evaluated this relationship in larger localities and cities, with larger law enforcement agencies, more diverse community resources and funding, and a no-refusal facility within reasonable distance. It is unclear whether the benefits of CIT training exist among smaller, more rural law enforcement agencies where community mental health resources are generally more limited, especially crisis and emergency evaluation facilities (Compton et al., 2010; Lord et al., 2011). Therefore, the role of available and accessible

local mental health resources, including a no-refusal emergency evaluation facility, on officer perceptions of mental illness and mental health treatment will be evaluated.

This study seeks to fill this gap in research by examining the effectiveness of CIT training in a more rural locality where law enforcement agencies tend to be smaller, employ fewer officers, and where mental health resources and funding are scarce. In addition, this study attempts to overcome some of the methodological limitations of previous research by increasing the sample size, surveying law enforcement officers in real-time immediately after responding to a call involving a mentally ill individual rather than a simulated experience or vignette, and including agencies of various sizes. The receiving facility that will serve as a data collection location serves law enforcement from at least three different counties, with many officers driving upwards of one hour to reach the facility from their community. Data collection will also be aided by the Alachua County Sheriff's Office, which is located in northern Florida and services a large college town population in addition to very rural locales characterized by small towns and farmland. Finally, no previous research has explored how the availability of "police friendly" emergency evaluation receiving facilities in the local community may impact officer perceptions toward mental health calls for service, and the effectiveness of such treatment.

While CIT training continues to grow and is now in place in over 2,600 programs nationwide, further research on the effectiveness of the training will likely allow for its continued growth, as program training is provided solely by donations (Ellis, 2014; Oliva & Compton, 2008; Ritter et al., 2010). Although it is important for mental health training

to be provided to as many law enforcement officers as possible, due to the increased frequency of law enforcement contact with the mentally ill, this effort may be futile if the necessary community resources are not available to those community residents for whom the training is intended. CIT training is a time consuming commitment for both those offering the training and the officers attending. By illuminating any possible shortcomings that may be impacting the efficacy of mental health training, we can better attempt to rectify any existing hurdles in order to provide a greater impact in the local community.

### **Study Objectives and Hypotheses**

The goals and objectives of the present study aim to: examine perceptions of law enforcement officers regarding mental health treatment; explore the impact of agency importance placed on mental health training on officer perceptions of mental health training; examine how community resources and availability impact views toward mental health treatment and training in law enforcement officers; and inspect group differences between those officers who have completed CIT training and those who have not on perceptions, comfort, and preparedness in dealing with the mentally ill. Additionally, characteristics of those individuals who are Baker Acted by law enforcement officers, rather than arrested or handled informally, will be examined in order to better identify the “typical” individual viewed by law enforcement officers to be mentally ill who fulfill the dangerousness criteria for emergency evaluation (i.e., mood disorders, psychotic symptoms, substance use, presence of a weapon, resistance, suicidal, etc.).

For the purposes of this study and based on Teplin (1984), mental illness is defined as exhibiting at least one symptom of a severe mental illness when that symptom

cannot be attributed to the current social setting or situation. While the researcher is cognizant that law enforcement officers may not have the advanced knowledge to diagnose an individual's mental health disorder, and as such, may lack diagnostic precision, law enforcement officers must often make on the spot assessments and judgments of individuals based on readily observable characteristics and behaviors (Engel & Silver, 2001). Therefore, we will assess the signs and symptoms that contribute to the officer identifying an individual as mentally ill, as well as the general category that captures the individual's mental illness.

In the present study, it is expected that CIT trained officers will differ significantly from their non-CIT trained peers in level of comfort in responding to mental health calls for service, level of preparedness, and positive perceptions toward treatment of mental illness. It is additionally proposed that officers who report their agency promotes and places importance upon training for mental health calls for service (i.e., agency offers regular training in mental health for officers, agency has dispatch officers trained in responding to mental health calls, agency offers CIT training to all officers) will view mental health training as more beneficial. Lastly, it is posited that officers from agencies with an emergency evaluation facility within their service area and high perceived levels of community resources would also view mental health training, including CIT training, to be more beneficial, and would hold more positive views toward mental health treatment.

The following study objectives and hypotheses are proposed:



Objective 1: To examine group differences between CIT and non-CIT trained officers with respect to level of comfort in responding to mental health calls, levels of preparedness, and positive attitudes toward treatment of mental illness.

*Hypothesis 1.1:* It is hypothesized that CIT-officers will report greater comfort in responding to mental health calls than non-CIT trained officers.

*Hypothesis 1.2:* CIT-officers will report higher levels of preparedness than non-CIT trained officers.

*Hypothesis 1.3:* CIT-officers will hold more positive attitudes toward treatment of mental illness than non-CIT trained officers.

Objective 2: To explore the impact of perceived agency importance of CIT and mental health training on officer perceptions of the benefits of mental health training.

*Hypothesis 2:* It is hypothesized that officers who report their agency promotes and prioritizes mental health training (e.g., agency offers training in mental health for officers, agency has large numbers of CIT trained officers) will view mental health training as more beneficial.

Objective 3: To explore the role of a local emergency evaluation facility and perceived levels of community mental health resource availability on officer perceptions regarding the benefits of mental health treatment.

*Hypothesis 3.1:* Officers from agencies with an emergency evaluation facility closer to their patrol zone will report more positive attitudes regarding the benefits of mental health treatment than officers who have to travel greater distance to the closest emergency evaluation facility.

*Hypothesis 3.2:* Officers who perceive their community as having available and effective mental health resources will hold more positive attitudes toward mental health treatment.

## **Method**

### **Participants**

Participants of this study consisted of 64 law enforcement officers completing Baker Acts as part of their patrol duties who were recruited and volunteered to participate in this study. Inclusion criteria in this study included current employment as a law enforcement officer and completion of an involuntary transfer for emergency mental health services due to mental illness. Exclusion criteria included any individual under the age of 18, as well as officers who had participated in the study previously. The participating law enforcement officers surveyed originated from six different agencies, including sheriff's deputies from the Alachua County Sheriff's office and one sheriff's department in central Florida, as well as local city and municipal police officers from four different departments located in central Florida. Demographic information for each of the participants was obtained during survey completion and included officer gender, age range, race/ethnicity, educational achievement, years of experience as a law enforcement officer, current rank, and current agency at which they are employed. Additionally, participants were asked if either they or a close loved one have ever had personal experience with mental illness or treatment for a mental illness.

### **Measures**

A survey developed by the researcher for the purpose of the present study was the primary instrument used, available in both a paper version and an on-line Qualtrics

version. The survey consisted of 39 questions, although based on the respondent's answers and experience some questions may be skipped if they do not apply to the participant (i.e., questions about CIT training experience for those officers who have not completed CIT training). Survey content included the following items: (a) previous mental health and CIT training completed by the officer, as well as number of training hours received in the past year (6 questions); (b) frequency of contact with the mentally ill and time spent responding to mental health calls for service (5 questions); (c) officer perceptions of the relevance and benefit of mental health training for their career (3 questions); (d) officer perception of agency support for mental health training (1 question); (e) officer perceptions of mental health resources available in the local area and perceived collaboration between these resources and law enforcement (3 questions); (f) officer level of preparedness in responding to mental health calls (4 questions); (g) officer comfort in responding to mental health calls (2 questions); (h) officer opinions and attitudes toward mental illness and mental health treatment (3 questions); (i) officer perceptions of limitations in responding to mental health calls (1 question); (j) demographic information regarding consumer of services, including age, gender, as well as mental illness signs and symptoms displayed at the scene (1 question); (k) characteristics about the call for service received, including situational and suspect variables, as well as dispatch category for the call (2 questions); and (l) officer demographic information (8 questions). Items were evaluated in categories, and individual items were also evaluated qualitatively for greater descriptive value. Completion of the survey was estimated to take approximately five to ten minutes. This survey can be found in Appendix B.

Data from the law enforcement agencies that utilized the emergency evaluation facility, in addition to the Alachua County Sheriff's Office, was also obtained with the hopes of identifying mental health training opportunities within each specific agency, as well as community mental health resources available to each agency. A Qualtrics on-line survey comprised of seven questions was the instrument used. Surveys were sent to each agency that employed at least one officer who completed the officer survey. Core components of this survey included: (a) provision of continued mental health training and percentage of CIT officers present in the agency (3 questions), and (b) availability and ease of use of local community mental health resources (3 questions). Items will be evaluated in categories, and individual items will also be evaluated qualitatively for greater descriptive value. Completion of the survey was estimated to take approximately five minutes. This survey can be found in Appendix C. However, due to a poor response rate from the agencies surveyed, as well as largely incomplete surveys obtained from those agencies that did participate, the agency survey was unable to be utilized in data analysis.

#### **Dependent variables.**

The primary outcomes in the current study included:

a. Officer comfort in responding to mental health calls: This component was evaluated by two questions on the survey, both scored on a four-point Likert scale. Questions assessed general officer comfort in interacting with individuals with mental illness (-2=strongly disagree to 2=strongly agree), and officer assessment of comfort in responding to the current mental health call for service (-2=very uncomfortable to 2=very

comfortable). Scores from these two items was summed into a cumulative score for officer comfort, which was used for data analysis. Cumulative scores can range from -4 to 4, with higher scores representing higher levels of officer comfort in responding to mental health calls.

b. Officer preparedness in responding to mental health calls: Officer preparedness was assessed by four questions on the survey, scored on a four-point Likert scale (-2=strongly disagree to 2=strongly agree). Questions evaluated whether officers feel they have received sufficient training on responding to mental health calls, if their agency has clear policies and procedures in place for calls involving mental illness, officer knowledge regarding identification of various presentations of mental illness, and overall preparedness in responding to calls involving individuals with mental illness. A cumulative score for officer preparedness was devised by summing the scores from these four items, and was used for data analysis. Cumulative scores can range from -8 to 8, with higher scores representing greater officer preparedness in responding to mental health calls.

c. Officer perceptions of mental health training: This component was evaluated via three questions on the survey, scored on a four-point Likert scale (-2=strongly disagree to 2=strongly agree). Questions assessed officer perception of relevance of mental health training for their careers in law enforcement, whether mental health training positively impacts officer response to mental health calls, and if mental health training should be required of all officers. A cumulative score for officer perception of mental health training was devised by summing the scores from these three items, and was used for data analysis. Cumulative scores can range from -6 to 6, with higher scores

representing more positive officer perceptions toward the benefits of mental health training.

d. Officer perceptions of mental illness and mental health treatment: Officer perceptions of mental illness and mental health treatment were measured by three questions scored on a four-point Likert scale (-2=strongly disagree to 2=strongly agree). Questions assessed whether officers feel mental health treatment is generally beneficial, if the mental health system works effectively, and whether officers believe law enforcement officers play an important role in linking individuals to mental health treatment. Scores from the three items was summed into a cumulative score for officer perception of mental illness and mental health treatment, which was used for data analysis. Cumulative scores can range from -6 to 6, with higher scores representing more positive officer perceptions of mental illness and mental health treatment.

#### **Independent variables.**

Officer CIT training was the primary independent variable of interest in this study. For the purposes of this study, a CIT-trained officer is defined as any officer who has completed at least the 40-hour CIT training in mental health. This component was assessed by one question on the survey asking if the officer is CIT-trained and will be scored as yes/no. This variable will be coded as 0 for “Non CIT-Officer” and 1 for “CIT Officer.” Questions regarding the characteristics of these CIT officers (i.e., timeframe of CIT training, self-selection to become a CIT officer, benefit of CIT training) were also evaluated for descriptive purposes.

Other independent variables in the study included whether the officers completed any additional post-academy training in mental health (excluding CIT training), hours of

mental health training in the past year, officer perception of the helpfulness of local resources (i.e., availability, support), distance to the closest emergency evaluation facility and time spent completing mental health calls for service, agency support for mental health training of officers (i.e., whether the agency supports and promotes mental health training), frequency of contact with the mentally ill, limitations in responding to mental health calls, as well as situational (i.e., violence toward others, erratic behavior, suicidal behaviors/threats, etc.) and personal characteristics of the subject relating to the current mental health call for service (i.e., age and gender of subject, mental illness symptoms displayed). Officer demographic characteristics including gender, age, race, education, years of experience, rank, agency where employed, and familiarity with mental illness were also included.

Data provided by the law enforcement agencies that employed at least one officer who completed the survey was also obtained in order to categorize each agency as “high” or “low” based on availability of local resources and available mental health training. Specifically, agencies were asked to provide the number of mental health training hours directly provided to officers per year, the number of patrol officers in their agency, and the number of patrol officers who are CIT trained in order to assess the available mental health/CIT training at the agency. Agencies were to be classified as “high” on training if at least two hours of continued training are offered per year and if at least 20% of patrol officers are CIT trained. Agencies who do not meet these criteria were to be classified as “low” regarding mental health training. Agencies were also asked about the emergency evaluation facility used, including how far away the facility is from their service area (in miles), whether the facility is a no-refusal facility (yes/no), the name of the facility, and

whether the agency believes there are sufficient community mental health resources available to their officers when completing mental health calls (scored on a four-point Likert scale; -2=strongly disagree to 2= strongly agree). Agencies were to be classified as “high” regarding local community resources if they have access to an emergency evaluation facility within 30 miles, that is considered a no-refusal facility, and if the agency responds “somewhat agree” or “strongly agree” regarding sufficient community mental health resources available to officers during their duties. Agencies who do not meet these criteria were to be classified as “low” regarding availability of local resources.

### **Procedure**

This study was initiated after receiving the approval of the Institutional Review Board at Florida Institute of Technology and the Doctoral Research Project committee (IRB Number 19-111). Pre-authorization to conduct this study was obtained by the Executive Vice President of Lifestream Behavioral Centers and Alachua County Sheriff, Sadie Darnell.

Data collection took place in two locations in the present study: The intake department of Lifestream Behavioral Centers, Inc., an inpatient psychiatric hospital in Leesburg, Florida, and was also distributed via email to all officers employed by the Alachua County Sheriff’s Office located in Alachua County, Florida. Alachua County Sheriff’s deputies were asked to complete the online Qualtrics version of the survey as soon as possible following completion of a Baker Act and transfer of the individual to the local receiving facility. This survey information was then submitted and stored in Qualtrics online. At Lifestream Behavioral Centers, Inc., the officer survey was offered to



all law enforcement officers at the time they had transported an individual to their location by means of a Baker Act for involuntary emergency psychiatric evaluation. The law enforcement officers are required to stay on-site while the patient is admitted to the facility, and during this time, the intake staff provided the officer with the informed consent and paper survey and asked for their participation in completion of the survey. Intake staff was trained by the researcher to inform officers they should only participate in the study once. After survey completion, the intake team at Lifestream Behavioral Centers, Inc. placed survey packets in confidential folders stored in a locked carrying box, which was stored in a locked room only accessible by individuals with approved access to privileged information at the facility. In order to ensure participant confidentiality and anonymity, a participant information document was used in place of signed informed consent in both the paper version of the survey utilized at Lifestream Behavioral Centers, Inc. as well as the online Qualtrics version provided to the Alachua County Sheriff's Office. This document outlined all aspects of the study and informed consent, and the participant's decision to complete the survey after reading the participant information document designated their informed consent to participate. Furthermore, participants were assigned a numerical identifier in place of any identifying information for the purposes of data collection to further ensure privacy.

Furthermore, data provided by Alachua County Sheriff's Office and the additional law enforcement agencies that had at least one officer complete the survey was obtained in the form of an agency survey to identify mental health training opportunities and community mental health resources available within each agency. This survey was emailed in the form of a Qualtrics online survey to each law enforcement agency that

employed at least one officer who completed the officer survey. Specific names of individuals completing this survey were not collected, though it is expected that someone holding a position in agency leadership completed this survey. The only identifying information that was obtained through the use of the agency survey was the name of the agency, if provided. Additionally, the researcher did not inform the agency that any of the law enforcement officers they employ had participated in the current research study. The email sent to each agency was general in nature and stated that the researcher is collecting data for a dissertation regarding the impact of CIT training and local community mental health resource availability on law enforcement response to the mentally ill. Completion of this survey was entirely voluntary in nature. Before beginning the survey, participants were directed to an informed consent page, which informed participants about the purpose of the study, procedure, potential risks and benefits of participating, confidentiality, voluntary participation and right to withdraw from the study, and who to contact with questions about the study. Participants then selected whether they agreed or did not agree to participate in the study, and those who did agree were directed to complete the survey.

### **Data Analytic Strategy**

Data analysis for the present study utilized a cross-sectional design. Descriptive statistics, including means, standard deviations, and frequencies, were calculated for participant demographics, the primary outcomes (i.e., perceptions toward mental health training for law enforcement, perceptions toward mental health treatment, comfort and preparedness in responding to mental health calls for service), and all covariates. The researchers explored a total cumulative score on each of the four primary outcome

variables. Group differences between CIT trained officers and non-CIT trained officers on the primary study outcomes and individual survey items loading on these outcomes were evaluated. Assumption testing for parametric testing of all four dependent variables revealed: overall officer comfort had an outlier (minimum  $z = -3.77$ ) and skewness and kurtosis of  $-1.57$  ( $SE = .30$ ) and  $3.15$  ( $SE = .60$ ), respectively; overall officer preparedness had an outlier (minimum  $z = -3.28$ ) and skewness of  $-1.43$  ( $SE = .30$ ) and kurtosis value of  $1.98$  ( $SE = .59$ ); overall law enforcement perception of mental illness and mental health treatment did not violate t-test assumption testing with no significant outliers and skewness and kurtosis values of  $-0.56$  ( $SE = .30$ ) and  $-0.27$  ( $SE = .60$ ), respectively; overall law enforcement perception of mental health training had an outlier score (minimum  $z = -3.64$ ) and skewness of  $-1.75$  ( $SE = .30$ ) and kurtosis of  $3.57$  ( $SE = .59$ ). Attempted removal of outliers resulted in additional outliers. As a result, due to violation of normality assumption in the current sample, the non-parametric Mann-Whitney test was used for the primary hypotheses outlined. A non-parametric Levene's test, review of descriptive analyses, and analysis of histograms were performed on all outcome variables in order to evaluate homogeneity of variance in order to meet the assumption that the data distributions were non-normal in a similar manner. Preliminary analyses were conducted to examine the relationship between covariates and our primary outcomes using t-test, chi-square, and Fisher's exact test; those that were significant were controlled for as covariates in our selected analyses. As an exploratory analysis, we also conducted multiple linear regressions to examine potential predictor variables for officer comfort and preparedness. All analyses were considered significant at the  $p < .05$  level.

Data was analyzed using the Statistical Package for the Social Sciences (SPSS)-version 26.

## **Results**

### **Participant Demographic and Officer-related Variables**

Table 1 provides descriptive information for participant demographics and officer-related variables. A total of 64 law enforcement officers completed the survey. The age of the sample ranged from 22 years to 49 years with a mean age of 33.3 years (SD= 7.53). Ten participants declined to provide their age. Participants were predominately White, constituting 67.2% of the sample, as can be seen in Table 1. The majority of the sample (90.6%) was male, which is representative of the law enforcement profession. The majority of the sample attained a postsecondary or college education, comprising 68.8% of the sample, while 15.6% completed high school and 7.8% of the sample completed graduate school. The sample was fairly evenly distributed in regards to years of experience as a law enforcement officer. Twenty-five percent of the sample had worked for three to five years. The majority of participants in the sample reported their rank as a patrol officer (85.9%), though 9.4% of the sample was comprised of Sergeants, and one Lieutenant completed the survey (1.6% of the sample). Regarding personal or family history of mental health treatment, 46.9% of the sample denied such a history, 25.0% endorsed a family member had received mental health treatment, 23.4% chose 'Prefer Not to Say', and one officer (1.6%) endorsed a personal history of mental health treatment. Lastly, the majority of participants surveyed were employed at the Alachua County Sheriff's Office, comprising 82.8% of the sample.

An independent samples t-test, chi-square testing, and Fisher's exact test were conducted to examine the association between demographic and officer-related variables and officer CIT training status. Frequencies for these variables by CIT training status are also presented in Table 1. Of the demographic variables assessed, officer age  $t(62) = -5.04, p < .001$  was significantly associated with CIT training status, with CIT officers being older in age ( $M = 37.92, SD = 6.45$ ) than non-CIT trained officers ( $M = 29.34, SD = 6.04$ ). Officer gender (Fisher's Exact Test = 1.12,  $p = .784$ ), race/ethnicity (Fisher's Exact Test = 6.47,  $p = .078$ ), and education (Fisher's Exact Test = 1.20,  $p = .614$ ) were not significantly associated with CIT training status. Additionally, of the officer-related variables assessed, officer rank (Fisher's Exact Test = 3.10,  $p = .134$ ), history of mental illness/treatment (Fisher's Exact Test = 0.96,  $p = .967$ ), and agency where employed (Fisher's Exact Test = 5.87,  $p = .214$ ), were not significantly associated with officer CIT training status. However, years of experience was significantly associated to officer CIT training status (Fisher's Exact Test = 17.07,  $p < .001$ ), with officers who have more years of experience being more likely to be CIT trained than officers with less experience. Examination of adjusted residuals suggested that significantly less CIT officers had between zero and two years of experience than would be expected ( $z = -3.3$ ), and significantly more CIT trained officers had between 11 and 20 years of experience than would be expected ( $z = 2.8$ ).

(continues)

Table 1

*Demographic, Officer-Related, and Frequency of Contact Variables by CIT/Non-CIT Training Status*

Variable	CIT Trained ( <i>n</i> = 27) <i>M</i> ( <i>SD</i> )	Non-CIT ( <i>n</i> = 37) <i>M</i> ( <i>SD</i> )	Total ( <i>N</i> = 64) <i>M</i> ( <i>SD</i> )	<i>t</i>
Age	37.92 (6.45)	29.34 (6.04)	33.31 (7.53)	-5.04**
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>Fisher's Exact Test</i>
Gender				<i>p</i> = .784
Male	25 (39.0%)	33 (51.6%)	58 (90.6%)	
Female	1 (1.6%)	3 (4.7%)	4 (6.3%)	
Other	0 (0.0%)	1 (1.6%)	1 (1.6%)	
Missing	1 (1.6%)	0 (0.0%)	1 (1.6%)	
Race/Ethnicity				<i>p</i> = .078
White	17 (26.6%)	26 (40.6%)	43 (67.2%)	
African American	6 (9.4%)	3 (4.7%)	9 (14.1%)	
Hispanic/Latino	3 (4.7%)	1 (1.6%)	4 (6.3%)	
Other	0 (0.0%)	4 (6.3%)	4 (6.3%)	
Missing	1 (1.6%)	3 (4.7%)	4 (6.3%)	
Education				<i>p</i> = .614
High School	5 (7.8%)	5 (7.8%)	10 (15.6%)	
College	19 (29.7%)	25 (39.1%)	44 (68.8%)	
Graduate School	1 (1.6%)	4 (6.3%)	5 (7.8%)	
Missing	2 (3.1%)	3 (4.7%)	5 (7.8%)	
Years of Experience				<i>p</i> < .001**
0-2 years	1 (1.6%)	14 (21.8%)	15 (23.4%)	
3-10 years	13 (20.3%)	17 (26.6%)	30 (46.9%)	
11-20 years	10 (15.6%)	3 (4.7%)	13 (20.3%)	
Over 20 years	2 (3.1%)	0 (0.0%)	2 (3.1%)	
Missing	1 (1.6%)	3 (4.7%)	4 (6.3%)	
Rank				<i>p</i> = .134
Patrol Officer	21 (32.8%)	34 (53.1%)	55 (85.9%)	
Sergeant	4 (6.3%)	2 (3.1%)	6 (9.4%)	
Lieutenant	1 (1.6%)	0 (0.0%)	1 (1.6%)	
Missing	1 (1.6%)	1 (1.6%)	2 (3.1%)	

(Table 1 continues)

Table 1 (cont.)

*Demographic, Officer-Related, and Frequency of Contact Variables by CIT/Non-CIT Status*

Variable	CIT Trained ( <i>n</i> = 27)	Non-CIT ( <i>n</i> = 37)	Total ( <i>N</i> = 64)	
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>Fisher's Exact Test</i>
History of Mental Illness/Treatment				<i>p</i> = .967
No	12 (18.8%)	18 (28.1%)	30 (46.9%)	
Yes, personal	0 (0.0%)	1 (1.6%)	1 (1.6%)	
Yes, family member	7 (10.9%)	9 (14.1%)	16 (25.0%)	
Prefer Not to Say	7 (10.9%)	8 (12.5%)	15 (23.4%)	
Missing	1 (1.6%)	1 (1.6%)	2 (3.1%)	
Agency Employed				<i>p</i> = .214
ACSO	25 (39.0%)	28 (43.8%)	53 (82.8%)	
Agency A	0 (0.0%)	4 (6.3%)	4 (6.3%)	
Agency B	1 (1.6%)	1 (1.6%)	2 (3.1%)	
Agency C	0 (0.0%)	2 (3.1%)	2 (3.1%)	
Agency D	0 (0.0%)	1 (1.6%)	1 (1.6%)	
Agency E	0 (0.0%)	1 (1.6%)	1 (1.6%)	
Missing	1 (1.6%)	0 (0.0%)	1 (1.6%)	
Calls Involving Mental Illness (per month)				<i>p</i> = .577
0-5	10 (15.6%)	9 (14.1%)	19 (29.7%)	
6-20	15 (23.4%)	25 (39.1%)	40 (62.5%)	
Greater than 20	2 (3.1%)	3 (4.7%)	5 (7.8%)	
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Baker Acts Initiated (per month)				<i>p</i> = .017*
0 to 1	10 (15.6%)	8 (12.5%)	18 (28.1%)	
2 to 5	12 (18.7%)	28 (43.8%)	40 (62.5%)	
5 or more	5 (7.8%)	1 (1.6%)	6 (9.4%)	
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Encounter Frequent Fliers				$\chi^2 = 1.56$
Never	0 (0.0%)	0 (0.0%)	0 (0.0%)	
Rarely/Sometimes	3 (4.7%)	10 (15.6%)	13 (20.3%)	
Frequently/Very Frequently	24 (37.5%)	27 (42.2%)	51 (79.7%)	
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)	

Significance levels indicated applies to the overall comparisons between CIT and non-CIT trained officers.

\**p* < .05, \*\**p* < .001.

### Frequency of Contact with the Mentally Ill

Details regarding officer frequency of contact with the mentally ill can also be found above in Table 1. Descriptive statistics revealed that 62.5% of the sample responded to between 6 and 20 calls for service involving a mentally ill individual per month (See Table 1). Almost 8% of the sample indicated they responded to greater than 20 calls involving a mentally ill individual per month. Similarly, the majority of officers (39.1%) reported they initiated two to five Baker Acts per month.

Officers were also asked about the frequency with which they encountered ‘frequent fliers’ in their work as a law enforcement officer (i.e., individuals known to law enforcement to have a mental illness and often require intervention). The majority of officers reported that they either frequently or very frequently (79.7%) encountered such individuals in their line of work. Conversely, it is important to note that no officers indicated they ‘never’ encountered frequent fliers in their work as a law enforcement officer.

Chi-square testing and Fisher’s exact test were conducted to examine the association between frequency of contact with the mentally ill variables and officer CIT training status. Frequencies for these variables by CIT training status are also presented in Table 1. Calls for service involving mental illness (Fisher’s Exact Test= 1.32,  $p = .577$ ) and frequency of encountering ‘frequent fliers’ ( $X^2 = 1.56, p = .212$ ) were not significantly associated with officer CIT training status. However, number of Baker Acts initiated per month was significantly associated with officer CIT training status (Fisher’s Exact Test= 7.65,  $p = .017$ ). Examination of adjusted residuals suggested that significantly less CIT officers completed two to five Baker Acts per month than expected



( $z = -2.5$ ), and significantly more CIT trained officers completed more than 5 Baker Acts a month than expected ( $z = 2.1$ ).

### **CIT Training and Other Mental Health Training**

In regards to CIT training, descriptive statistics illustrated the majority of the sample was not CIT trained ( $n = 37$ ; 57.8%). Of the 42.2% ( $n = 27$ ) of the sample comprised of CIT trained officers, 25.9% of officers self-selected to become a CIT trained officer. Therefore, the majority of the CIT trained officers in this sample underwent CIT training as required by their respective agency. The majority of CIT trained officers underwent CIT training more than five years ago (55.6%). Of the officers in the sample that were CIT trained, the majority of officers either agreed (44.4%) or somewhat agreed (37.0%) that CIT training was beneficial for their career/experiences. Furthermore, the majority of the sample (84.4%) had received in-service or additional training in mental health (excluding CIT training). In the past year, 32.8% of the overall sample indicated they received one to two hours of mental health training with the remainder of the sample receiving three or more hours of training. It is important to note that 9.4% of the sample reported they received zero hours of mental health training in the preceding year. Results are shown below in Table 2.

(continues)

Table 2

*Frequency Statistics for CIT Training and Other Mental Health Training Received*

Mental Health Training Variables	n	%
<b>Total Sample (N=64)</b>		
CIT Trained		
Yes	27	42.2%
No	37	57.8%
Received Additional Mental Health Training (Excluding CIT)		
Yes	54	84.4%
No	10	15.6%
Hours Mental Health Training Received in Past Year (Excluding CIT)		
0 hours	6	9.4%
1-2 hours	21	32.8%
3-4 hours	19	29.7%
5-6 hours	7	10.9%
7-8 hours	2	3.1%
9 or more hours	9	14.1%
<b>CIT Trained Officers (n=27)</b>		
How long ago CIT Trained		
0-2 years	4	14.8%
2-5 years	8	29.6%
More than 5 years	15	55.6%
Self-Select to be CIT Officer		
Yes	7	25.9%
No	20	74.1%
CIT Training Beneficial to Career/Experiences		
Disagree	1	3.7%
Somewhat Disagree	4	14.8%
Somewhat Agree	10	37.0%
Agree	12	44.4%

**Call Dispatch Codes and Personal/Situational Characteristics of Baker Act**

Descriptive statistics were also calculated for the dispatch code of the call for service, demographics of the individuals for whom the law enforcement officers initiated

a Baker Act, the mental illness signs and symptoms present on scene, as well as any situational factors that may have influenced their decision to Baker Act. Table 3 displays the frequency results of dispatch call code and demographics of the individuals for whom the officers initiated emergency evaluations.

The majority (45.3%) of dispatch codes regarding the current call for service were characterized as suicidal threats/behavior, followed by disturbance (18.8%) and mentally ill (17.2) characterizations. Only 9.4% of all calls were dispatched as violence/aggression toward others, 3.1% were identified as disorderly calls, and 1.6% of calls were characterized as trespassing calls and loitering calls. Two officers declined to provide information related to the dispatch code of the call, which may suggest that the individual for whom the officer initiated a Baker Act may have come to the attention of the officer without a referral from dispatch.

Moreover, the majority of individuals Baker Acted by the officers in this study were adults aged 18-64 (70.3%) and 59.4% were male. Officers were also asked to describe the mental illness or symptoms presented on scene that influenced the officer's decision to Baker Act the individual. Officers (32.8%) reported the individual displayed signs or symptoms of Bipolar Disorder, 23.4% indicated psychotic symptoms, 17.2% cited depression, 4.7% reported anxiety as the signs and symptoms present, 1.6% indicated autism, and the remaining 15.6% chose "other" as the mental illness they believe best captured the individual's presentation.

Finally, officers were asked to indicate whether any personal or situational factors were present at the scene that influenced their decision to Baker Act the individual. Officers were able to select more than one factor, if applicable. The most commonly

selected personal or situational factor that influenced the officers' decision to

Baker Act was suicidal threats or behavior, with 46.9% of officers indicating this was a contributing factor in the current call for service.

Table 3

*Frequency Statistics for Dispatch Call Codes and Consumer Demographic, Personal, and Situational Factors for the Total Sample (N=64)*

Variable	n	%
Dispatch Call Code (n=62)		
Disorderly	2	3.1%
Disturbance	12	18.8%
Trespassing	1	1.6%
Loitering	1	1.6%
Mentally Ill	11	17.2%
Suicidal threats/behavior	29	45.3%
Violence/Aggression toward others	6	9.4%
Age of Consumer (n=63)		
8 years or younger	1	1.6%
9-12 years	6	9.4%
13-17 years	8	12.5%
18-64 years	45	70.3%
65 years and older	3	4.7%
Gender of Consumer (n=60)		
Male	38	45.3%
Female	22	54.7%
Transgender	0	0.0%
Other	0	0.0%
Mental Illness Signs/Symptoms Displayed or Reported (n=61)		
Alzheimer's	0	0.0%
Anxiety	3	4.7%
Autism	1	1.6%
Bipolar	21	32.8%
Depression	11	17.2%
Psychotic symptoms	15	23.4%
Other	10	15.6%

(continues)

(Table 3 cont.)

Variable	n	%
Personal/Situational Factors Present (n=62)		
Non-compliance with prescribed meds	8	12.5%
Neglect to self	8	12.5%
Presence of a weapon	4	6.3%
Suicidal behaviors/threats	30	46.9%
Violence toward others	14	21.9%
Lack of other treatment options	2	3.1%
Erratic behavior	16	25.0%
Substance use	9	14.1%
Subject resistance/Disrespect	2	3.1%
Severity of offense	3	4.7%
Homelessness	2	3.1%
Other	6	9.4%

### **Ease of Completing Baker Acts**

Descriptive statistics and frequencies were calculated regarding the officers' perceived ease of completing Baker Acts, which was evaluated by analyzing their responses to items regarding the average number of minutes to complete a Baker Act as well as miles driven to the closest receiving facility, and the types and overall number of limitations identified by the officer in responding to mental health calls for service. Over 90% of officers reported between 31 and 90 minutes were required to complete a Baker Act call (from time of call response to availability to respond to a new call for service). Interestingly, 4.7% indicated required 151 minutes or more to complete a Baker Act. In regards to the average number of miles the closest emergency evaluation receiving facility was from the officers' patrol zone, 87.5% of officers reported the closest facility was between 0 and 20 miles away. Only 1.6% of officers indicated the closest facility was 40 to 50 miles away from their patrol zone.

The mean number of limitations in responding to the mental health calls reported by officers was 2 ( $M=2.14$ ,  $SD = 1.26$ ). The overall number of limitations endorsed by officers ranged from zero limitations to six. The most common limitations endorsed by law enforcement officers surveyed included ‘unpredictability of those with mental illness’, which was endorsed by 70.3% of all officers, ‘lack of community resources available to refer individuals to (if not completing a Baker Act)’, indicated by 48.4% of officers, and ‘calls are time consuming for the officer’, reported by 35.9% of officers.

Frequencies of the variables considered in evaluating ease of completing Baker Acts are displayed in Table 4.

Table 4

*Frequency Statistics for Ease of Completing Baker Acts (Minutes to Complete Baker Act, Miles to Closest Receiving Facility, & Limitations Identified) for the Total Sample (N=64)*

Variable	n	%
<b>Minutes to Complete Baker Act</b>		
0 to 30	6	9.4%
31 to 60	26	40.6%
61 to 90	26	40.6%
91 to 120	3	4.7%
121 to 150	0	0.0%
151 or more	3	4.7%
<b>Miles to Closest Emergency Evaluation Receiving Facility</b>		
0 to 10	31	48.4%
10 to 20	25	39.1%
20 to 30	7	10.9%
30 to 40	0	0.0%
40 to 50	1	1.6%
50 or more	0	0.0%

(Table 4 continues)

(Table 4 cont.)

Variable	n	%
<b>Number of Limitations Identified</b>		
0	5	7.8%
1-2	37	57.8%
3-4	20	31.2%
5-6	2	3.2%
7-8	0	0.0%
<b>Limitation Endorsed</b>		
Calls are time consuming for the officer		
Yes	23	35.9%
No	41	64.1%
Lack of continued training in mental health		
Yes	11	17.2%
No	53	82.8%
Discomfort responding to mental health calls		
Yes	4	6.3%
No	60	93.8%
Difficulty recognizing mental illness		
Yes	6	9.4%
No	58	90.6%
Uncertainty regarding criteria for Baker Act		
Yes	6	9.4%
No	58	90.6%
Unpredictability of those with mental illness		
Yes	45	70.3%
No	19	29.7%
Ease of use of Baker Act receiving facility		
Yes	11	17.2%
No	53	82.8%
Lack of community resources available		
Yes	31	48.4%
No	33	51.6%

### Objective 1

Objective 1 proposed examination of group differences between CIT and non-CIT trained officers with respect to level of comfort in responding to mental health calls, levels of preparedness in responding to mental health calls, and positive attitudes toward

treatment of mental illness. Frequency statistics for outcome variables (i.e., officer comfort, preparedness, and perceptions regarding mental illness/mental health treatment) can be found in Table 5.

Table 5

*Descriptive Statistics for Officer Comfort, Preparedness, and Attitudes of Mental Health Treatment by CIT Training Status*

Variable	CIT Trained ( <i>n</i> = 27)	Non-CIT ( <i>n</i> = 37)	Total Sample ( <i>N</i> = 64)	
				<i>Mann-Whitney U</i>
Officer Comfort <sup>1</sup>				554.50
Mean	3.00	2.81	2.89	
SD	1.44	1.20	1.30	
Median	3.50	3.00	3.00	
Officer Preparedness				666.50*
Mean	6.00	4.62	5.20	
SD	2.00	2.69	2.50	
Median	6.00	5.00	6.00	
Attitudes re: Mental Health Treatment <sup>2</sup>				392.50
Mean	1.35	2.17	1.82	
SD	2.55	2.30	2.42	
Median	1.50	3.00	2.00	

Significance levels indicated applies to the overall comparisons between CIT and non-CIT trained officers.

\**p* < .05

<sup>1</sup> indicates *n*=63. <sup>2</sup> indicates *n*=62

**Hypothesis 1.1.** Hypothesis 1.1 aimed to compare CIT and non-CIT trained officers on levels of comfort in responding to the mentally ill. Descriptive statistics for officer comfort for the total sample and the CIT and non-CIT trained groups who answered both questions loading on this variable are presented in Table 5.



The two individual items loading on the combined overall officer comfort score were additionally evaluated. In regards to the statement, 'I feel comfortable interacting with individuals with mental illness', the majority of the sample ( $n=62$ ; 96.8%) somewhat or strongly agreed with the statement. No officers indicated they strongly disagreed with this statement. Additionally, when asked to select their overall level of comfort in responding to the current call for service, nearly 94% of officers indicated feeling very or somewhat comfortable. Frequency statistics for the individual items comprising officer comfort can be seen in Table 6. Individual items were evaluated for differences between CIT and non-CIT officers utilizing Fisher's Exact test, with results indicated in Table 6.

To examine the relationship between CIT and non-CIT trained officers and level of comfort, a non-parametric Mann-Whitney U test was utilized due to non-normality of the sample data. Review of histograms showed that the two distributions had a similar pattern and were both negatively skewed, allowing the medians to be used to summarize the differences for the groups. The distribution for CIT trained officers had a skewness value of -2.08 ( $SE=0.46$ ) and the distribution for non-CIT trained officers had a skewness value of -1.15 ( $SE=0.39$ ). Levene's test suggested that the assumption of homogeneity of variance based on the median and adjusted degrees of freedom was fulfilled,  $p= .661$ .

A Mann-Whitney U test showed no significant differences in the overall combined score of officer comfort in responding to mental health calls for service ( $U=554.500$ ,  $z = 1.083$ ,  $p= 0.279$ ,  $r =0.136$ ) between the CIT-trained group ( $Md = 3.50$ ,  $n= 26$ ) and the non-CIT trained group ( $Md = 3.00$ ,  $n= 37$ ). Both groups reported feeling moderately comfortable in responding to mental health calls for service. No significant

associations were found for responses on individual items on the comfort outcome and CIT-training status (all  $p$  values  $> .10$ ).

Table 6

*Frequency Statistics for Individual Variable Items Comprising Each Outcome Variable for the Total Sample (N=64)*

Variable	CIT Trained (n = 27)	Non-CIT (n = 37)	Total (N = 64)	<i>Fisher's Exact Test</i>
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	
<b>Officer Comfort</b>				
Feel Comfortable Interacting with Individuals with Mental Illness				<i>p</i> = 1.000
Somewhat/Strongly Disagree	1 (1.6%)	1 (1.6%)	2 (3.1%)	
Somewhat/Strongly Agree	26 (40.6%)	36 (56.3%)	62 (96.9%)	
Overall Level of Comfort Responding to Current Call for Service <sup>1</sup>				<i>p</i> = 1.000
Somewhat/Very Uncomfortable	2 (3.2%)	2 (3.2%)	4 (6.3%)	
Somewhat/Very Comfortable	24 (38.1%)	35 (55.6%)	59 (93.7%)	
<b>Officer Preparedness</b>				
Department Provides Sufficient Training on Responding				<i>p</i> = .124
Somewhat/Strongly Disagree	1 (1.6%)	7 (10.9%)	8 (12.5%)	
Somewhat/Strongly Agree	26 (40.6%)	30 (46.9%)	56 (87.5%)	
Department Has Clear Policies and Procedures Involving Mental Illness				<i>p</i> = .504
Somewhat/Strongly Disagree	0 (0.0%)	2 (3.1%)	2 (3.1%)	
Somewhat/Strongly Agree	27 (42.2%)	35 (54.7%)	62 (96.9%)	
Feel Knowledgeable re: Mental Illness and How to Identify It				<i>p</i> = .387
Somewhat/Strongly Disagree	1 (1.6%)	4 (6.3%)	5 (7.8%)	
Somewhat/Strongly Agree	26 (40.6%)	33 (51.6%)	59 (92.2%)	

(Table 6 continues)

Table 6 (continued)

*Frequency Statistics for Individual Variable Items Comprising Each Outcome Variable for the Total Sample (N=64)*

Variable	CIT Trained (n = 27)	Non-CIT (n = 37)	Total (N = 64)	
	<i>n (%)</i>	<i>n (%)</i>	<i>n (%)</i>	<i>Fisher's Exact Test</i>
Feel Prepared to Respond to Calls Involving Individuals with Mental Illness				<i>p</i> = 1.000
Strongly/Somewhat Disagree	1 (1.6%)	1 (1.6%)	2 (3.1%)	
Strongly/Somewhat Agree	26 (40.6%)	36 (56.3%)	62 (96.9%)	
<b>Officer Perceptions of Mental Illness/Mental Health Treatment</b>				
Mental Health Treatment is Generally Beneficial				<i>X</i> <sup>2</sup> = .365
Somewhat/Strongly Disagree	7 (10.9%)	6 (9.4%)	13 (20.3%)	
Somewhat/Strongly Agree	20 (31.3%)	31 (48.4%)	51 (79.7%)	
The Mental Health System Works Effectively <sup>1</sup>				<i>X</i> <sup>2</sup> = .798
Somewhat/Strongly Disagree	16 (25.4%)	19 (30.2%)	35 (55.6%)	
Somewhat/Strongly Agree	11 (17.4%)	17 (27.0%)	28 (44.4%)	
Officers Play Important Role Linking Individuals to Treatment <sup>1</sup>				<i>p</i> = 1.000
Somewhat/Strongly Disagree	2 (3.2%)	2 (3.2%)	4 (6.3%)	
Somewhat/Strongly Agree	24 (38.1%)	35 (55.6%)	59 (93.7%)	

Note. All comparisons between CIT and non-CIT trained officers were not significant, all *p* values > .10.

Responses were combined into 'Somewhat/Strongly agree' and 'Somewhat Disagree/Strongly Disagree' for analyses. Some officers elected not to respond to all questions such that frequencies may not reflect the total sample.

<sup>1</sup> indicates n=63

To examine the relationship between demographic, officer-related, and frequency of contact with the mentally ill variables and overall officer comfort, an exploratory linear multiple regression was conducted. Predictor variables were included if they were not significantly related to other predictor variables to ensure the assumption of multicollinearity was not violated. Predictor variables included were selected based on preliminary analyses and the empirical literature identifying an association with officer CIT training and related comfort. CIT training status, years of experience, number of calls for service per month involving mental illness, number of Baker Acts initiated per month, additional mental health training received, and total officer preparedness scores were included as predictor variables in the regression.

In the first model examining overall officer comfort score, the overall model was significant, such that all seven variables together explained 31% of the variance in officer comfort score,  $R^2 = .31$ ,  $F(7, 46) = 2.89$ ,  $p = .014$ . When all factors were included, overall officer preparedness ( $b = 0.27$ ,  $p = .001$ ) significantly predicted overall officer comfort in responding to the mentally ill. Officers with higher overall preparedness scores in responding to the mentally ill had significantly higher overall comfort scores. Years of experience, number of calls for service, number of Baker Acts initiated, additional mental health training, and age of officer did not significantly contribute to the model. A summary of the regression analysis can be found in Table 7.

Table 7

*Summary of Multiple Regression Analyses for Officer Comfort and Preparedness*

	<i>R</i>	<i>R</i> <sup>2</sup>	<i>SE</i> of the Estimate	<i>b</i> ( <i>SE</i> )	$\beta$	<i>t</i>
<u>Model 1</u>						
<b>Officer Comfort</b>	0.55	0.31	1.20			
CIT Training				-0.14 (0.44)	-0.05	-0.33
Years of Experience				-0.24 (0.34)	-0.14	-0.71
Calls for Service (per month)				-0.15 (0.34)	-0.06	-0.43
Baker Acts Initiated (per month)				0.37 (0.35)	0.16	1.09
Additional Mental Health Training				0.32 (0.48)	0.09	0.66
Age of Officer				0.03 (0.04)	0.18	0.89
Officer Preparedness				0.27 (0.08)	0.49	3.66***
<u>Model 2</u>						
<b>Officer Preparedness</b>	0.41	0.17	2.34			
CIT Training				1.89 (0.81)	0.39	2.35*
Years of Experience				-0.49 (0.66)	-0.16	-0.75
Calls for Service (per month)				-0.02 (0.67)	-0.00	-0.03
Baker Acts Initiated (per month)				0.96 (0.66)	0.23	1.46
Additional Mental Health Training				0.63 (0.93)	0.09	0.68
Age of Officer				-0.05 (0.07)	-0.14	-0.62

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Hypothesis 1.2.** Hypothesis 1.2 compared CIT and non-CIT trained officers on levels of preparedness. Descriptive statistics for the total sample and the CIT and non-CIT trained groups for officer preparedness are presented in Table 5.

The four individual items loading on the combined overall officer preparedness score were also evaluated. In regards to the statement ‘My department provides a

sufficient amount of training on responding to mental health calls for service and completing Baker Acts', (87.5%) of officers somewhat or strongly agreed with this statement. Additionally, when asked to rate their level of agreement with the statement 'My department has clear policies and procedures in place for calls for service involving persons with mental illness (i.e., clarification on arrest/Baker Act based on severity of charges)', nearly 97% of officers somewhat agreed or strongly agreed with this statement. No officers reported they strongly disagreed with this statement. In rating level of agreement with the statement 'I feel knowledgeable regarding the various presentations of mental illness and how to identify it', the majority of officers (92.1%) somewhat agreed or strongly agreed. Finally, in rating their level of agreement with the statement 'I feel prepared to respond to calls involving individuals with mental illness', nearly 97% of officers somewhat agreed or strongly agreed. No officers strongly disagreed with the statement. Frequency results for the individual items loading on officer preparedness are also shown in Table 6. Individual items were evaluated for differences between CIT and non-CIT officers utilizing Fisher's Exact test, with results indicated in Table 6.

To examine the relationship between CIT training and officer preparedness, a Mann-Whitney U test was utilized due to non-normal sample data distributions. A review of histograms of both distributions illustrated that the two distributions had a similar pattern and were both negatively skewed. The distribution for CIT trained officers had a skewness value of -2.56 (SE=0.45) and the distribution for non-CIT trained officers had a skewness value of -1.01 (SE=0.39). Levene's test suggested that the assumption of homogeneity of variance based on the median and adjusted degrees of freedom was

fulfilled,  $p = .067$ . Results from the Mann-Whitney U test indicated significant differences ( $U = 666.500$ ,  $z = 2.306$ ,  $p = 0.021$ ,  $r = 0.288$ ) between the CIT-trained group ( $Md = 6.00$ ,  $n = 27$ ) and the non-CIT trained group ( $Md = 5.00$ ;  $n = 37$ ) on overall combined score of officer preparedness in responding to mental health calls for service. CIT-trained officers reported significantly greater preparedness when compared to non-CIT trained officers. There was no significant association found for responses on individual items of the preparedness outcome and officer CIT training status (all  $p$  values  $> .10$ ).

To examine the relationship between demographic, officer-related, and frequency of contact with the mentally ill variables associated with overall officer preparedness in responding to the mentally ill, an exploratory linear multiple regression was conducted. Predictor variables were only included if they were not significantly related to other predictor variables to ensure the assumption of multicollinearity was not violated. Predictor variables included were selected based on preliminary analyses and the empirical literature identifying an association with officer CIT training and preparedness. CIT training status, years of experience, number of calls for service per month involving mental illness, number of Baker Acts initiated per month, and additional mental health training received were included as predictor variables in the regression. The overall model was not significant,  $R^2 = .17$ ,  $F(6, 47) = 1.56$ ,  $p = .180$ . However, when all six factors were included, officer CIT training status was significantly correlated with overall officer preparedness in responding to the mentally ill. As such, CIT officers had significantly higher preparedness scores than those officers who were not CIT trained. A summary of this regression analysis can be found in Table 7.



**Hypothesis 1.3.** Hypothesis 1.3 compared CIT and non-CIT trained officers on attitudes toward treatment of mental illness. Descriptive statistics for the total sample and the CIT and non-CIT-trained groups are included in Table 5.

The three individual items loading on the overall combined score for officer perception of mental illness and mental health treatment were also evaluated. In regards to the statement ‘Mental health treatment is generally beneficial’, the majority of officers (79.7%) somewhat agreed or strongly agreed with this statement. Additionally, when asked to rate their level of agreement with the statement ‘The mental health system works effectively’, 55.5% strongly or somewhat disagreed with this statement. Finally, in rating their level of agreement with the statement ‘Law enforcement officers play an important role in linking individuals to mental health treatment’, nearly 94% of officers somewhat or strongly agreed with this statement. No officers surveyed strongly disagreed with this statement. Frequency statistics for the individual items loading on officer’s attitudes toward treatment of mental illness are shown in Table 6. Individual items were evaluated for differences between CIT and non-CIT officers utilizing chi-square or Fisher’s Exact test, with results indicated in Table 6.

To investigate the relationship between CIT training and officer attitudes toward treatment of mental illness, a non-parametric Mann-Whitney U test was employed due to non-normality of the sample data. Review of histograms showed that the two distributions had a similar pattern and were both negatively skewed, allowing the medians to be used to summarize the differences for the groups. The distribution for CIT trained officers had a skewness value of -0.75 (SE=0.46) and the distribution for non-CIT trained officers had a skewness value of -0.35 (SE=0.39). Levene’s test suggested that the

assumption of homogeneity of variance based on the median and adjusted degrees of freedom was fulfilled,  $p = .608$ . A Mann-Whitney U test showed no significant differences ( $U = 392.50$ ,  $z = -1.089$ ,  $p = 0.276$ ,  $r = -0.138$ ) between the CIT-trained group ( $Md = 1.50$ ,  $n = 26$ ) and the non-CIT trained group ( $Md = 3.00$ ,  $n = 36$ ) on overall combined officer perception of mental health treatment scores. No significant association between the individual item responses on the officer perceptions of mental health outcome and CIT training status was found (all  $p$  values  $> .10$ ).

## **Objective 2**

The second objective of this study was to explore the impact of perceived agency importance of CIT and mental health training on officer perceptions of the benefits of mental health training for law enforcement officers. Descriptive statistics for the total sample for the overall combined scores for officer perceptions of mental health training indicated that on average, officers reported positive perceptions regarding mental health training for law enforcement ( $M = 3.91$ ,  $SD = 2.45$ ).

The three individual items loading on the overall combined score for officer perceptions of mental health training were additionally evaluated. In regards to the statement 'Mental health training, including CIT training, is of great relevance to my career as a law enforcement officer', the majority of the sample (90.7%) somewhat agreed or strongly agreed with the statement. Additionally, when asked to rate their level of agreement with the statement 'Mental health training, including CIT training, positively impacts how officers handle calls involving mental illness', nearly 94% of officers somewhat agreed or strongly agreed. Finally, in rating their level of agreement with the statement 'Mental health training should be required of all law enforcement

officers', 51.6% of officers strongly agreed. Frequency statistics for the individual items loading on officer's perceptions toward mental health training are shown below in Table 8.

Table 8

*Frequency Statistics for Individual Variable Items for Officer Perceptions of Mental Health Training for the Total Sample (N=64)*

Variable	n	%
<b>Mental Health Training of Great Relevance to Career</b>		
Strongly Disagree	1	1.6%
Somewhat Disagree	5	7.8%
Somewhat Agree	28	43.8%
Strongly Agree	30	46.9%
<b>Mental Health Training Positively Impacts Handling of Calls</b>		
Strongly Disagree	2	3.1%
Somewhat Disagree	2	3.1%
Somewhat Agree	31	48.4%
Strongly Agree	29	45.3%
<b>Mental Health Training Should Be Required of All Officers</b>		
Strongly Disagree	1	1.6%
Somewhat Disagree	4	6.3%
Somewhat Agree	26	40.6%
Strongly Agree	33	51.6%

Hypothesis 2 compared officer perceptions of mental health training for law enforcement officers based on their perceived agency support for mental health training of officers as reflected in their promotion and prioritization of training (e.g., agency offers training in mental health for officers, agency has large number of CIT trained officers). A non-parametric Mann-Whitney U test was utilized due to non-normality of the sample data. The officer's rated level of agreement with the statement 'My department embraces and supports mental health training for officers' was utilized as the

independent variable for this hypothesis. This question was scored on a four-point Likert scale ranging from strongly disagree to strongly agree (-2 to 2). If the officer's response to this question was a positive value, indicating the officer either somewhat agreed or strongly agreed with the statement, participants were categorized in the 'perceived positive support' group. Participants whose response to this question was a negative value, indicating the officer either somewhat disagreed or strongly disagreed with the statement, were identified as the 'perceived negative support' group.

Levene's test suggested that the assumption of homogeneity of variance based on the median and adjusted degrees of freedom was fulfilled,  $p = .131$ . A Mann-Whitney U test revealed no significant differences ( $U = 21.00$ ,  $z = -1.658$ ,  $p = 0.131$ ,  $r = -0.207$ ) between officers from agencies with positive ( $Md = 4.00$ ,  $n = 62$ ) and negative perceived agency support ( $Md = 6.00$ ,  $n = 2$ ) for mental health training for overall combined scores for officer perception of mental health for law enforcement. This finding should be interpreted with caution due to the small group size for negative perceived agency support.

### **Objective 3**

The third objective of this study aimed to explore the role of a local emergency evaluation facility and perceived levels of community mental health resource availability on officer perceptions regarding the benefits of mental health treatment.

**Hypothesis 3.1.** To investigate the relationship between distance to the closest emergency evaluation facility and officer attitudes regarding the benefits of mental health treatment, a non-parametric Mann-Whitney U test was utilized due to non-normality of the sample. The officer's response to an item asking about the average distance in miles

to the closest emergency evaluation facility from the officers' patrol zone was utilized as the independent variable for this hypothesis. This question offered six response options: 0 to 10 miles, 10 to 20 miles, 20 to 30 miles, 30 to 40 miles, 40 to 50 miles, and 50 or more miles. If the officer's response to this question indicated the closest facility was within twenty miles of their patrol zone, they were categorized as 'close to a facility' (recoded as a 1). If the officer's response to this question indicated the closest facility was twenty or more miles from their patrol zone, they were categorized as 'distant from a facility' (recoded as 0).

Levene's test suggested that the assumption of homogeneity of variance based on the median and adjusted degrees of freedom was fulfilled,  $p = .110$ . Results from the Mann-Whitney U test indicated no significant differences ( $U = 194.50$ ,  $z = 0.045$ ,  $p = 0.965$ ,  $r = 0.006$ ) between officers with an emergency evaluation facility close to their patrol zone (within 20 miles;  $Md = 2.00$ ,  $n = 55$ ) and officers who do not have an evaluation facility close to their patrol zone (greater than 20 miles;  $Md = 2.00$ ,  $n = 7$ ) on overall combined score of officer perception of mental health treatment. This finding should be interpreted with caution due to the small group size of officers without an evaluation facility close to their patrol zone.

**Hypothesis 3.2.** The final hypothesis of this study compared officer perceptions of mental health treatment based on their perceived availability and effectiveness of community mental health resources. To investigate this hypothesis, a non-parametric Mann-Whitney U test was used due to non-normality of the sample data. The officer's rated level of agreement with the statements 'The local mental health community provides enough resources to law enforcement officers in order to successfully complete

mental health calls for service' and 'I have ready access to mental health professionals, if needed, when on a mental health call for service' were summed into a combined score and utilized as the independent variable for this hypothesis. These statements were each scored on a four-point Likert scale ranging from strongly disagree to strongly agree (-2 to 2), resulting in a range of combined overall scores ranging from -4 to 4. If the officer's summed score to these questions was a positive value, indicating the officer holds positive perceptions regarding available community resources, this variable was coded as 1. If the officer's response to these questions was a negative value, suggesting the officer holds negative perceptions regarding available community resources, this variable was coded as 0.

A review of histograms of both distributions illustrated that the two distributions had a similar pattern and were both negatively skewed. The distribution for officers holding positive perceptions of community resources had a skewness value of -0.991 (SE=0.39) and the distribution for officers holding negative perceptions of community resources had a skewness value of -0.184 (SE=0.47). Levene's test suggested that the assumption of homogeneity of variance based on the median and adjusted degrees of freedom was fulfilled,  $p = .907$ .

Results from the Mann-Whitney U test indicated a significant difference (U=634.00,  $z = 2.838$ ,  $p = 0.005$ ,  $r = 0.363$ ) between officers with positive and negative perceptions of community resources on the overall combined score of officer perceptions of mental health treatment. Officers with positive perceptions regarding community resources had significantly higher median scores of perceptions of mental health

treatment (Md = 3.00, n = 37) compared to officers with negative perceptions of community resources (Md = 1.00, n = 24).

## **Discussion**

### **Impact of Study**

Law enforcement officers often respond to mental health calls for service and play a primary role in linking individuals with mental illness to needed treatment resources. Therefore, law enforcement officers must receive adequate training and support from local mental health resources in order to optimally fulfill this role. The intention of the current study was to provide an exploratory examination of the impact of CIT training and availability of local mental health resources on law enforcement officer perceptions in effectively responding to the mentally ill.

A comparison of CIT and non-CIT-trained officers participating in the study yielded a number of interesting findings across outcomes. First, no significant group differences were found in reported feelings of officer comfort when responding to mental health calls for service. This finding may, in part, be related to the perceived unpredictability of individuals with mental illness, regardless of training, as over seventy percent of the sample identified this as a limitation in responding to the mentally ill. To this researcher's knowledge, this is the first study that assessed officer comfort in responding to the mentally ill, though past studies have examined officer confidence (Bonfine et al., 2014; Hanafi et al., 2008) and self-efficacy (Bahora et al., 2008) in responding to mental health calls. These studies, however, asked participants about their confidence in their practical application of skills and abilities learned to interact effectively with the mentally ill (Hanafi et al., 2008), and did not specifically question

participants on their comfort in responding to a real-time mental health call for service, as was done in the current study. The study by Bahora and colleagues (2008) measured comfort by utilizing questions about social distance (e.g., comfortable living next door to the individual, being friends with the individual) rather than comfort responding to law enforcement service calls with such a population. Although an officer may feel confident in his application of skills and abilities, this confidence may not necessarily translate to comfort in responding to each mental health crisis call requiring an emergency evaluation, as situational and individual factors may impact subjective feelings of comfort.

A significant group difference, however, was found for officer preparedness, suggesting that CIT training may better prepare law enforcement officers for responding to and handling calls for service involving individuals with mental illness. The greater levels of preparedness observed in our study are likely due to increased knowledge of mental illness and how to identify it, criteria for the Baker Act and purpose of emergency evaluation, as well as exposure to de-escalation techniques gained through CIT training. This finding supports previous research indicating that CIT officers report feeling more prepared to respond to calls involving mental illness than their non-CIT trained counterparts (Bonfine et al., 2014; Borum et al., 1998; Ritter et al., 2010).

Despite their greater preparedness, CIT-trained officers did not have significantly different attitudes toward treatment of mental illness than non-CIT-trained officers. This finding is contrary to previous research by Compton et al. (2006), which found CIT training was associated with improvements in attitudes toward mental health, as well as research by Borum and colleagues (1998), which found CIT officers were more likely to



rate the mental health system as helpful compared to non-CIT trained officers. It is important to note many previous studies took place in more urban settings (such as Memphis, Atlanta, and Chicago), with one study (Borum et al., 1998) utilizing officers from the Memphis CIT training model, who presumably had greater access to community resources. Additionally, previous studies which found a significant improvement in attitudes toward mental health utilized a pre- and post-CIT training design (Compton et al., 2006; Ellis, 2014), which may have reflected a response bias from the participants. Improved attitudes found in these studies were also measured by decrease in social distancing scores (e.g., asking participants if they would feel comfortable living next to an individual with mental illness, working with an individual with mental illness), rather than questions related to real-time interactions with a mentally ill individual during a law enforcement mental health service call as in the current study. In sum, the lack of improved officer attitudes secondary to CIT training found in this study may reflect a general frustration with the mental health system and lack of available community treatment options of the officers we surveyed. In fact, 48.4% of the sample identified lack of community resources as a limitation in responding to the mentally ill and over half of the sample (55.6%) did not agree that the mental health system works effectively.

Exploratory analyses examining the variables that best predict officer comfort found that officer preparedness was a significant predictor of officer comfort in responding to mental health calls for service. While CIT training was a significant predictor of preparedness, the overall model investigating the contribution of CIT training with other variables was not significant. Other variables not examined in the current study that may enhance the impact of CIT training on officer preparedness, including

officer knowledge of mental illness and differences in attitude/personality variables between officers who volunteer for CIT training and those who do not, should be further explored. Ritter and colleagues (2010), for example, found that officers who volunteered for CIT were more tolerant of mental illness than those who took part in training on the request of their agency. It may be that those officers who volunteer for CIT are cognizant of a personal skill deficit, which in turn contributes to more positive perceptions of preparedness, post CIT-training. Moreover, given the variability in CIT training across jurisdictions, it is difficult to define those components that most influenced officer preparedness. Examination of the contribution of specific components of CIT training to preparedness and other improved outcomes reported in previous research (i.e. using a dismantling approach) may also be an important next step. Additionally, future studies that assess preparedness by an objective set of metrics and how preparedness translates to greater subjective reports of officer comfort are clearly warranted.

Although we hypothesized that officers who reported that their agency promoted and prioritized mental health training would perceive their mental health training as more beneficial, our results did not support this relationship. There was limited variability, however, in terms of the training backgrounds of the officers in our study and very few officers endorsed negative attitudes toward training. Overall, the majority of the current sample had some form of mental health training in the past year, excluding CIT training. In fact, 93.7% of the current sample held a positive score regarding perception of mental health training, indicating positive attitudes toward the benefits of mental health training for law enforcement. As such, it does not appear that CIT training is the only variable

contributing to perceived benefits of mental health training for law enforcement.

Instead it is likely that other factors, such as frequency of contact with individuals with mental illness on the job and additional mental health training, may also play a role in officer attitudes toward mental health training.

This study was the first to examine the relationship between the availability of a local emergency evaluation facility and perceived levels of community mental health resources on officer perceptions regarding the benefits of mental health treatment. It has been noted in the literature that previous studies had not considered the role of the mental health system in successful implementation of CIT in communities (Watson et al., 2008). Results from the current study did not demonstrate any significant relationship between closeness of an emergency evaluation facility to the officers' patrol zone and positive attitudes toward mental health treatment. It should be noted that the sample was not evenly distributed with regards to closeness to an emergency evaluation facility, as 87.5% of the sample reported they had a facility close to their patrol zone (i.e., within twenty miles). However, officers who perceived their community as having more available and effective mental health resources more positively perceived mental health treatment as a whole. This finding suggests that availability of local community mental health resources may play a role in officer decision-making when responding to mental health service calls. Compared to the previous literature which examined officers in urban areas, such as Memphis, Atlanta, and Chicago, the officers in this study were from more rural locales in Florida characterized by fewer outpatient mental health treatment options, and receiving facilities which accepted patients from multiple counties. Increased distance from the closest receiving facility is directly related to increased time necessary to complete a

Baker Act call, requiring the officer to be away from other work duties for longer periods of time. The lack of collaboration with local mental health resources may impact officer perceptions of mental health treatment, and should be examined in greater depth with a more representative sample in the future.

Overall, results from the current study offer additional support to previously documented past findings that CIT training increases officer feelings of preparedness when responding to mental health calls for service (Bonfine et al., 2014; Borum et al., 1998, & Ritter et al., 2010). Additionally, it provides preliminary evidence that access to effective local mental health services, such as an emergency evaluation receiving facility, has an impact on law enforcement officer perceptions regarding the effectiveness of mental health treatment. It is likely that officer perceptions regarding the benefits of mental health treatment may influence their decision-making during mental health calls for service, including whether the officer resolves the situation on scene, arrests the individual, or initiates an emergency evaluation. As such, increasing law enforcement relationships with local mental health services may result in even stronger implementation and effectiveness of CIT training and principles, provide better treatment outcomes for those individuals with mental health needs, and may reduce the number of individuals with mental illness found in correctional settings. This study makes an important contribution of our understanding about how both CIT training and availability of local resources impact officer perceptions of their comfort and preparedness in responding to calls, and the benefits of mental health treatment and mental health training for law enforcement.

### **Limitations and Areas for Future Research**

There are several limitations for the current study inherent to research involving law enforcement officers and their interaction with the mental health system. To begin, the primary outcomes in the present study were based solely on participant self-report, and as such, may have been vulnerable to participant response bias or the degree of disclosure on part of the officer. Although officers were assured by the researcher that all responses were anonymous and would not be reported to their respective agencies, officers may have limited their disclosure or biased their reporting on the survey due to fear of repercussions from disclosure, difficulty admitting to perceived shortcomings in their abilities to respond to mental health calls for service, or to avoid any negative perceptions of their agency.

The data used for this study was also obtained directly from officers who were asked to report on a call for service involving an individual with mental illness that resulted in initiation of an emergency evaluation. While officers who completed the paper survey immediately completed the survey on site after transporting the individual to the receiving facility, officers who completed the online survey were instructed to complete the survey as soon as possible after transfer; it is possible some officers may have waited until the end of shift. As a result, the reliability of data obtained by the officers may be limited by the officer's memory, perception, or recall bias. Similarly, not all surveys were completed thoroughly, as some officers either accidentally skipped or intentionally did not answer some survey questions, which resulted in some officers being excluded from analyses of outcome variables.

This survey was also offered on a voluntary basis, and though the number of officers who declined to participate was not recorded, the officers who did choose to participate could introduce a sampling bias into the study. Officers were informed that the study concerned their interactions with individuals with mental illness before given the option to decline participation. It is possible that officers who declined to participate could have a different perspective or experiences with individuals with mental illness that may have influenced their decision not to participate. Although the researcher is fortunate to have achieved the level of cooperation from law enforcement found in this study, the potential sampling bias must be considered when interpreting the study findings. Moreover, the study at hand focused on only one no-refusal emergency evaluation receiving facility in Florida and only one complete sheriff's department, with participation from only six law enforcement agencies in total. As such, the generalizability of results is limited to agencies that are similar in terms of geographical location, as well as use of similar receiving facilities.

In addition, the sample size obtained in this study was relatively small and may not include a representative number of CIT trained officers, which may further limit its generalizability to the population of interest. The sample size was also additionally further reduced in comparison of officers from agencies with access to an emergency evaluation facility close to their patrol zone (i.e., within twenty miles) and officers without access to such resources. A more structured sampling method may result in a larger and more representative sample in future research, allowing for greater generalizability of conclusions. Lastly, due to the sample being non-normal in

distribution, non-parametric statistics were used for analyses, which may have resulted in a loss of statistical power, such that some significant findings may have been obscured.

This exploratory study utilizing a small sample of law enforcement officers from rural locales in Florida suggests that there is a need for further research regarding the roles of training in mental health and collaboration with local community mental health resources on law enforcement response to the mentally ill. In order to better address the limitations found in this study, future research should survey officers at more than one emergency evaluation receiving facility in more diverse geographical areas, and from a wider range of agencies, to achieve a greater breadth of data. Similarly, replication of this study in other locales where law enforcement officers do not have access to a no-refusal emergency evaluation facility could increase generalizability of results. Moreover, future studies should more closely examine individual, agency, and community factors (e.g., collaboration with local mental health resources/services, efficiency of and relationships with emergency evaluation receiving facilities) that affect officer attitudes toward mental illness and mental health treatment, as well as their responses to mental health calls for service. For example, comparisons of officer response to mental health calls for service in areas with both high and low availability and accessibility of local mental health resources is clearly warranted. Overall, additional research on the effectiveness of mental health training for law enforcement is critical to improve the CIT training model in general, collaborations between law enforcement and mental health systems, as well as access to necessary treatment, rather than criminalization, for those individuals with mental health needs.

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**Appendix A**

## Florida Statute 394.463, Involuntary Examination

(1) CRITERIA. – A person may be taken to a receiving facility for involuntary examination if there is reason to believe that the person has a mental illness and because of his or her mental illness:

(a)1. The person has refused voluntary examination after conscientious explanation and disclosure of the purpose of the examination; or

2. The person is unable to determine for himself or herself whether examination is necessary; and

(b)1. Without care or treatment, the person is likely to suffer from neglect or refuse to care for himself or herself; such neglect or refusal poses a real and present threat of substantial harm to his or her well-being; and it is not apparent that such harm may be avoided through the help of willing family members or friends or the provision of other services; or

2. There is substantial likelihood that without care or treatment the person will cause serious bodily harm to himself or herself or others in the near future, as evidenced by recent behavior.

## Appendix B

### Survey of Mental Health Resources Available to Law Enforcement Officers Completing Baker Acts

Are you a CIT trained officer?     Yes     No

*If yes:* How long ago were you CIT trained?

0-2 years     2-5 years     More than 5 years

Did you self-select to be a CIT officer?

Yes     No, training was required by agency

Do you believe CIT training was beneficial or your career/experiences?

Disagree     Somewhat Disagree     Somewhat Agree     Agree

Have you received any in-service or additional training in mental health (excluding CIT training)?

Yes     No

How many hours of training do you estimate you received **in the past year** (excluding CIT training)?

0 hours     1-2 hours     3-4 hours     5-6 hours     7-8 hours     9 or more hours

How many calls for service involving a mentally ill individual do you estimate you respond to **per month**?

0 to 5     6 to 10     11 to 15     16 to 20     Greater than 20

How many of these calls involve a mentally ill juvenile?

0     1 to 2     3 to 4     5 or more

How many Baker Acts do you estimate you initiate **per month**?

0 to 1     2 to 3     4 to 5     5 or more

How many **minutes**, on average, does it take you to complete a Baker Act encounter from the time of call response to availability to respond to a new call for service?

0 to 30     31 to 60     61 to 90     91 to 120     121 to 150     151 or more

How many **miles**, on average, is the closest emergency evaluation receiving facility from your patrol zone?

0 to 10     10 to 20     20 to 30     30 to 40     40-50     50 or more

***Please rate your level of agreement with the following statements:***

Mental health training, including CIT training, is of great relevance to my career as a law enforcement officer.

Strongly Disagree     Somewhat Disagree     Somewhat Agree     Strongly Agree

Mental health training, including CIT training, positively impacts how officers handle calls involving mental illness.

Strongly Disagree     Somewhat Disagree     Somewhat Agree     Strongly Agree

Mental health training should be required of all law enforcement officers.

Strongly Disagree     Somewhat Disagree     Somewhat Agree     Strongly Agree

My department provides a sufficient amount of training on responding to mental health calls and completing Baker Acts.

Strongly Disagree     Somewhat Disagree     Somewhat Agree     Strongly Agree

The local mental health community provides enough resources to law enforcement officers in order to successfully complete mental health calls for service.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

I have ready access to mental health professionals, if needed, when on a mental health call for service.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

My department has clear policies and procedures in place for calls for service involving persons with mental illness (i.e., clarification on arrest/Baker Act based on severity of charges).

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

My department embraces and supports mental health training for officers.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

I feel knowledgeable regarding the various presentations of mental illness and how to identify it.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

I feel prepared to respond to calls involving individuals with mental illness.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

I feel comfortable interacting with individuals with mental illness.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

I encounter “frequent fliers” in my work as a law enforcement officer (i.e., individuals known to law enforcement to have a mental illness and often require intervention).

- Never       Rarely       Sometimes       Frequently       Very Frequently

Mental health treatment is generally beneficial.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

The mental health system works effectively.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

Law enforcement officers play an important role in linking individuals to mental health treatment.

- Strongly Disagree       Somewhat Disagree       Somewhat Agree       Strongly Agree

***Please check all of the following you consider limitations in responding to mental health calls for service.***

- Calls are time consuming for the officer       Lack of continued training in mental health  
 Discomfort responding to mental health calls       Difficulty recognizing mental illness  
 Uncertainty regarding criteria for Baker Act       Unpredictability of those with mental illness  
 Ease of use of Baker Act receiving facility (close location, quick intake time)  
 Lack of community resources available to refer individuals to (if not completing a Baker Act)

***Please answer the following questions in reference to the current call for service.***

Which of the following best describes the individual you initiated a Baker Act on during this call?

Age:  8 yrs. or younger       9-12 yrs.       13-17 yrs.       18-64 yrs.       65 yrs. and older

Gender:  Male       Female       Transgender       Other

Mental Illness/Symptoms:  Alzheimer’s       Anxiety       Autism       Bipolar

Depression       Psychotic symptoms       Other \_\_\_\_\_

Which of the following **best** describes the general category for how the current call for service was dispatched?

- Disorderly       Disturbance       Trespassing       Loitering       Mentally Ill  
 Suicidal threats/behavior       Violence/Aggression Toward Others

Which of the following personal/situational factors influenced your decision to Baker Act this individual? (*Please select all that apply*)

- Non-compliance with prescribed meds       Erratic behavior  
 Neglect to self       Substance use  
 Presence of a weapon       Subject resistance/Disrespect  
 Suicidal behavior/threats       Severity of offense  
 Violence toward others       Homelessness  
 Lack of other treatment options       Other \_\_\_\_\_

Please select your overall level of comfort in responding to the **current** call for service.

- Very uncomfortable     Somewhat uncomfortable     Somewhat comfortable     Very comfortable

### **Demographic Information**

*Please choose which of the following describes you best:*

**Gender:**  Male       Female       Other       Prefer Not to Say

**Age:** \_\_\_\_\_

**Race/Ethnicity:**  White     African American     Hispanic/Latino     Asian     Other

**Educational achievement:**  High School       Postsecondary/College     Graduate school

**Years of experience as a law enforcement officer:**

0-2 years     3-5 years     6-10 years     11-15 years     16-20 years     Over 20 years

**Rank:**  Patrol officer     Sergeant     Lieutenant     Captain or higher

**Have you or any of your family members been diagnosed with a mental illness and/or received mental health treatment?**

Yes, personal     Yes, family member       No       Prefer Not to Say

**Agency name** (*all surveys are anonymous*):

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## Appendix C

### Survey of Mental Health Resources Available to Law Enforcement Officers Completing Baker Acts

(To be completed once by Office Leadership/Administration)

How many hours of mental health training does your agency directly provide to each officer *per year*?

- 0 hours     1-2 hours     3-4 hours     5-6 hours     7-8 hours     9 or more hours

How many patrol officers does your agency have?

\_\_\_\_\_

How many or what percentage of patrol officers are CIT trained?

\_\_\_\_\_

In *miles*, how far away is the closest emergency evaluation facility used by your law enforcement officers when completing a Baker Act?

- 0 to 10     10 to 20     20 to 30     30 to 40     40 to 50     50 or more

Is the emergency evaluation facility your agency uses considered a no-refusal facility?

- Yes     No

If possible, name of facility used:

\_\_\_\_\_

There are sufficient community mental health resources available to support officers from this agency when completing mental health calls (i.e., officers can refer subjects to, local emergency evaluation facility).

- Strongly Disagree     Somewhat Disagree     Somewhat Agree     Strongly Agree