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Variations in Specialized Policing Response Models as a Function of Community  
Characteristics- A Survey of Crisis Intervention Team Coordinators

A dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy at Virginia Commonwealth University

by

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*With Great Appreciation,*

*Anna Young*

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Abstract

VARIATIONS IN SPECIALIZED POLICING RESPONSE MODELS AS A  
FUNCTION OF COMMUNITY CHARACTERISTICS-A SURVEY OF CRISIS  
INTERVENTION TEAM COORDINATORS

By Anna M. Young, M.S.

A dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy at Virginia Commonwealth University

Virginia Commonwealth University, 2015

Major Director: Dr. William Pelfrey Jr.  
Associate Professor, Program Chair, Homeland Security and Emergency Preparedness

Although a specific program called the Crisis Intervention Team (CIT) has been generally recognized as the best-practice model that addresses the needs of the police officers in responding to mental health calls, many jurisdictions across the country have not only adopted the full CIT model but also have taken the liberty of adding new components and/or removing components of the original model in order to create a unique program that fits the needs of their individual community. The issue of differentiated adaptations of the original CIT model has created a controversy around best practice in the area of police response to individuals with mental health issues who are in crisis. Using an on-line survey and interview methods, this study examined a relationship between the degree of variation within specialized policing response models and their corresponding community characteristics. Previous research shows that the components of the original CIT model have positive influence on officers' confidence in interacting

with people with mental illness. Therefore, this study also hypothesized that a rating of an SPR police officers' job satisfaction was likely to correlate with the degree to which an SPR program adhered to the original CIT model. The study found that mental health resources, extent of presence of special populations in a community, existence of SPR policies in law enforcement, mental health, and dispatch departments, and how much law enforcement and mental health administrators supported the program, all predicted the degree of total deviation of a program from the original CIT model. Population density, related to a distinction between rural and non-rural communities, did not predict the degree of deviation from the original CIT model. The study also found that the degree of deviation of a program from the original CIT model did not strongly predict the rating of SPR officers' job satisfaction. The study discusses the possible reasons for the results as well as implications for stakeholders who are considering implementation of a Specialized Policing Response model in their communities. Limitations of the current study's research design are also discussed.

## **CHAPTER 1**

### **Introduction**

#### **Background of the Problem**

There is a significant concern within the law enforcement and mental health practice and policy about the variations in the law enforcement programs that are designed to assist police officers in properly responding to mental health crisis calls (Compton, Broussard, Hankerson-Dyson, Krishan, Stewart, Oliva, & Watson, 2010; Council of State Governments, 2010). Although a specific program called the Crisis Intervention Team (CIT) has been generally recognized as the best-practice model that addresses needs of police officers in responding to mental health calls, many jurisdictions across the country have not only adopted the full CIT model but also have taken the liberty of adding new components and/or removing components of the original model in order to create a unique program that fits the needs of their individual community. The issue of differentiated adaptations of the original model has created a controversy around the best practices in the area of police response to individuals with mental health issues who are experiencing crisis.

#### **Encounters between people with mental health challenges and law enforcement.**

When a person with mental illness comes in contact with law enforcement, the situation has a high potential for escalating to the point where police officers have to use force and/or weapons, arrest the person and, in most extreme cases, cause injury or death to the person and/or to the officer(s) (Cooper, McLearn, & Zapf, 2009; Morabito, 2007; Novak & Engel, 2005; Watson, Corrigan, & Ottati, 2004). Responding to people with

mental health problems presents a difficult challenge to law enforcement and requires a proactive and structured approach on the part of police officers in order to minimize escalation and prevent undesirable outcomes such as injuries to police officers, persons with mental illness, and/or bystanders. Even though traditional police training includes medical first responder curriculum, officers' skills may be particularly tested when they encounter a person who is delusional, hallucinating, fearful, or disoriented (Bailey, Barr, & Buntin, 2001; Patch & Arrigo, 1999; Price, 2005; Richter, 2007; Ruiz & Miller, 2009; Skeem & Bibeau, 2008).

Law enforcement officers, who are policing a community, are very likely to come in contact with individuals with mental illness (Richter, 2007; Teplin, 1984). LaGrange (2000), in a study of a large metropolitan area, found that, in the previous 12 month period, 89% of officers had encountered an individual suffering from mental illness. Other estimates indicate that seven to 10% of all police contacts are linked to emotionally disturbed individuals (Borum, Deane, Steadman, and Morrissey, 1998; Deane, Steadman, Borum, Veysey, & Morrissey, 2009). The prevalence of individuals with mental illness in jails and prisons is also concerning. Studies show that up to 15% of persons in city and county jails and state prisons have severe mental illness (Steadman, Osher, Clark Robbins, Case, & Samuels, 2009).

### **Historical perspective: Problems with deinstitutionalization.**

The issue of mentally ill individuals coming in contact with criminal justice system, also referred to as criminalization of mental illness, did not present as a significant problem in the United States until after the *deinstitutionalization* movement around the 1950s (Fisher, Silver, & Wolff, 2006; Richter, 2007; Steadman, Manahan,

Duffee, Hartstone, Robbins, 1984). The deinstitutionalization phenomenon consisted of closing of most of the large state mental health hospitals and discharging patients into the community. During this process, the state mental health hospitals' population declined from 559,000 in 1955 to about 71,000 in 1994 (Perez, Leifman, & Estrada, 2003; Richter, 2007). After being released from institutions, patients often ended up on the street, homeless, and with very little or no medical, financial, or emotional support or treatment for their symptoms. It is not surprising that, when out on the street and without proper treatment to control the symptoms, individuals with mental illness began coming in contact with police for engaging in behaviors that caused disturbance in a community.

Police officers are frequently the first ones to respond to disturbances caused by mentally ill individuals (Compton, Bahora, Watson, & Oliva, 2008; Richter, 2007). Traditional training does not provide officers with any special knowledge or skill on how to handle mental health disturbance calls. Without specialized training, officers frequently choose to arrest rather than assist an individual in finding proper mental health resources (Gillig, Dumaine, Strammer, Hillard, & Grubb, 1990; Green, 1997; Richter, 2007; Tucker, Van Hasselt, & Russel, 2008; Wolff, 1998). Another reason why officers choose arrest over another type of disposition, such as consultation with a mental health professional, may be that there are very few opportunities for diversion to treatment due to lack of available mental health providers and/or psychiatric beds.

**Solution: Jail diversion programs.**

The option to arrest results in a highly concentrated mentally ill population in local and county jails. According to the Bureau of Justice Statistics (2006), 56% of state prisoners, 45% of federal prisoners, and 64% of jail inmates had a mental health

disorder. Because of the disturbing rates at which individuals with mental illness are arrested and sent to jail in the years following deinstitutionalization, a nation-wide initiative to implement jail-diversion programs for mentally ill individuals has taken place (Abramson, 1972; Draine & Solomon, 1999; Steadman, Cocozza, & Veysey, 1999; Steadman, Deane, Morrisey, Westcott, Salasin, & Shapiro, 1999; Steadman, Osher, Robbins, Case, & Samuels, 2009; Torrey, Kennard, Eslinger, Lamb & Pavle, 2010). Jail diversion effort is initiated at the point of an encounter between a mentally ill individual and law enforcement. In a proactive effort to address the jail diversion needs, law enforcement agencies around the country have begun to design “specialized policing response” programs. The goal of these programs is to divert individuals with mental health diagnosis who come in contact with police, away from jail and into treatment (Richter, 2007).

“Specialized policing response” (SPR) programs are typically defined as innovative programs designed to improve encounters between people with mental illness and law enforcement. These programs include training for first responders (e.g., police officers, fire and rescue, etc.) on how to recognize mental illness, deescalate a person who is in crisis, and direct that person to treatment and away from jail (Reuland, Schwarzfelt, & Draper, 2009).

### **The original CIT model.**

One of the most popular models that fall under the category of “specialized policing response” is the Crisis Intervention Team (CIT) model. It originated in Memphis, TN in 1998, and was founded by the Memphis Police Department after a fatal shooting of a young man with mental illness by a police officer (Dupont & Cochran,

2000; Oliva & Compton, 2008). The Memphis model generated core requirements and goals for the CIT model, and over the years, numerous jurisdictions from all over the country, have adopted the model and its core elements. The original CIT model is a collaborative program between mental health and law enforcement agencies and reaches out for participation to other stakeholders in the community including mental health consumers and consumer advocacy organizations, such as the National Alliance on Mental Illness (Compton, Bahora, Watson, Oliva, 2008; Watson, Schaefer Morabito, Draine, & Ottati, 2008). The original CIT program consists of a 40-hour training curriculum for volunteer police officers and dispatch staff. Aside from training, it incorporates an availability of a 24-hour, “no refusal” drop-off center to where police officers can bring individuals who have not been arrested, but are in need of mental health consultation and/or treatment. The drop-off center allows officers to transfer supervision of an individual to mental health professionals in a relatively short period of time and without having to wait with the individual until appropriate mental health support becomes accessible. This helps to achieve one of the CIT’s goals of shortening the officer’s total response time dedicated to a mental health crisis so that the officer can be back on the street and available for other calls.

A famous and frequently echoed statement by the founders of the CIT program emphasizes that CIT is “not just a training” (Vickers, 2000; S. Cochran, personal communication, August 13, 2012); other components, such as tight collaboration between mental health and law enforcement agencies, are necessary. The program also points out a need for unique selection of officers, typically based on a volunteer system, to ensure

that the officers willingly enter the program and carry out its mission with fidelity and commitment (Oliva & Compton, 2008).

The original Memphis Crisis Intervention Team is classified as a pre-booking jail diversion model that includes procedures that guide decisions related to disposition, transportation, custodial transfer, and diversion to appropriate treatment of individuals with mental illness in crisis (Department of Criminal Justice Services and Department of Behavioral Health and Developmental Services, 2009; Dupont, Cochran, & Pillsbury). The goals of the CIT program include improved law enforcement perceptions of individuals with mental illness, decreased officer crisis response time, decreased injury rates for both officers and persons with mental illness, decreased arrest rates for persons with mental illness, and improved community perceptions of law enforcement (Oliva & Compton, 2008).

**Challenges to utilization of the original CIT model in different communities.**

Jurisdictions throughout the country are attempting to replicate the original CIT model and often do so successfully by following the core elements of the program, visiting the original site in Memphis, and investing in training provided directly by the experts in the Memphis police department where CIT first originated (BJA Publication, 2010). However, many of those jurisdictions are unable to adopt all of the required components of the original CIT program either because they cannot afford to do so or do not consider some of the components (such as a 24-hour, no refusal drop off center) as essential or practical for the community in which the CIT program is being implemented. (Bureau of Justice Assistance and U.S. Department of Justice, 2010; Compton et al., 2010).



Some of the roadblocks to implementation of the original Memphis CIT model with full fidelity include lack of financial resources in the community, not enough collaboration between mental health and law enforcement, size of the community, and local policies related to law enforcement's response to mental health calls that may not be adequately developed or implemented (Compton, et al., 2010; Council of State Governments, 2010). For example, because the original model was developed in an urban community, i.e., city of Memphis, the model may be difficult to implement in rural communities. Many jurisdictions have made modifications to the original CIT program to address the unique needs of a community. Most continue to call the model "CIT", although, a recent recommendation from stakeholders and policy developers has been to refer to all programs, including CIT and its variations, as "specialized policing response" programs (L. Usher, personal communication, 2012). For purposes of this study, unless it is necessary to make a distinction, any model designed to address the law enforcement's response to mental health calls will be referred to as a "specialized policing response" (SPR) program.

**A need to research the issue of variation within specialized policing response models to guide policy.**

According to Bureau of Justice Assistance and U.S. Department of Justice publication (2010) "Beyond a commitment to collaboration...little is known about the steps law enforcement professionals and community members need to take to tailor other jurisdictions' models to their own distinct problems and circumstances." In order to guide policy development in the area of jail diversion at the level of first encounter between an individual with mental illness and law enforcement, it is important to determine patterns

of variations in SPR models and how the variations relate to each individual community's characteristics.

**The issue of SPR police officers' job satisfaction.**

There is research evidence that CIT improves officer-level outcomes. A survey of CIT officers found that they were more prepared when responding to individuals with mental illness than non-CIT officers (Borum, Deane, Steadman, & Morrissey, 1998). CIT training has also been reported to improve attitudes of police officers toward people with mental illness and improve officers' de-escalation and communication abilities (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006). Hanafi, Bahora, Demir, & Compton (2008) found that CIT police officers perceived to have greater knowledge of mental illness and greater confidence in their skills.

One way to understand how deviation from the original CIT model may or may not be desirable, is to explore whether SPR Police Officers' job satisfaction relates to the deviation of an SPR program's from the original CIT model. If the rating of job satisfaction is higher across programs that do not deviate from the original CIT model, other SPR programs may want to adhere more strictly to the original CIT model. This study attempts to provide a preliminary insight into the issue by exploring the relationship between police officers' job satisfaction and an SPR program's degree of deviation from the original CIT model. The local law enforcement administrator that this author contacted in order to get a better idea of how easy it would be to survey police officers about their job satisfaction, advised that, given this study's resources, it would be very difficult to obtain an adequate response rate and an accurate measure of job satisfaction directly from the police officers. This is because officers may fear that their

responses may be discovered by their supervisors and subsequently affect their job performance evaluation. Therefore, a rating by CIT Coordinators' of SPR police officers' job satisfaction in their corresponding programs, was used as an indirect measure of the job satisfaction variable.

## **Theoretical Framework**

### **Diffusion of innovation theory and research.**

To support its hypotheses, this study used the theory of diffusion of innovation (Rogers, 2003) to illustrate that spread of an innovation, such as the original Memphis CIT model, can follow predictable patterns, specifically as it applies to the issue of “re-invention” (Rogers, 2003) of the original model by communities. The diffusion of innovation theory attempts to explain how innovations are adopted by different communities. An innovation is an “...idea, practice, or object perceived as new by an individual or other unit of adoption” (Rogers, 2003, pg. 36). The theory focuses on ways in which innovations are spread, importance of communication between users, and understanding how different users adopt original innovations. Re-invention is defined as “the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation” (Rogers, 2003, pg. 17). The theory encourages reinvention of products or behaviors so that they can better address the unique needs of individuals and groups (Rogers, 2003).

Much of the concern of stakeholders across the nation who are invested in making the SPR programs work for their communities, is the fact that the original Memphis model, if modified or not fully adopted, will not produce the same successful outcomes in a community in which it operates (S. Cochran, personal communication, August 13,

2012; Compton, Broussard, Hankerson-Dyson, Krishan, Stewart, Oliva, & Watson, 2011). Sam Cochran, one of the original founders of the CIT program, has expressed concerns that the model will become diluted and lose its meaning when jurisdictions deviate from its specific elements (S. Cochran, personal communication, 2012).

Most innovations, including CIT, can be broken down into their constituent elements; this process can then be used to measure the degree of reinvention from a core structure. The core elements of an innovation consist of the features that are responsible for its effectiveness. The diffusion of innovation research shows that reinvention occurs for many innovations (Rogers, 2003). For example, research on diffusion of drug abuse prevention program, DARE (Drug Abuse Resistance Education) showed a high degree of reinvention; some schools omitted the original components of the program because they did not need the component. For instance, many schools did not incorporate the lesson on discouraging children to join gangs because the gang problem did not exist in their communities (Rogers, 2003). In another example, reinvention was observed in 55 out of 104 adoptions of original innovations by mental health agencies in California (Rogers, 2003).

Research suggests that a higher degree of reinvention leads to a faster rate of adoption as well as a higher degree of sustainability of an innovation (Rogers, 2003). The diffusion of innovation theory may be helpful in understanding the phenomenon of how the original CIT program has been adopted and “reinvented”. It may help to explain why the deviation from the original model should not be seen as a breach of fidelity, but rather as a sign that the original program can be generalized across variety of communities.

The theory of diffusion of innovation may help to clarify why variations across SPR models occur in different communities and whether those variations may be a result of a re-invention that is typical of the process and not necessarily detrimental to the communities in which the variations occur. If the relevant stakeholders, such as the CIT Coordinators, find value in adopting and modifying the original CIT model, this will support the principle of reinvention as described in the diffusion of innovations model. A pattern of variations in the original CIT model may encourage further discussion and research to investigate whether strict adherence to the original model and absence of additions or omissions to the model's components, is critical to the effectiveness of the program or whether modifications in the original model are acceptable and still allow the program to reach its goals. According to diffusion of innovation theory, it is most likely that an innovation will be modified to fit the needs of a community as opposed to the community changing its characteristics in order to better adopt the original innovation.

### **Statement of the Problem**

It is apparent that there is a growing number of variations of specialized policing response programs and deviations from the original CIT model. Members of law enforcement and mental health agencies, mental illness advocates, individuals with mental illness and their families, want information that would answer the following questions (Compton, Broussard, Hankerson-Dyson, Krishan, Stewart, Oliva, & Watson, 2012; Reuland, 2009; Watson, Ottati, Draine, & Morabito, 2011):

- which community characteristics fit specific SPR model components what elements of the original CIT program are critical to the program's success regardless of community characteristics

- whether mental health and community resources, both financial and human, affect the choice of SPR program components and,
- how much the state and/or local policies and department leadership variables contribute to the nature of an SPR model that is adopted.

Very few studies have examined community characteristics and related model variations (Compton, Broussard, Hankerson-Dyson, Krishan, Stewart, Oliva, & Watson, 2012). A number of experts in the field of specialized policing response (L. Usher, personal communication, August 14, 2012; S. Cochran, personal communication, August 13, 2013; A. Watson, personal communication, August 15, 2012), suggest that the issue of SPR model variations and the importance of finding out why variations happen is one of the most pressing issues being tackled in the area of law enforcement's response to mental health calls.

### **Purpose and Importance of the Study**

This study examines a relationship between the degree of variation within specialized policing response models and the corresponding community characteristics. In order to determine the type and degree of deviation, the original CIT model was used as a reference to identify components of an SPR model; any diversion from the original Memphis CIT model, by addition or omission of components, determined the degree of deviation. The community characteristics were identified based on recommendations included in previous research (Council of State Governments, 2010, Compton et.al., 2010, Watson et.al., 2008) and included demographical characteristics (e.g., population density reflecting rural vs. urban communities, average socio-economic status), prevalence of unique mental health populations (e.g., homeless people), accessibility of

mental health resources, collaboration between mental health and law enforcement agencies and departmental policies. By determining whether there is significant relationship between the two variables i.e., degree of deviation of an SPR program from the original CIT model and characteristics of a community in which the program operates, the results of this study will guide the criminal justice and mental health policies in the area of specialized policing response programs and will provide insight into how specialized policing responses can be tailored to the needs of a particular community. The study will utilize a survey methodology to answer research questions that have been derived from important issues commonly raised in literature on specialized policing response models and by relevant stakeholders in the field of law enforcement and mental health.

### **Hypotheses**

The study addresses the following hypotheses:

**Hypothesis 1.** Communities with higher population densities (non-rural communities) will be more likely to adopt the original CIT model.

**Hypothesis 2.** The lesser the availability of mental health resources in the community, the greater the deviation of an SPR program from the original CIT program.

**Hypothesis 3.** The greater the community need to address a special subset of mentally ill population (e.g., mentally ill who are homeless), the more likely an SPR program is going to deviate from the original CIT model.

**Hypothesis 4.** Communities that have access to extensive department policies on law enforcement's response to people with mental illness will deviate less from the original CIT model.

**Hypothesis 5.** The more the top administrators within criminal justice and mental health agencies support an existing SPR program, the more likely it is that an SPR program will not deviate from the original CIT model.

**Hypothesis 6.** The less an SPR program deviates from the original CIT model, the more likely SPR police officers will be satisfied with their jobs.



## CHAPTER 2

### Review of Literature

#### **Deinstitutionalization of Mentally Ill Individuals**

“People with mental illness are falling through the cracks of this country’s social safety net and are landing in the criminal justice system at an alarming rate” (Council of State Governments, June 2002, p. xii). The high rate at which mentally ill individuals come in contact with criminal justice system has not always been a problem. Historically, before 1950s, people with mental illness were institutionalized in large state mental hospitals. The traditional treatments for mental illness consisted of procedures such as lobotomy, electroconvulsive therapy, long- term isolation under strict supervision, and physical restraint (Richter, 2007). The mentally ill in the institutions were being more managed than treated, and the institutionalization was perceived by society as inhumane. In the early 1950s, the evolution of new drugs that relieved symptoms of mental illness opened up a possibility of mentally ill individuals being treated outside of the institutions. Assuming that the individuals could access treatment and remain compliant with their medication regimens, it was desirable to have them return back to the community and to their families (Lamb & Bachrach, 2001; Lamb & Weinberger, 2002; Steadman, Monahan, Duffee, Harstone, & Clark Robbins, 1984).

Accordingly, the federal government began to approve initiatives to develop community-based treatment alternatives. In 1964, Congress passed a Community Mental Health Centers Act, which encouraged community-based support for individuals with mental illness (United States Code Title 42, 1964). The idea of moving the treatment of

mentally ill individuals into the community was appealing given the growing costs of institutionalization; a conservative estimate of hospitalization of mentally ill individuals averaged over \$300 million per state. As a result of the community-based support initiatives, the hospital population decreased from 500,000 to 300,000 over a period of 5 years and about 92% of people with mental illness were released back into the community by 1994 (Torrey, 1997).

Despite its noble and progressive goals, deinstitutionalization was not well planned and did not take into account ensuing problems once an individual with mental illness returned into the community. First, an individual with mental illness may not always have had strong ties to his or her family and, even if supported by family members for a while, the family might have realized that a burden of caring for the individual was more than could be handled. Second, without support, supervision, and comprehensive mental health services, individuals with mental health issues were not always capable of following their medication regimens and decompensated quickly. Even if they did take their medication, the medication side effects inhibited their ability to function effectively in the society. The return of symptoms prevented the individual from taking care of self, maintaining personal safety, employment, and housing (Abramson, 1972; Bonovitz & Bonovitz, 1981; Lamb & Bachrach, 2001; Richter, 2007; Steadman, Cocozza, & Veysey, 1999). It is also possible that the stigma of institutionalization contributed to barriers that an individual with mental illness encountered when re-entering society.

The housing situation for mentally ill individuals was especially worsened by an increase in urban renewal and development projects, which eliminated many low-rent

options. Without affordable housing options, many individuals with mental illness ended up in a homeless condition and out on the street. There is evidence that a third to a half of all homeless adults in the United States have major mental illness and up to 75% have major mental illness, substance abuse or both (Lamb & Bachrach, 2001).

Whether homeless or not, individuals with severe symptoms of mental illness who end up in public places quickly draw attention of the community's citizens and law enforcement. Public concerns range from sympathy to complaints about public nuisance or serious crime in which the mentally ill individual may be likely to commit. The high rate at which police detain mentally ill individuals has drawn the attention of mental health and law enforcement professionals, advocates, and policy makers. The disproportionate rates of arrest of mentally ill and corresponding jail placement have been termed by some as "criminalization of mental illness" (Abramson, 1972; Fisher, Silver & Wolff, 2006; Perez, Leifman, & Estrada, 2003; Steadman, Cocozza, & Veysey, 1999).

### **Criminalization of Mental Illness**

In his paper titled "Criminalization of Mentally Disordered Behavior: Possible Side Effect of a New Mental Health Law," Abramson (1972) noted that law makers did not take into account society's tolerance for mental illness and its symptoms. "If the entry of persons exhibiting mentally disordered behavior into the mental health system of social control is impeded, community pressure will force them into the criminal justice system of social control" (Abramson, 1972, pg. 103). Already in 1972, there were concerns about people with mental illness being increasingly subjected to arrest and criminal prosecution (Lamb & Weinberger, 2001; Lee-Griffin, 2001; Sigurdson, 2000). In 1999 the U.S. Surgeon General termed untreated mental illness as the "silent epidemic

of modern times” which has inadvertently fallen on law enforcement and the courts (Richter, 2007). The criminal justice community has expressed concerns that the process of deinstitutionalization of mentally ill has occurred without any formal communication or consultation with law enforcement even though police officers had been seriously affected by the outcomes of the deinstitutionalization process (Richter, 2007).

It is clear that the disproportional incarceration of mentally ill, has taken place but, whether it has been caused directly by deinstitutionalization is a matter of debate among the experts in the field. Although the decrease in hospital population over the years correlated with increase in mentally ill population in jails, it has been difficult to prove via controlled methods that deinstitutionalization was responsible for this phenomenon. Some scholars proposed that the increase in mentally ill populations in jails was a function of an increase in crime by the general population at risk e.g., male baby boomers reaching criminogenic age in the late 1960s and 1970s (Steadman, Monahan, Duffee, Hartson, & Clark, 1984). The shift in increasing crime also coincided with an increase in rate of crimes that were punishable by imprisonment as well as an increase in average sentencing and mandatory minimum sentences. Overall, the authors concluded that an increase in incarceration of mentally ill individuals was most likely facilitated by communities’ reactions toward all types of marginal groups (Steadman et. al., 1984).

Regardless of the causes, encounters between mentally ill individuals and law enforcement have become a unique problem; neither law enforcement nor courts are qualified to handle the countless issues related to mentally ill entering criminal justice system. Once individuals with mental illness enter the system, the treatment options for symptoms of their mental health conditions are often limited and ineffective. National

surveys and state reports show, annually, 300,000 mentally ill people are confined to jails, prisons, and juvenile detention centers vs. 60,000 who are treated in mental health institutions. State prisons spend about 4.75 billion dollars annually to incarcerate nonviolent mentally ill inmates (Council of State Governments, 2002).

According to the U.S. Department of Justice (1999), the disproportionate incarceration of mentally ill individuals is not due to their higher tendency to commit crime. In fact, Cuellar and colleagues (2007) determined that mentally ill individuals are mostly arrested for nonviolent crimes. The researchers also found that individuals diagnosed with schizophrenia and psychoses were disproportionately arrested for drug crimes (Cuellar, Snowden, and Ewing, 2007). According to Stone (1997), 30% of jails reported incarcerating a mentally ill individual with no charges against them. A common reason provided by the criminal justice system for incarceration without a charge or for a minor violation is that there are simply no other places where mentally ill individuals can be placed. Torrey and colleagues (2010) found that whereas there is a shortage of psychiatric beds, there are plenty of jail and prison cells for individuals with mental illness to occupy. In 1955, there was one psychiatric bed for every 300 Americans whereas in 2005, there was one psychiatric bed for every 3000 Americans (Torrey et al., 2010).

In addition to well-documented evidence that jails and prisons do not improve the condition of mentally ill persons, incarceration of mentally ill individuals also imposes a burden on the criminal justice system. Mentally ill offenders have been found to recidivate at higher rates than other released offenders, remain in jails longer, and often require more intensive behavior treatment; further, they are more likely to commit suicide

and be abused by other inmates and/or staff (Pustilnik, 2005). Due to a need for more intensive staffing, use of psychiatric medications, psychiatric evaluations, and increasing number of lawsuits, incarceration and care for mentally ill inmates costs more than that of non-mentally ill inmates. Government allocation of resources for the care of mentally ill individuals in the criminal justice system is highly inefficient and many programs are ineffective (Pustilnik, 2005; Torrey, 2010). For example, officials in King County, Washington, determined that over the course of one year, 20 individuals were repeatedly hospitalized, jailed, or admitted to detoxification centers, which cost the county approximately \$1.1 million dollars (Council of State Governments, 2002). Such inefficiencies worsen the ability of both the mental health and criminal justice systems to properly allocate money toward treatment and disposition of individuals with mental illness who enter the criminal justice system.

### **Law Enforcement and Response to Individuals with Mental Illness**

#### **Prevalence of encounters between law enforcement and people with mental illness.**

Police officers have been coming in contact with mentally ill individuals at disproportionately high rates for years (Laberge & Morin, 1995; Teplin, 1983). Bonovitz and Bonovitz (1981) reported a 227% increase in police-citizen encounters involving mentally ill persons between 1975 and 1979. Crocker, Hartford and Haslop (2009) found in their study of official records for 767,365 individuals with and without serious mental illness that people with mental illness had a greater number of offenses, they reoffended more quickly, and were more often formally charged for a suspected offense. Teplin (1984) and Teplin (1985) found that five percent of the police-citizen interactions

involved a person suffering from symptoms of mental illness at the time of the encounter compared to a mean rate of psychosis in the general population of approximately two percent. Teplin (1984) and Teplin (1985) also claimed that mentally ill individuals were 20% more likely to be arrested for similar crimes than were non-mentally ill individuals.

Teplin's 1984 and 1985 research brought forth a question of whether police officers were more likely to arrest people with mental illness because they believed that mentally ill individuals needed to be removed from the community and confined through means of incarceration. But this stipulation has been challenged. Although Teplin (1984) and Teplin and Pruett (1992) claimed that officers are more likely to arrest individuals with a mental illness, Engel and Silver (2001) found that officers were actually less likely to do so. Furthermore, Teplin's 1984 and 1985 analyses did not statistically control for other factors known to influence police decision making, such as community, environmental, and organizational characteristics (Novak and Engel, 2005).

Research conducted on police officers' feedback about responding to mental health calls has revealed that officers do carry significant concerns regarding their ability to respond effectively (Wells and Schafer, 2006). Police officers are typically first, and often the only, community responders to the mental illness calls. Officers have been described as "psychiatric medics," "forensic gatekeepers," "street corner psychiatrists," and "amateur social workers" (e.g., Cumming, Cumming, & Edell, 1965; Menzies, 1987; Teplin, 1984). The responsibility of maintaining safety in the community places the police officers in a role of primary gatekeepers (Lamb et. al., 2002). Surveys of officers report that officers' common concerns include lack of training, inaccessibility of psychiatric services, the effort required to secure hospital admissions, poor relations with

medical and mental health service providers, scarce community-based referral options, and the lengthy time required to employ non-arrest resources (Borum et. al., 1998; Cooper et al., 2004; Dupont and Cochran, 2000; Finn and Sullivan, 1989). In addition, in one study, officers indicated that, when responding to a mental health call, they are most in need of access to information about an individual's past history of violence or suicide attempts. Officers also desire a quick on-site assistance by mental health professionals in assessing suicidal or hostile mentally ill persons (Gillig, Dumaine, Widish Stammer, Hillard, & Grubb, 1990). Obtaining information about a mentally ill person is extremely difficult due to protection of the person's privacy, and there are not enough mental health professionals on call that can respond promptly to the scene to assist officers in handling a mental health crisis Gillig, Dumaine, Widish Stammer, Hillard, & Grubb, 1990).

As much as police officers express lack of confidence about responding to mental health calls, individuals with mental illness express a similar level of anxiety about encountering police officers. A traditional police treatment of a mentally ill individual may consist of using authoritative commands, demands for compliance, use of physical means, and even use of weapons in order to gain compliance from an individual who resists. When confronted by police, the behavior of an individual with mental illness may escalate because of symptoms of paranoia, anxiety, and suspicion, especially in a presence of an authority (Richter, 2007; Watson et al., 2008). Ruiz and Miller (2004) identified at least three triggers that may increase the anxiety of a mentally ill individual who encounters a police officer: 1) fear of a stranger; 2) potential reluctance to cooperate with police orders; and 3) fear of uniform or intimidating presentation of some of the officers. Novak and Engel (2005) also found that mentally ill individuals were



significantly more likely to be disrespectful and resistant toward officers compared to non-mentally ill suspects. In turn, suspects who were disrespectful or resistant toward police officers were significantly more likely to be arrested compared to suspects who were not disrespectful or resistant (Novak & Engel, 2005).

The traditional police approach has unfortunately resulted in a number of tragic events involving wounding or fatally shooting an individual with mental illness. Tragic outcomes of incidents involving officers' use of deadly force against mentally ill individuals have been reported. Although these incidents may be rare, they are often intense in nature and evoke strong emotions among community members. An excerpt from a media report reads:

On October 29th, 2001, four police officers responded to the desperate call made by a sister who could no longer control her 38-year-old brother. The sister had originally called mental health authorities for help, but had been transferred to 911 by the operator. Her brother was diagnosed with bipolar disorder thirteen years earlier and recently had manifested paranoia and delusions in response to the September 11th terrorist attacks. She begged the police to help him, not hurt him. Officers found the man in the back yard waving his screwdriver. He did not obey their orders to drop the weapon. After being shot with a beanbag gun, the man climbed on top of a doghouse still waving the screwdriver. Officers opened fire, one emptying his entire clip and reloading. In its entirety the incident lasted five minutes. Fourteen shots, six in the back, were fired and the brother was dead. The police department claimed the shooting was justified. (Khanna, 2004)

Media reports, such as the one above, often portray police officers as unsympathetic and insensitive in the eyes of a mental health community stakeholders. Most research shows that officers want to learn more about mental illness and available mental health resources so that they can avoid jail disposition and link the individual to appropriate mental health services (Wells and Schafer, 2006). Although research links some police officers' personal characteristics to a greater likelihood of an arrest of a

person with mental illness, more evidence points to a combination of variables including officer's training, seriousness of crime, policies on detention of a person with mental illness, department's presence or absence of guidelines with regards to mental health calls, presence of bystanders or active request to press charges against the mentally ill offender by another citizen, and availability of mental health resources (Watson et al., 2008).

### **Police officers characteristics and criminalization.**

Patch and Arrigio (1999) point out that individual officers have an incredible power to determine to which system a mentally ill individual will be directed. Police officers also have an authority to influence the extent to which the execution of that decision will be successful. Officers' attitudes in regards to the mentally ill individual may be influenced by the general stigma toward mental illness that exists in society. Watson et al., (2004) examined how a label of mental illness, along with attitudes and beliefs that the label evokes, influences police officers' response to citizens. They found that officers were less likely to investigate and take action on behalf of victims with mental illness; they were also less likely to act on information provided by victims or bystanders with mental illness, unless they first verified the account with others.

Due to highly publicized incidents of criminal acts committed by mentally ill individuals, the officers may falsely believe that persons with mental illness are more dangerous and more violent (Mulvey, 1994; Phelan, Link, Stueve, & Pescosolido, 1999). There is indeed evidence that some people with serious mental illness, particularly those who are psychotic and experiencing command hallucinations and/or not taking their

medication, are significantly more dangerous than persons in the general population (Ruiz & Miller, 2004).

### **Situational factors and criminalization.**

A number of studies suggests that, in addition to the officer's attitude toward a person with mental illness, situational factors pertaining to a mental health call, such as seriousness of crime, play a role in determining police officers disposition decision. It has been found that officers are more likely to arrest individuals with mental illness when there is evidence of a crime, when they feel that an individual would be inadmissible to a hospital, when public encounters exceed community's tolerance for deviant behavior, and when it is likely that the person will continue to cause a problem. Also, less experienced officers are more likely to arrest persons with mental illness than more experienced officers (Watson et al., 2008).

### **Organizational factors and criminalization.**

The degree to which an officer has been trained or educated about mental illness in the police academy has been found to contribute to the disposition outcome of the mental health call. The law enforcement organizational factors, such as the philosophy of the department and how much training the department allocates to topics of mental illness, contribute to how an officer may handle a call. Officers who are less trained tend to perceive more danger as opposed to officers who have had more prior contact with persons with mental illness (Reuland, 2007).

Some departments want to honor the local government leaders' demands to reduce crime and fear of crime and institute "zero tolerance" policies, leading to an arrest of people who commit offenses such as loitering, urinating in public, and disturbing

peace. According to the Bureau of Justice Statistics (2006), over one quarter of the inmates with mental illness in local jails were incarcerated for a public order offense. Additionally, in some cases, officers' discretion may be affected by policy that mandates an arrest automatically if an individual has committed a major crime (Watson et al., 2008).

Many departments may not have a formal policy for responding to mental health calls. Deane, Steadman, Borum, Vaysey, & Morrisey (1999) found that 55% of departments lacked specialized procedures for how police officers should handle mental health incidents. Without specialized training, officers may perceive the behaviors of mentally ill individuals as typical, dangerous, and needing arrest (Lamb et al., 2002; Pandiani, Banks, Clements, and Schacht, 1999). Another study found that 50% of officers indicated that their department did not provide guidelines on how to manage persons with mental illness. Of those departments that did report having a policy, 11% indicated that it was forced as a result of a serious incident involving a person with mental illness (Ruiz and Miller, 2004). A lack of policy or guidelines may lead to arrest as a response with which officers are familiar, in which they have more control, and one that they think will lead to an appropriate disposition (Ruiz and Miller, 2004).

Traditional police work and organizational policies and procedures also may place pressure on the officers to be available on patrol. "Any interval of time spent on a call that exceeds 30 minutes, removes an officer from being available to assist in other calls and draws the department supervisor's attention to the officer's efficiency in responding to calls" (Hoover, 2007, pg.6). The time that an officer may need to spend on a mental health call is fairly significant, unless mental health resources, to which the individual

can be transferred without a problem, are immediately available. The most time-consuming disposition occurs when law enforcement transports an individual to an emergency medical facility and waits for medical clearance or admission (Reuland, Schwarzfelt, & Draper, 2009). Patrol officers frequently monitor the committed individual until a bed in a hospital becomes available. And if an officer decides to involuntarily commit an individual (i.e., hospitalize the individual against his or her will) the required paperwork is extensive and exceptionally time consuming.

Given the time factor, the decision to arrest an individual with mental illness is much more attractive to an officer than an attempt to hospitalize. Green (1997) found that an average hospitalization commitment took 2.5 hours in comparison to less than an hour for an arrest. The scarcity of mental health supports in some communities and/or weak linkage between mental health and law enforcement are barriers to a quick transfer of an individual with mental illness from law enforcement to a mental health facility (Dupont and Cochran, 2000; Lurigio & Swartz, 2000; Perez et al., 2003).

#### **A need for officer training.**

Literature in the area of police response to people with mental illness emphasizes the importance of officer training, especially when it comes to recognition of symptoms of mental illness upon arrival on scene during a mental health call. Despite the well-intentioned model of community policing that many departments want to adopt, most departments do not provide specialized mental health training for their officers. The training that officers do receive consists of emphasis on safety of the officer and the public at all costs. When the citizen's action is unpredictable, which may manifest in high degree of erratic behavior, police officers enter a protective mode, which typically

involves drawn weapons and readiness to use physical means to control the individual (Richter, 2007).

Police officer training should focus on strategies that are effective in de-escalation of a person with mental illness and on reducing the stigma associated with mental illness. “Only broadly conceived training program which deals with officers’ stereotypes of mentally disturbed people can affect tactical decisions. So long as the officers hold on to the ideas that mentally disturbed people are completely irrational and cannot be reasoned with, verbal tactics will play a minor role, sometimes being only a ploy to facilitate physically subduing the subject” (Bailey, Barr, & Bounting, 2001, pg. 345).

Another critical component of officers’ training has to do with familiarizing officers with mental health resources and options. In a study examining dispositional decisions with mentally ill, Cooper, McLearn, & Zapf (2004) found that in their sample of 92 officers only three out of 10 were aware of a mental health liaison in their community. If officers do not know how to secure mental health resources or if they are not able to find mental health resources that are immediately available, they may choose a path of the criminal justice system instead of jail diversion. Police officers are discouraged by the limited availability and accessibility of the mental health resources to which they can direct a mentally ill person for treatment. Several studies have found that officers want to link persons to mental health services but a relatively large portion of officers is dissatisfied with the assistance and cooperation they receive from mental health providers (Borum, et al., 1998; Cooper et al., 2004; Dupont and Cochran, 2000; Green, 1997; Wells and Schafer, 2006). Ensuring linkage and collaborative relationship between mental health providers and law enforcement, as well as educating the officers

about existence of mental health resources, are critical in increasing the likelihood that a person with mental illness will be directed to treatment.

Watson and colleagues (2011) examined the impact of specialized police officer training, availability of mental health services, and saturation of officers who have been specially trained on how to resolve calls involving persons with mental illness. The authors examined the difference between police districts along the dimensions of district mental health resource availability (low vs. high) and district saturation of officers (low vs. high). The authors found that officer training increased referrals to mental health services in districts with greater availability of mental health services. In districts with low mental health service availability, higher officer saturation increased referrals to mental health services. No effects were found for arrest as an outcome of a call. These results show that a combination of officer training and mental health resources are necessary for a successful intervention for persons with mental illness.

### **Jail Diversion Programs for Mentally Ill Individuals: Pre- vs. Post- Booking Programs**

Overcrowded prisons and jails typically do not have the resources to ensure an availability of effective mental health treatment and appropriate medication (Council of State Governments, 2002). When a person with mental illness experiences a crisis in the community, neither the police nor the emergency mental health system alone can serve the individual effectively; it is essential for the two systems to work closely together. Since the realization that individuals with mental illness do not fair well in jails and their prognosis worsens without proper treatment, the mental health and criminal justice stakeholders have been advocating for jail diversion of mentally ill individuals.

The goal of jail diversion is to lead individuals with mental illness away from incarceration by preventing incarceration or shortening its time and to provide immediate access to treatment resources (Draine & Solomon, 1999). The planning of a diversion process, is not focused on transferring mentally ill individuals from one system into another, but on integrating the two systems in order to provide the most appropriate services to the individuals (Draine & Solomon, 1999).

The first opportunity for a mentally ill individual to be diverted is during a pre-booking diversion process, which occurs at the point of contact with law enforcement and prior to filing any formal charges against the individual. Most pre-booking programs require specialized training for police officers and a 24-hour crisis center to where police officers can bring a mentally ill individual in need of treatment. Post-booking diversion programs identify and divert offenders after they have been booked, while they are either in jail or in arraignment court (Cowell, Broner, & Dupont, 2004).

Lattimore, Broner, Sherman, Frisman, & Shafer (2003) concluded that subjects who were diverted at the pre-booking sites were more educated, more involved with employment, and generally more satisfied with their lives, health, and finances. In comparison with subjects who were diverted at the post-booking sites, individuals who were pre-booked, were often less involved in treatment and other services, less likely to use emergency rooms for mental health problems, less likely to be prescribed medication, and less seriously involved in drugs and alcohol. The researchers concluded that post-booking programs might be best for individuals with mental health and substance abuse who have a prior criminal history because the post-booking programs are better equipped



to handle more serious mental health problems that have led to repeated contact with criminal justice system.

The pre-booking programs have been associated with significant savings on the criminal justice side and higher treatment costs on the mental health side. In a study by Cowell, Hinde, Broner, & Aldridge (2015), the authors used a jail diversion model in San Antonio, Texas to study data on staff costs, client contacts, planning, and implementation across three types of diversion: pre-booking police, post-booking bond, and post-booking docket. The researchers found that the pre-booking diversion cost was \$370 per person and 90% of this cost was incurred by community mental health agencies for short-term monitoring and screening. Post-booking bond and docket diversion cost \$205 per person with the majority of the cost incurred by the courts for court decisions. Although pre-booking diversion programs may seem to make more sense because they divert an individual at an earlier stage, the post-booking programs have a great value in cases where the law mandates the arrest based on seriousness of the crime, and in situations in which an individual with mental illness has slipped inadvertently into the criminal justice system. The post-booking diversion programs may also benefit individuals presenting with more severe symptoms and requiring intense supervision and supports, not only from mental health, but also from criminal justice. Post-booking programs provide more oversight of an individual (Lattimore, et al., 2003), and tend to also be more coercive in nature as evidenced by greater supervision by courts and other diversion or case management personnel. What is important to understand is that that pre- and post-booking programs should not be seen as competing with each other for effectiveness. Rather each one fits some individuals better than others. Based on the information about

the benefits of both the pre- and post-booking programs, both programs are needed and should be considered on case-by-case basis.

**Policy recommendations for jail diversion programs: The criminal justice/ mental health consensus project.**

As a result of problems related to criminalization of mental illness and options related to jail diversion that have seemed to alleviate those problems, state legislators, mental health advocates, and criminal justice representatives, gathered together to generate what was they called the Consensus Project (Council of State Governments, 2002). This nation-wide project was a unique effort to define measures that could be used when creating a response to people with mental illness who come in contact with the criminal justice system. Because the present study focuses on recommendations related to the police officers' response to people with mental illness at a pre-booking level, only those recommendations from the Consensus Project that are concerned with pre-booking options are described below.

The Consensus Project recommendations include ensuring that first responders are trained in the area of mental illness and resources related to it. This includes training for emergency dispatchers, as they often receive mental health calls, have to recognize them as such, and communicate the type of call to the responding officer. Equally important is the training for law enforcement administrators; the more aware the law enforcement leadership is of the challenges related to police response to mentally ill individuals, the more likely they will develop and encourage best-practice policies and procedures for police response to people with mental illness (Council of State Governments, 2002).

The most important and strongly emphasized recommendation stated in the Consensus Project is to establish a collaborative relationship between law enforcement and mental health agencies. This includes contracts or agreements between the two agencies that delineate each other's responsibilities and allow for exchange of information and resources. The authors of the Consensus Project strongly encourage formalization of collaborative contracts because they help sustain any potential changes in agency leadership and personnel, and provide a way to systematically evaluate program's successes and challenges (Council of State Governments, 2002).

### **Law Enforcement Training Models**

#### **Specialized policing response programs for mentally ill individuals.**

The Consensus Project provided a general guide and some core principles but lacked operational specifics on how a community could develop a program that addressed issues related to mental health calls. The emergence of police-based models, commonly referred to as specialized policing response (SPR) models provided a more specific focus on improving outcomes of encounters between people with mental illness and law enforcement and on diversion of mentally ill from jail into treatment.

In a national survey of police departments, Deane et al., (1999), reported that about 88% departments provided some training for the officers, but only 45% of those departments provided more specialized response training in the area of mental illness. Where specialized programs existed, they represented one of the three following models: 1) police-based specialized police response where sworn officers with special mental health training respond to mental health crisis in the community; 2) police-based mental health response in which mental health professionals (not sworn officers) are employed

by the police department to provide on-site and telephone consultations to officers in the field; and 3) mental health-based specialized mental health response in which a collaborative agreement is generated between law enforcement and mobile mental health crisis team; the mobile crisis team operates independently of the police department (Deane, Steadman, Borum, Veysey, & Morrissey (1999).

Hails and Borum (2003) updated the findings of Deane's et al., (1999) survey and examined the nature and extent of training that police agencies provided to police officers on handling calls involving people with mental illness. The authors found that almost all of the agencies responding to the survey provided some training pertaining to the topic, but that the time allotted seemed very limited and fell well below the 16 hours recommended in 1997 by the Police Executive Research Forum. The overall proportion of agencies that reported having a specialized response was lower (32%) than in the 1996 survey in which the largest difference was in the number of agencies using a mental health-based specialized mental health response model. This was the most commonly reported model in the 1996 survey; whereas in 1999, only 8% reported utilizing such a model. The researchers suggested that this might have been due to the mental health budgets reductions and to the lack of sufficient data to support the effectiveness of the mobile crisis team unit. The use of the police-based specialized mental health response model was very similar between the two surveys. The use of the police-based specialized police response model had increased considerably; the percentage of the programs reporting use of this model increased from 3% in the 1996 survey to 11% in 2003. The authors concluded that this change was likely due to the rising popularity of the Crisis Intervention Team (CIT) program (Borum, 2000; Cochran, Deane, & Borum, 2000;

Dupont & Cochran, 2000). Compared to other programs, the Memphis CIT program had a very low arrest rate for mental disturbance calls, a high rate of utilization by patrol officers, a rapid response time, and resulted in frequent referrals to treatment (Steadman, Deane, Borum & Morrissey, 2000). Since the Hails and Borum (2003) study, the most recent statistics show that the number of specialized policing response programs of all three kinds has grown from about 30 in 1996 to about 2,6000 in 2015 (Reuland et al., 2009; University of Memphis CIT Center, 2015).

Specialized Policing Response (SPR) programs offer some meaningful benefits. Research shows that a specialized policing response improves officers' understanding of how mental illness may affect overt behavior (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006). SPR programs increase the frequency with which law enforcement officers transport individuals to mental health facilities for evaluations and treatment. Departments employing specialized responses to people with mental illnesses also report decreased injuries to officers (Dupont and Cochran, 2000; Reuland et al., 2009). Individuals referred to mental health treatment by law enforcement officers experience fewer subsequent contacts with the criminal justice system than individuals who were not referred to services (Steadman & Naples, 2005). Specialized law enforcement-based response programs reduce certain costs incurred by law enforcement agencies, including high-cost SWAT call-outs (Bower & Petit, 2001; Dupont and Cochran, 2000).

In an effort to compare the effectiveness of the basic types of the SPR models, Steadman, Williams Deane, Borum, and Morrissey (2000) compared three different police response programs: 1) Birmingham, AL which employed a police-based specialized mental health response model; 2) Memphis, TN which employed a police-based

specialized police model; and 3) Knoxville, TN which employed a mental health-based specialized mental health response model. The authors examined a sample of about 100 police dispatch calls made over one year span and found statistically significant differences across the three sites. Furthermore, the Memphis program, also known as the Crisis Intervention Team (CIT) program, had the most active procedures for linking people with mental illness to mental health treatment resources and had the highest percentage of dispositions that resulted in direct transport of an individual to mental health treatment rather than to jail. With reference to the other two models, although effective in many ways, they produced excessive and unreasonable crisis response times. In another study by Borum et al. (1998) officers from jurisdictions with a police-based, specialized police response program and the mental health based specialized mental health response program rated their programs as being moderately effective; the mental health based specialized mental health response program had significantly lower ratings.

Steadman, Stainbrook, Griffin, Draine, Dupont & Horey (2001) designed a study to determine which components made an SPR programs effective. The researchers examined three pre-booking diversion programs and identified elements of those programs that appeared to be critical to their success. The variables that were determined to increase the effectiveness of an SPR program included a no refusal, drop-off center to which the officers could bring mentally individuals in crisis and transfer them into the care of the emergency staff at the center. "Having such a site directly addresses past difficulties for police in accessing mental health services in response to a psychiatric crisis" (Steadman et al., pg. 221). The necessity of the no-refusal drop off site was also supported in a study by Deane et al., (1999) which found that, in a survey of 174 police

departments, officers, who had access to a drop-off center, were significantly more likely than those who did not to describe their programs as being effective. In addition the center helped the officers to discriminate between mental health, substance abuse, and other crises, and allowed a single point of entrance to both mental health and substance abuse systems.

Another identified component of an effective SPR program consisted of police-friendly policies and procedures that emphasize the no-refusal standard as well as an intake process that minimizes police officer's time at the drop off center. Steadman et al. (2001) pointed out the importance of a legal foundation in the policy of a specialized crisis response program. Each of the three programs visited by the authors had established legal foundations for accepting and detaining an individual who may or may not have pending charges. In one of the sites, the policy allowed police officers to facilitate the initial involuntary hospitalization detention without the required review by a mental health magistrate delegate.

An intensive cross training between mental health and law enforcement has also been found to be critical to the success of an SPR program. The cross training may consist of a shared activity between a mental health provider and a law enforcement officer. Linkages to community services, including intensive case management for the individuals experiencing mental health and substance abuse problems, are critical to the success of an SPR program as well (Steadman, et al., 2001).

#### **The original CIT model.**

Crisis Intervention Team (CIT) model, a police-based specialized police response model, has been identified as the most successful SPR model (Borum et al., 1998;

Steamdan et al., 2000). The CIT model has been most comprehensively developed, evaluated, and researched among the various SPR programs and is the most widely adopted approach across the country (Watson et. al., 2009). There are close to 2619 local and 335 regional CIT programs operating in the United States according to CIT Center in Memphis TN (<http://www.cit.memphis.edu>).

In Memphis, the CIT program led to significant improvements in desirable outcomes; it has reduced police officer injuries, arrest rates, and length of time that the officers spent on mental health calls. In other jurisdictions, lower recidivism rates for the mentally ill individuals and a greater likelihood of diversion to treatment have been attributed to the CIT model (Bahora, Hanafi, Chien, & Compton, 2008; Compton, et al., 2006; Dupont, Cochran, and Pillsbury, 2007). With respect to officers' behavior, results of surveys of CIT officers and non-CIT officers show that CIT training correlates with an improvement in the CIT officers' belief that they have adequate skills to respond to people with mental illness as compared to non-CIT trained officers. CIT training has also been associated with an increase in officers' comfort with behavior of individuals with mental illness. Compton et al., (2006) found that CIT officers reported improved attitudes toward behavior of individuals diagnosed with schizophrenia, were more open to treatment programs for schizophrenia, and were more knowledgeable about the illness in general. Borum et al. (1998) also found that CIT officers were more likely to find the mental health system and supports to be helpful and felt more prepared for responding to mental health calls compared to non-CIT officers. Literature also provides evidence that CIT police officers are less likely to stereotype and stigmatize a person with mental



illness than non-CIT officers and are more likely to show empathy toward mentally ill individuals (Dupont et al., 2007).

With respect to use of force by officers during encounters with mentally ill individuals, Skeem and Bibeau (2008) found that CIT officers only used force if there was a high potential for violence on the part of a mentally ill individual. The CIT officers' disposition of cases consisted of 74% referral to hospitalization and 4% arrest. The study did not include a comparison group of non-CIT trained officers so it cannot be concluded that non-CIT trained officers would not have resolved the mental health calls in a similar manner; there could be a number of other variables, such as departmental policies, that might have affected the disposition decision of both the CIT and non-CIT officer with reference to mentally ill individuals. The study did show, however, that at least in a case of CIT officers, law enforcement was not as eager to use weapons during encounters with mentally ill individuals and preferred to refer individuals to mental health treatment rather than to arrest them. A 2009 study by Compton, Berivan, Demir Neubert, Broussard, McGriff, Morgan, & Oliva, did have a comparison group and found that CIT officers' responses to vignettes consistently endorsed use of less physical force and that CIT-trained officers chose less force in one of the scenarios than non-CIT trained officers.

Although the Memphis CIT team reports success with reducing arrests of mentally ill persons, this result has not been supported consistently (Dupont, et al., 2007, Teller et al, 2006; Watson et al., 2009). For example, Watson et al. (2009) did find that the CIT officers were likely to divert individuals with mental illness to treatment, but there was no difference in rates of arrest between CIT and non-CIT officers.

***The fidelity of the CIT model: Importance and benefits.***

Given the popularity of the original CIT model, it is not surprising that when jurisdictions deviate away from the model, it causes a great deal of concern to the relevant stakeholders i.e., policy makers, advocates, individuals with mental illness and their families, mental health professionals, and members of law enforcement. It is natural to ask whether communities replicating CIT need to replicate it with 100% fidelity or whether some variations are allowed as long as the critical elements, mission, and philosophy remain the same. Many jurisdictions utilize a combination of a CIT and other types of specialized policing response models such as a mobile-response unit that includes a mental health professional who co-responds with police officers to mental health calls (Reuland, 2004; Reuland and Cheney, 2005; Watson et al., 2008).

For example, more recently, the police department in Portland, Oregon, has adopted some of the components of the Memphis-based CIT model. However, contradictory to the recommendations of the original CIT model that officers should volunteer to participate in the program, Portland made a decision to train *all* of the officers in the CIT curriculum. This stemmed from a belief that all officers should be able to effectively respond to mental health calls because a CIT officer may not always be available to answer a call, especially in large jurisdictions where the saturation of CIT officers is low compared to the mental health population. Portland's decision resulted in a deviation from the original CIT model in which, the police officers volunteer for the specialized CIT training. The voluntary participation ensures that officers are willingly accepting the challenges of working with people with mental illness instead of being forced to participate in the program (Cochran et al., 2000). The original founders of the

Memphis program emphasize that CIT is more than training; it requires the officers' commitment to the model's mission and acceptance of its core principles.

Major Sam Cochran expressed criticism of the requirement that all officers need to be trained and stressed the importance of carefully selecting officers who can skillfully respond to mental health crisis calls (Bernstein, 2006; Cochran, 2004; Compton et. al, 2011; Hails and Borum, 2003). Compton and colleagues (2006) supported the notion that not every officer is ready to take on the role of a CIT responder. For example, it has been found that younger or less experienced officers are less effective in implementing the CIT components (Watson et al., 2008). Compton et al. (2006) suggested a benefit a voluntary participation in in the CIT program because there is some evidence that those self-selecting into the program may already have an interest in learning about mental illness and be more empathetic toward mentally ill individuals; perhaps officers who self-select, have a past personal or work-related exposure to mental illness or psychiatric care. Studies show that approximately three quarters of CIT officers report having volunteered for CIT training and about one quarter reports having been assigned to it (Compton & Chien, 2008).

The dilemma of CIT officer selection (voluntary vs. required) illustrates the issue of fidelity to the original CIT model that is seen as essential by so many in the field and especially those who originally developed the program. It seems as though communities realize the necessity of including the core elements but some design and implement those core elements in different ways. There is a disagreement among stakeholders i.e., members of law enforcement and mental health agencies, mental illness advocates, individuals with mental illness and their families, on which elements should and should

not be negotiable for implementation. It also seems that the operational components of the model are more likely to be manipulated either by omission of elements from the original model or addition of new elements to those that are already part of the original CIT model (The Council of State Governments, 2010).

Specialized policing response models also vary along the lines of dispatch training and availability of a drop-off center. In addition to officer training, many experts in the field emphasize CIT training for dispatchers or fire and rescue teams because those groups also frequently come in contact with individuals with mental illness and may be responsible for appropriately identifying mental illness as a factor in a crisis incident or call. Additionally, while most jurisdictions agree on the importance of no-refusal center where officers can drop off mentally ill individuals without having to wait until a bed is available, many jurisdictions do not have adequate resources to operate an independent drop-off location. Some jurisdictions contract with local hospitals for easier drop-off procedures, but others do not provide any formal options for officers to be able to quickly transfer a case to a mental health professional.

Most research points to the benefit of a drop-off center; however, this benefit continues to be debated, especially in the light of its high financial cost. Some stakeholders suggest that it is entirely possible that the drop off component is not as critical in contributing to an effectiveness of a program and that, instead, other variables such as an inter-agency collaboration, may be more critical to an effective implementation of an SPR program (Compton et al., 2008).

***Multi-conceptualization of CIT: Watson et al. (2008) study.***

Research has not yet carefully teased out the components that are most important to an effective implementation of an SPR program. It is a challenge for researchers to study this area comprehensively due to difficulty in gaining access to reliable data and ability to control for variations in community, organizational, and officer factors. In many instances, research relies on survey methods and does not employ control groups. The consistency of measuring the relationship between independent and dependent variables is also lacking especially in the area of community characteristics and contextual factors as related to CIT model (Watson et al., 2008). Police departments often do not collect reliable data to track mental health calls and their outcomes. In addition, it is rare that jurisdictions document follow up on individuals who come in contact with law enforcement and have either been diverted, released at the scene, or arrested (Watson et al., 2009).

Watson et al. (2008) implemented a study to address the issue of lack of empirical findings related to CIT outcomes. The authors acknowledged that many communities have adapted the Memphis CIT model to their own needs, but it is less clear how these programs differ across communities and whether these variations relate to the effectiveness of the programs in meeting their goals and objectives. Watson et al. (2008) considered three variables that are likely to effect CIT implementation: 1) officer characteristics; 2) community characteristics; and, 3) organizational characteristics. With reference to officer characteristics, the researchers recommended that individual officer characteristics such as demographics, prior training, familiarity with mental illness and completion of CIT training should be included in the comprehensive analysis of a program. With reference to organizational characteristics, both saturation (percent of

officers trained in CIT to insure 24/7 coverage), and presence of a champion (a leader who is invested in and advocates for the CIT philosophy and practice) were also identified as variables to be included.

The issue of officer saturation has been highly queried. “Critical mass is the point after which diffusion becomes self-sustaining...” (Rogers, 2003, pg. 343). Diffusion of innovation theory has been used to understand the diffusion of technology innovations, but can be applied to organizational innovations as well. Based on literature related to this theory, the expectation is for CIT to get to the point at which it has gained enough stakeholders’ support that no extra efforts to promote its effectiveness are needed. For example, a small change in a response to persons with mental illness by a small group of specially trained officers may trigger a big change in how the other officers respond to the mentally ill population. Determining whether a critical mass does or does not exist may answer the question of whether an entire department has to be trained specifically or whether a portion of specialized officers can influence the rest of the program so that it can provide effective response to mentally ill individuals (Watson et al., 2008).

With reference to community characteristics, Watson et al., (2008) considered the extent of linkages between law enforcement and mental health providers in the community and other community characteristics, in general. Included in those other characteristics is a presence of a no-refusal, drop-off center at the local psychiatric emergency room. The authors also identified a need for examining broader variables that most likely influence CIT outcomes. One of those variables is an availability of mental health providers in the community. The authors conceptualized this variable as a number of providers of different types of services (e.g., centralized drop-off, mobile crisis unit,

psychiatric emergency rooms, inpatient beds, outpatient providers) in and around any given jurisdiction. The availability of resources constitutes a relevant variable because CIT relies on mental health supports as much as it does on law enforcement. It is hard to support the diversion effort, without having resources to offer to the individual who is in need of treatment.

Other community characteristics should be studied as well and they include conditions such as level of poverty, employment, family structure, residential stability, and racial composition at the neighborhood level. These variables have been identified by scholars as determinants of crime and violence (Watson et al., 2008).

#### ***Challenges to implementation of the Crisis Intervention Team model.***

A number of variables requires attention in order to determine which CIT components effectively fit the different communities across the country. Although numerous cities, such as Akron, Ohio, have replicated the original CIT program in its entirety, many find it challenging to implement all of the core components of the program. The challenges include inadequate training of dispatch, limited availability of psychiatric emergency receiving facilities, lack of no-refusal policies, and addressing needs of special populations (e.g., homeless who are mentally ill). The biggest challenge appears to be extending the application of the original CIT model, which was designed and applied in an urban setting and has been more popular in urban settings than in smaller rural communities (Council of State Governments, 2010).

#### ***Solutions to Challenges: Examples.***

##### ***Rural vs. urban Communities.***

The Census Bureau (2010) reported that 19.3% of the US population was located in the rural areas and covered 97% of all the land. The other 80.7% of the population was urban and lived in three percent of the land area. Rural areas are characterized by low population densities (i.e., less than 500 people per square mile) and households that are spread out across large geographical areas (U.S. Census Bureau, 2010). Individuals living in rural communities may need to travel long distances to access mental health services that may only be available in the distant bigger towns or cities. In addition, rural environments are often characterized by greater social stigma related to seeking mental health treatment and do not readily provide early intervention services (New Freedom Commission on Mental Health, 2003). Rural residents often come into treatment with serious symptoms that have not been adequately treated.

The availability of a psychiatric, no-refusal, drop-off center, which has been identified as a key element in the successful implementation of the CIT model, is seldom possible in rural areas (Kempf, 2008) and the state mental health facilities often serve as the nearest available treatment option. Law enforcement must transport individuals with mental illness to locations far away which often forces the officers be out of service for up to 8 hours (Bonyng, Lee, & Thurber, 2005; Kempf, 2008). Another problem associated with lack of transportation or unavailability of hospital beds in rural areas is detention of people with mental illness without any criminal charges and without treatment while they await disposition. Sullivan and Spritzer (1997) surveyed a psychiatric population in rural Mississippi and found that 75% of the sample had been held in local jails without charges at least once in their lifetimes while awaiting state hospital admission.



With respect to rural communities, Dupont et al. (2007) recommended that rural police departments may need to train a greater portion of officers in order to make sure that CIT officers are available consistently to respond to as many mental health crises as possible. A policy of only training those officers who volunteer or demonstrate desirable qualities may not work in a rural community that only has four patrol officers in a department. Rural police departments must place more effort into making specific arrangements with mental health providers to increase the likelihood that individuals who have been detained by police can quickly be transferred into the care of mental health professionals (COPS, 2006). In a small jurisdiction these providers may not be available and if they are, it may be on a very limited basis.

Jurisdictions do come up with solutions to such problems. For example, in hopes of putting together human resources, the New River Valley CIT program in Virginia brought together fourteen jurisdictions in its area because they all fell within one of Virginia's mental health catchment areas. The various agencies created agreements to allow officers to cross jurisdictions and serve each other's residents. The jurisdictions trained 25% of the total number of patrol officers from the combined forces to have sufficient coverage of shifts and geography (Council of State Governments, 2010).

Large jurisdictions also have their share of problems in figuring out how to adopt CIT to their needs. In Los Angeles, the size of the police department was a barrier to the agency's ability to train the recommended benchmark of 20% of the officers to work full time on crisis intervention calls. The large geographic area of the jurisdiction also made deploying the CIT-trained officers difficult. Therefore, the LAPD tailored its strategy to focus on the co-responder model- increasing the number of personnel assigned to

specialized policing and expanding the hours of operation. The co-responder teams were assigned to the specialized policing unit to patrol areas with overlapping response protocols, which ensured city-wide coverage (Council of State Governments, 2010).

*Leadership and Organizational Factors.*

Besides differences in the size of a rural community, historical, political, and leadership variables need to be considered. For example, a rural community that is characterized by a culture that stigmatizes mental illness is likely to also have a police department in which the leaders hold similar stigmatizing convictions. Such a department may require a cultural overhaul that can be achieved through additional training components. Leadership of a police department that heavily supports community policing initiatives, is more likely to develop and support SPR programs; leadership that does not recognize a need for law enforcement to improve its response to mental illness because of its philosophical foundation, is less likely to invest its efforts in an SPR program.

*Special populations.*

In some cases jurisdictions may spend tremendous resources responding repeatedly to a small number of locations or individuals. Other communities may face significant concerns about responding appropriately to particular groups of individuals, such as people with mental illness who are homeless. In Memphis, Tennessee, police leaders, mental health professionals, city hall officials, and other key stakeholders were spurred to action following a tragic incident in which a person with mental illness was killed. The program that was developed following this incident was designed to improve safety during encounters by enhancing officer's ability to deescalate the situation

(Council of State Governments, 2010). On the other hand, In Los Angeles and San Diego, the push for specialized policing response was due to an excessive volume of people with mental illness who were not receiving treatment services. To address this problem, the law enforcement agencies in Los Angeles and San Diego formed teams of officers and mental health professionals that responded together at the scene to connect the mentally ill individuals with community-based services (Council of State Governments, 2010)

*Officer training.*

Some programs have reduced officers' total time spent in training due to funding constraints or have changed the proportion of time spent on individual topics (Council of State Governments, 2010). Agencies often specifically identify the training audience and select and train trainers from a range of disciplines, not just police. Similarly, some localities have added a mandatory refresher training to provide officers with an opportunity to keep informed on current issues and to help commanders stay in touch with CIT officers (Council of State Governments, 2010).

*Departmental policies and procedures.*

Some jurisdictions have revised policies specific to medical clearance issues and have designated a special entrance rooms as emergency rooms for individuals with mental illness brought in by the police. In many communities, laws regarding law enforcement officers' role during mental health evaluations are given special attention by indicating under what circumstances officers are permitted to transport or take into custody individuals with mental illnesses who meet specific standards. In Virginia, officers are authorized to determine if a person meets the criteria for an "emergency

custody order” (ECO) without taking the person in front of a magistrate (Council of State Governments, 2010).

*Limited resources.*

Jurisdictions have also developed creative ways to target limited resources. Some communities manage to increase the available mental health resources or shift the resources from one agency to another. Los Angeles, California, has modified the original CIT program by focusing the SPR model efforts on a co-responder model, while incorporating elements of the CIT model into patrol operations, as well as creating a new program focusing on a priority population. The Los Angeles police department focused on specialized policing response programs to reduce some demands on limited mental health resources by relying on well-trained officers and effective information-gathering to help properly assess individuals’ need for emergency evaluations, and connect people with care providers outside of the emergency response networks. In Los Angeles, the officers work with their triage unit to access a database with an individual’s history while the forensic nurse in this unit can access the mental health records (Council of State Governments, 2010).

The New River Valley, Virginia program represents a rural, multi-jurisdictional CIT program that includes fourteen different law enforcement agencies contained in four counties and one city. This program has designed extra steps to address the issue of scarcity in law enforcement resources in small rural communities and has added inter-agency collaboration components that combines the effort of multiple jurisdictions and allows exchange of resources between the separate communities. In the New River

Valley, CIT officers are trained to screen people who are in need of hospitalization (Council of State Governments, 2010).

### **Council of State Governments Report (2010)**

The 2010 Council of State Governments has visited four jurisdictions with extensive experience in specialized policing response: Los Angeles, CA, Akron, OH, New River Valley, VA, and Fort Wayne, IN. The purpose of the visits was to examine the decision-making of those communities with respect to components, which should or should not be included in an SPR model in each jurisdiction. Based on the visits to those four jurisdictions, the 2010 Council of State Governments has made recommendations on community characteristics that should be taken into account when designing an SPR program (Council of State Governments, 2010). The recommendations call for:

1. Consideration of both law enforcement and mental health agencies' resources
2. Design of detailed policies and regulations for SPR operations
3. Establishment of effective law enforcement and mental health leadership
4. Establishment of local and state laws that guide treatment of mentally ill individuals who come in contact with law enforcement
5. Demographic and geographic characteristics of the community
6. Response styles of the mental health and law enforcement agencies to mental health crisis calls
7. Training curriculum
8. Other special considerations such as special populations e.g., homeless, juveniles, co-occurring substance abuse and mental illness.

The programs visited by the authors of the Council of State Governments report (2010) were successful in maximizing the use of existing resources by using a couple of strategies: 1) extending resources by training officers and others to more accurately identify those people who needed emergency mental health services; and 2) developing strategies to enroll qualified individuals in benefit programs to improve payment of needed mental health services. In the New River Valley, law enforcement agencies also shared resources throughout the region, making it easier to access and sustain them (Bureau of Justice Assistance, 2010).

Even though the authors of the Council of State Governments report (2010) provided some general insight into what might and might not work for particular communities, they used a limited sample of four jurisdictions. The report did not use statistical analyses or experimental controls to support its conclusions. The authors of the report suggested that controlled research studies be designed to provide more empirical evidence for which specific community characteristics correlate with the different components of the SPR models.

### **Non-Specialized Programs**

In addition to emphasizing the importance of specialized policing programs to address police response to mental health calls, it is important to be aware of research that supports effectiveness of non-specialized tactics. Sellers, Sullivan, Veysey, & Shane (2005), concluded that some non-specialized strategies, like the one used by the Newark police department, were just as effective as specialized police response programs. The assumption is that departments with a specialized response are more effective because of outcomes such as increased community safety, reduced arrests, and have increased

officer efficacy and satisfaction. What is important is that this assumption is challenged before implementing programs that cost more and have low potential for improvement. Nonetheless, communities must examine the possibility that alternatives to specialized response may enhance their relationship between police and local agencies at a lower cost, while still allowing for improvement in dealing with this population. The results of the Sellers et al. (2005) study showed that a community with a traditional response to persons with mental illness can be effective in dealing with this special population. Although the Memphis program appears to be the most effective, traditional programs, such as the Newark approach can work as well as the specialized ones. Police agencies must consider their resources, the capacity for sharing the burden of response with other local agencies, and the specific nature of their problem in responding to persons with mental illness. This will ensure that additional costs are not introduced into agencies with already scarce resources. However, because the results of the Sellers et al. (2005) study have not been replicated in other jurisdictions, it is possible that Newark is an exception in finding some success within the confines of the traditional response to those with mental illness. Nonetheless, it is essential that detailed needs assessments are conducted in police and mental health agencies that are considering specialized response models in order to ensure the appropriate use of limited resources and to avoid unnecessary interventions.

## CHAPTER 3

### Methodology

The CIT model is a type of an SPR program that has been nationally recognized and widely adopted by variety of communities across the country; over the years, however, stakeholders have debated whether the original CIT model, which was developed in Memphis, TN, can realistically be replicated in different types of communities that have their own unique needs and challenges. The purpose of this study was to determine whether there is a relationship between variations in community characteristics and the degree of deviation of an SPR program from the original CIT model. This study identified and operationally defined a number of relevant community characteristics so that they could be analyzed against variations in corresponding SPR programs. These community characteristics included (a) population density; (b) availability of mental health resources; (c) the extent of need to attend to special populations; (d) the existence of SPR policies in law enforcement, mental health, and dispatch departments; and (e) how much law enforcement and mental health administrators supported the SPR program. These characteristics were included based on recommendations from the literature (Watson et. al., 2008). The components of an SPR program included all of the core components of the original CIT model and consisted of (a) 40-hour training curriculum for police officers and dispatch staff; (b) voluntary participation by police officers; (c) availability of a 24-hour drop-off center; (d) support of the police department's chief; and (e) collaboration between mental health and law enforcement agencies (Compton et al., 2008).



This study hypothesized that variations in community characteristics will lead a community to modify the original CIT program; any particular community may omit or add components depending on its unique needs and challenges. The closer the community resembles an urban setting, out of which the original CIT model grew, the more likely it is that the community will be able to more precisely replicate the components of the original CIT model. Based on implications found in previous CIT literature (Borum et al., 1998; Compton et al., 2006; Hanafi et al., 2008), it was also hypothesized that the closer an SPR program resembles the original CIT model, the higher the rating of an SPR police officers' job satisfaction would be. For example, evidence shows that the requirement of the 40-hour training, which constitutes a critical core component of the CIT model, has led to an increase in officers' confidence and positive attitude in interacting with people with mental illness (Borum et al., 1998; Compton et al., 2006; Hanfi et al., 2008); positive changes in attitude and confidence subsequently may contribute to an increase in overall job satisfaction of an SPR officer.

This study utilized a survey that was disseminated electronically to CIT Coordinators and/or other individuals in charge of community's SPR program. The survey questions were designed to collect information on community characteristics as well as components of the community's SPR program. To further expand on the results of the survey, a number of experts in the field were identified and interviewed by phone; these experts were provided with results of the survey and were asked to comment on the results.

The following sections provide operational definitions of the independent, dependent, and control variables, outline the study's specific hypotheses, and describe the research design and data analysis methods.

## **Conceptual and Operational Definitions**

### **General Terms**

**CIT Coordinators:** community representatives who are responsible for coordinating the collaboration between law enforcement and mental health agencies with the primary goal of developing, implementing, maintaining, and evaluating specialized policing response model.

**Specialized Policing Responses (SPR):** all law enforcement-based responses to mental health incidents; the term encompasses CIT and co-responder approaches, as well as any other programs developed to respond to people with mental illness.

**Community:** for purposes of this paper a community will be defined as a group of any size whose members are served by a single specialized policing response program.

### **Control Variables**

**Average ethnic/racial status of a community (CV1):** This variable was measured by survey question # 4 (see Appendix A) with the response choices as follows: "Hispanic or Latino", "White", "American Indian or Alaska Native", "Asian", "Black or African American", "Native Hawaiian or Other Pacific Islander." A responder also had a choice of responding with "Don't know" to indicate that he/she did not know the ethnic/racial status of the community.

**Socio-economic status of the community (CV2):** This variable was measured by survey question #5, with the response choices as follows: "lower class", "lower middle class",

“middle class”, “upper middle class”, and “upper class.” Each choice was defined by an estimated household income (see Appendix A). A responder also had a choice of responding with “Don’t know” to indicate that he/she did not know the socio-economic status of the community.

### **Independent Variables- Community Characteristics**

**Population density (IV1):** This variable was defined by the U.S. Census Bureau (2010) as a number of members in the community per square mile (i.e., population size/geographical size). A population density of at least 500 or more people per square mile defines an urban community; rural populations are located outside of the urbanized areas and clusters (U.S. Department of Health and Human Services, 2015). Population density value for each community was retrieved from the U.S. Census Bureau (2010) website by looking up the name of a jurisdiction which was provided by the CIT Coordinator in survey question #2.

**Extent of Need to Attend to Special Populations (IV2):** This variable was measured by survey question #30 and was defined in terms of a number of agencies that served special populations with which the CIT program collaborated. Local veterans’ administration, homeless advocacy groups, and substance abuse groups were chosen as the three primary agencies because they were mentioned in previous literature as agencies with which the CIT program collaborated most frequently (e.g., Council of State Governments, 2002). Previous literature supports the idea that the greater the collaborative effort between law enforcement and other agencies that support special populations, the greater the need of a community to attend to special populations (Council of State Governments, 2002). “Extent of need” was measured by survey

question #30 and was defined by the number of agencies that a survey respondent checked in question #30 (see Appendix A). “No need” was scored when a respondent did not indicate collaboration with any of the following groups: veterans’ administration, homeless advocacy groups, or substance abuse groups. “Low need” was scored when a respondent checked collaboration with one of the following groups: veterans’ administration, homeless advocacy groups, or substance abuse groups. “Moderate need” was scored when a respondent chose collaboration with two out of the three aforementioned agencies. “High need” was scored when a respondent chose collaboration with all of the three agencies: veterans’ administration, homeless advocacy groups, and substance abuse groups.

**Mental health resources availability (IV3):** Previous research has identified mental health resources as critical to successful implementation of CIT programs (Watson et al., 2004). This variable was measured by survey question #19 and was defined by a CIT Coordinator’s rating of extent of availability of mental health resources on a scale of 0-5, with 0= *no availability* and 5= *plenty of availability* (see Appendix A). By nature of their role and collaboration with mental health agencies, it is very likely that CIT Coordinators can accurately estimate the level of mental health resources in their community.

**Extent of specification in department policies (IV4):** This variable was measured by survey question #14 and was defined by a CIT Coordinator’s knowledge of existence of written policies and procedures describing CIT operations in the operational handbooks of three relevant departments: law enforcement, mental health, and dispatch. This variable was defined in the above terms under the assumption that Crisis Team

Coordinators are professionals who are well aware of policies across departments that participate in the CIT program. “Maximum extent” was defined by a CIT coordinator checking for presence of written policies in all three of the departments i.e., law enforcement, mental health, and dispatch. “Moderate extent” was defined by a CIT coordinator checking for presence of policies in two out of the three departments. “Low extent” was defined by a CIT coordinator checking for presence of policies in one out of the three departments. “Absence of policy” was defined by the CIT coordinator indicating absence of policies across all three departments (see Appendix A).

**Support of top criminal justice and mental health administrators (IV5):**

Previous CIT research shows that administrators who are actively involved in growth and sustainability of an SPR program are also perceived as supportive of the program (Council of State Governments, 2010; Hanafi et al., 2008.) This variable was measured by survey question #20 and defined by CIT Coordinators’ perceptions of the extent to which law enforcement and mental health leaders were involved in the development and sustainability of the SPR program. This variable was measured on a scale of 0-5 with 0 = *no support*, values between 1 and 2.5 = *low support*; values between 2.6 and 3.5 = *moderate support*; values between 3.6 and 4.5 = *high support*; and values between 4.6 and 5 = *maximum support* (see Appendix B).

**Degree of deviation of an SPR program from the original CIT model (IV6):**

Total deviation was defined as deviation from the original Memphis CIT model measured by omission of, or addition to, the core elements of the original CIT program (Dupont, et al., 2007). The core elements include: (a) comprehensive 40-hour training for police officers and competency-based training for dispatch; (b) selection of officers based on

voluntary criterion; (c) availability of a close 24- hour, no refusal drop off option such as a designated facility or hospital emergency room; (d) presence of an appointed “chief” or a leader who actively supports specialized policing response efforts; and (e) extent of mental health and law enforcement collaboration (Dupont et al., 2007). The numerical values for omission and addition were determined as described below.

### ***Deviation by addition***

The numerical deviation by addition of components was measured by survey question #6. Research in the area shows that some jurisdictions across the country supplement the components of the CIT model with one or more of the following models: (a) hiring a mental health professional as an employee of the police department; (b) having a mental health professional, who is not an employee of the police department but always travels with officers to respond to mental health calls; and/or (c) utilizing a special mobile crisis team consisting of law enforcement and mental health professionals with the mobile team functioning independently of the police and mental health agencies (Steadman et al., 2000.) For purposes of calculating the addition value, an addition of any of the three aforementioned components counted as one addition (see Appendix B for more details).

### ***Deviation by omission***

The numerical deviation by omission of any or all of the elements of the original CIT model was defined by absence of any of the core components and was measured by survey questions #12, #13, #14, #18, #20, #21, and #24. Questions #12 and #18 checked for presence of the first component: the 40 hour training; question #13 addressed the second component: voluntary participation by police officers; question #24 addressed the

third component: an availability of a 24-hour drop-off center; question #20 addressed the fourth component: support of a police department's chief; and Questions #21 addressed the fifth component: collaboration between mental health and law enforcement agencies (see Appendix D for list of core components of the CIT model).

The variable of degree of deviation of SPR program from the original CIT model (IV6) was only used in testing hypothesis 6 where SPR police officers' job satisfaction (DV2), was the dependent variable. IV6 was used as DV1 when testing hypotheses 1-5.

### **Dependent Variables**

**DV1- Degree of deviation from the original Memphis model:** Total deviation was defined as any deviation from the original Memphis CIT model measured by omission of, or addition to, the core elements of the original CIT program (Dupont, et al., 2007). The core elements include: (a) comprehensive 40-hour training for police officers and competency-based training for dispatch; (b) selection of officers based on voluntary criterion; (c) availability of a close 24-hour, no refusal drop off option such as a designated facility or hospital emergency room; (d) presence of an appointed "chief" or a leader who actively supports specialized policing response efforts; and (e) extent of mental health and law enforcement collaboration defined as a number of components that strengthen the collaboration between law enforcement and mental health agencies such as existence of planning committee groups, program coordination groups, existence of contract/agreement between law enforcement and mental health agencies with reference to specialized policing response, and exchange of information to successfully measure outcomes and facilitate the process of pre-booking jail diversion (Dupont et al., 2007). The numerical values for omission and addition were determined as described below.

### ***Deviation by addition***

The numerical deviation by addition of components was measured by survey question #6. Research in the area shows that some jurisdictions across the country supplement the components of the CIT model with one or more of the following variations: (a) hiring a mental health professional as an employee of the police department; (b) having a mental health professional, who is not an employee of the police department, always travel with officers to respond to mental health calls; and/or (c) utilizing a special mobile crisis team consisting of law enforcement and mental health professionals with the mobile team functioning independently of the police department and mental health agencies (Steadman et al., 2000.) For purposes of calculating the addition value, an addition of any of the three aforementioned components counted as value equal to one (see Appendix B for more details).

### ***Deviation by omission***

The numerical deviation by omission of any or all of the elements of the original CIT model was defined by absence of any of the core components and was measured by survey questions #12, #13, #14, #18, #20, #21, and #24. Questions #12 and #18 checked for presence of the first component: the 40 hour training; question #13 addressed the second component: voluntary participation by police officers; question #24 addressed the third component: an availability of a 24-hour drop-off center; question #20 addressed the fourth component: support of a police department' chief; and Questions #21 addressed the fifth component: collaboration between mental health and law enforcement agencies (see Appendix D for list of core components of the CIT model).



The variable of degree of deviation of SPR program from the original CIT model (IV6) was only used in testing hypothesis 6 where SPR police officers' job satisfaction (DV2), was the dependent variable. IV6 was used as DV1 when testing hypotheses 1-5.

**DV2- SPR Police Officers' job satisfaction:** This variable was measured by survey question #25 and was defined by a CIT Coordinators' rating of job satisfaction of SPR officers with 0 = *completely dissatisfied* and 5 = *completely satisfied*. The reason why a CIT Coordinator was chosen to provide a rating of SPR police officers' job satisfaction was because this investigator did not have an easy or practical access to a sample of SPR police officers; experts in the field (e.g., S. Cochran, personal communication, August 13, 2012) and chiefs of local police departments discouraged this investigator from attempting to collect a direct measure of police officers' job satisfaction rating suggesting that the measures may not reflect officers' true attitude: No matter how much they are assured that their responses would be kept confidential, police officers may be reluctant to share how they feel about their jobs in fear of their reports unintentionally or intentionally being accessed by their supervisors. This investigator believes that CIT Coordinators, by virtue of their close contact with SPR police officers, are in a position to fairly and accurately assess the officers' job satisfaction.

## **Hypotheses**

**Hypotheses: Relationship between community characteristics and degree of an SPR program's deviation from the original model.**

The following hypotheses assume a relationship between independent variables i.e., population density, availability of mental health resources, extent of need to attend to special populations, extent of department policies, and support of mental health and law

enforcement administrators, and the dependent variable i.e., degree of deviation of an SPR program from the original CIT model.

Specifically:

***Hypothesis 1.*** Communities with higher population densities (non-rural or urban communities) will be more likely to adopt the original CIT model.

***Hypothesis 2.*** The lesser the availability of mental health resources in the community, the greater the deviation of an SPR program from the original CIT program will be.

***Hypothesis 3.*** The greater the community need is to address a special subset of a mentally ill population (e.g., mentally ill who are homeless), the more likely an SPR program is going to deviate from the original CIT model.

***Hypothesis 4.*** Communities that have access to specific local and/or state policies related to law enforcement's response to people with mental illness will not deviate from the original CIT model.

***Hypothesis 5.*** The more the top administrators within the criminal justice and mental health systems are supporting an existing SPR program, the more likely it is that an SPR program will not deviate from the original CIT model.

**Hypothesis: Relationship between degree of an SPR program's deviation from the original model and CIT Coordinators' rating of an SPR police officers' job satisfaction.**

In addition to hypothesizing a relationship between the type of community characteristic and an SPR program's degree of deviation from the original CIT model, the current study also hypothesizes a relationship between independent variable, i.e., degree

of deviation of an SPR program from the original CIT model and the dependent variable i.e., SPR officers' job satisfaction.

Specifically:

***Hypothesis 6.*** The less an SPR program deviates from the original CIT model, the more likely it is that SPR police officers will be satisfied with their jobs.

## **Research Design and Data Analysis**

### **Variable definitions.**

Both the dependent variables (DVs) and independent variables (IVs) were chosen based on recommendations from literature (Council of State Governments, 2010; Dupont et al., 2007; Watson et al., 2008; Watson et al., 2011). Levels of measurement for each of the variables were determined in order to guide use of proper statistics in data analysis. Brief definition of each of the variables and corresponding levels of measurement are listed below.

***CV1:*** Ethnic/racial status of the community, measured at an ordinal level. CV1 was measured by survey question #4 (see Appendix A) with the response choices as follows: "Hispanic or Latino", "White", "American Indian" or Alaska Native", "Asian", "Black or African American", "Native Hawaiian or Other Pacific Islander." The responder also had a choice of responding with "Don't know" to indicate that he/she did not know the ethnic/racial status of the community.

***CV2:*** Social-economic status, measured at an ordinal level. CV2 was measured by survey question #5, with the response choices as follows: "lower class", "lower middle class", "middle class", "upper middle class", and "upper class." Each choice was defined by an estimated household income (see Appendix A). The responder also had a

choice of responding with “Don’t know” to indicate that he/she did not know the socio-economic status of the community.

**IV1:** Population density, measured at an interval level. IV1 was defined by the U.S. Census Bureau (2010) as the number of members in the community per square mile (i.e., population size/ geographical size).

**IV2:** Extent of need to attend to special populations, measured at an ordinal level. IV2 was defined by an SPR/CIT program’s ongoing collaboration with any of the following agencies: local veterans’ administration, special populations (e.g., homeless) advocacy groups, and/or substance abuse service agencies (see Appendix B for complete definition).

**IV3:** Availability of mental health resources, measured at an ordinal level. IV3 was defined by the CIT Coordinator’s rating of availability with 0 = *no availability* and 5 = *plenty of availability*.

**IV4:** Extent of specification in department policies, measured at an ordinal level. IV4 was defined by the CIT Coordinator’s knowledge of existence of policies and procedures describing CIT operations in the operational handbooks of three relevant departments: law enforcement, mental health, and/or dispatch (see Appendix B for complete definition).

**IV5:** Extent of administrative mental health and law enforcement support, measured at an ordinal level. IV5 was defined by perceptions of CIT coordinators of an extent to which law enforcement and mental health leaders were involved in a development and sustainability of the SPR program; measured on a scale of 0-5 with 0 = *no involvement* and 5 = *significant involvement*.

**IV6:** Degree of deviation of SPR program from the original CIT model, measured at an interval level. IV6 was defined as a total numerical deviation from the original Memphis CIT model as measured by omission of, or addition to the core elements of the original CIT program (Dupont, et al., 2007) (see Appendix B for complete definition).

**DVI:** Degree of deviation of SPR program from the original CIT model, measured at an interval level. IV6 was defined a total numerical deviation from the original Memphis CIT model as measured by omission of, or addition to the core elements of the original CIT program (Dupont, et al., 2007).

**DV2:** SPR police officers' job satisfaction, measured at an ordinal level. DV2 was defined by the CIT Coordinators rating of a job satisfaction of SPR officers with 0 = *completely dissatisfied* and 5 = *completely satisfied*.

### **Survey Data Preparation for Entry into Statistical Analysis**

#### **Levels of measurement for control, independent, and dependent variables.**

Independent variables, IV1, IV2, IV3, IV4, and IV5, were identified as potential predictor variables of the degree of deviation from the original CIT model (DV1). IV6 was identified as a potential predictor variable of police officers' job satisfaction rating (DV2). The variable of degree of deviation of SPR program from the original CIT model (IV6) was only used in testing hypothesis 6, where SPR police officers' job satisfaction was the dependent variable. IV6 was used as DV1 when testing hypotheses 1-5.

Multiple regression analysis which was used to analyze survey data in this study, requires that the dependent variable be metric and the independent variables be metric or dichotomous. All of the variables were already at a level of measurement appropriate for

entry into statistical analysis without needing to be transformed into dichotomous variables.

**Multicollinearity.**

Independent variables, IV1, IV2, IV3, IV4, and IV5 which were hypothesized to predict DV1, were examined for multicollinearity to ensure that there were no strong correlations between the variables.

**Univariate statistical analyses.**

In order to decide whether they could be further used or discarded, all variables were examined in a univariate method of analysis. For the independent variables IV1 (measured at a interval level) and IV5 and DV1 (measured at an interval level), descriptive statistics included range, minimum and maximum values, mean and its standard deviation, median, mode, and skewness. For the ordinal variables (CV1, CV2, IV2, IV3, IV4, IV5, and DV2), descriptive statistics included mode, median, and skewness.

**Bivariate statistical analyses: Relationship between community characteristics and the degree of SPR's deviation from the original CIT model (testing hypotheses 1-5).**

In order to examine each independent variable's relationship with the dependent variable, bivariate relationships were tested as follows:

$$DVI = a + b*IV1$$

$$DVI = a + b*IV2$$

$$DVI = a + b*IV3$$

$$DVI = a + b*IV4$$

$$DV1 = a + b*IV5$$

**Multiple regression analysis: Relationship between community characteristics and the degree of SPR's deviation from the original CIT model (testing hypotheses 1-5).**

A multiple regression model was used to examine if and how each independent variable, IV1-IV5, explained the variance in the dependent variable (DV1) while holding ethnic/racial status (CV1) and socio-economic status of a community (CV2) constant:

$$DV1 = a + b*IV1 + b*IV2 + b*IV3 + b*IV4 + b*IV5$$

In order to control for the variables of ethnic/racial status (CV1) and socio-economic status (CV2) of a community, CV1 and CV2, were first entered into a regression analysis to measure their relationship with the dependent variable without the other independent variables present. In the second model, independent variables were added to regression. The two models were compared to determine if the addition of the independent variables to the regression improved the strength of the model and whether it reduced the error in predicting the dependent variable.

**Bivariate statistical analyses: Relationship between the degree of SPR's deviation from the original model and CIT Coordinators' rating of SPR police officers' job satisfaction with an SPR program (testing hypothesis 6).**

In order to examine the relationship between the degree of SPR's deviation from the original model, (i.e., independent variable, IV6) and the CIT Coordinators' rating of SPR police officers' job satisfaction, (i.e., dependent variable, DV2), bivariate linear regression was applied as follows:

$$DV2 = a + b*IV6$$

## **Expert Interviews**

This study incorporated an interview data collection method to augment the survey findings and inform key issues. Using criterion-based selection method, ten experts in the field of Specialized Policing Response programs were identified and interviewed by phone. In order to qualify as an expert, an individual had to have published literature or engaged in research related to SPR models and/or had to have otherwise demonstrated active work in the area of SPR programs as evidenced by his/her name mentioned in published literature, press, or public presentations related to the SPR topic (see Appendix C for list of experts who were interviewed).

The expert interviewees were informed of the benefits and risks of participating in the survey. The benefit of participating in the study was described as information that potentially could guide a development of local and state policies and procedures which could further enhance and support the efficiency, effectiveness, and sustainability of any single SPR program as it relates to its individual community needs. The risks of participating in the study included a potential for a participant's responses to be quoted directly in the study and linked to his or her name; this would only be the case if a participant provided permission for the researcher to publicly quote his or her responses. The expert interviewees were assured that all of their responses would be kept anonymous unless they provided permission for the responses to be linked to their names and that their participation in the interview was completely voluntary and they could stop the interview at any time (see Appendix E for complete oral consent for the interview).

The content of the interview questions related directly to the results of the survey and to each hypothesis formulated in the study. The expert interviewees were asked to



provide comments and feedback with regards to the survey's results as they related to each of the hypotheses.

### **Sample Selection and Characteristics**

#### **Survey.**

The survey was distributed to 600 CIT Coordinators who managed SPR programs registered on the National CIT directory. The staff at the CIT Center in Memphis, TN, assisted this research investigator in distribution of the survey instrument. The survey was distributed over a course of six months to the email addresses of the 600 CIT Coordinators that were listed in the directory. Those whose emails were not listed in the directory were not able to be reached. Since there are over 2000 CIT programs operating in the country, about 1400 Coordinators were excluded from the survey sample. The CIT Center directory was determined to be the most comprehensive data base of CIT programs and their respective CIT Coordinators. An alternative to reaching the CIT Coordinators via the national CIT directory would be for the current study's research investigator to contact each and every jurisdiction in the country and obtain the contact information for the CIT Coordinators who managed the jurisdictions' programs. This would be a very difficult and time-consuming task, which this study's resources did not accommodate.

According to the CIT Coordinators who completed the survey, their programs have fully implemented or were aiming to fully implement components of an SPR program which the particular jurisdiction had chosen; a fully implemented program did not have to be a complete replication of the original CIT model but needed to reflect a list of components agreed upon by the SPR program's planning team for that particular

jurisdiction. The survey was distributed with assistance from the University of Memphis, CIT Center. The center maintained a directory of registered CIT Coordinators. The directory, however, was not complete because the CIT Center did not have access to emails of CIT Coordinators who have not registered on the directory. One hundred and five CIT Coordinators responded to the survey.

Tables 1 through 3 describe the demographic characteristics of the sample. Majority (70%) of respondents were represented by a law enforcement agency, 27% were represented by mental health professionals, and a very small portion (1%) was represented by members of the National Alliance on Mental Illness (see Table 1). As seen in Table 2, a little over one half of the CIT Coordinators (51.4%) identified their communities to have a middle class status. Very few identified their communities as having lower or upper class status (2.9% and 3.8% respectively). Communities represented by the CIT Coordinators, who responded to the survey, were predominantly white (75.2%). Black or African American and Hispanic/Latino population represented 8.6% and 6.7% of the total responses, respectively (see Table 3).

Tables 4 through 10 describe the characteristics related to the independent and dependent variables. Of the 86% of jurisdictions, 40% were characterized as rural and 46% were characterized as non-rural, i.e., urban or as part of an urban cluster (see Table 4). With reference to the need of the jurisdiction to attend to special populations, 34% of respondents said that the need was high, 21% said it was moderate, 16% said it was low, and 11% said there was not need to attend (see Table 5). Fifty six percent of the respondents reported that the availability of a mental health resources in their community ranged from moderate to high; 24% reported that there was plenty of available resources;

only 5.7% and 9.5% percent reported that the resources were very low and low, respectively. There were no respondents who reported the community to have no available mental health resources (see Table 6).

Close to one half of the respondents described the extent of policies guiding law enforcement's response to people with mental illness in crisis as "low". Twenty two percent described their jurisdictions' policies extent as "moderate" (see Table 7). The extent of mental health and law enforcement administrative support was measured by the respondents rating of how involved administrators of the mental health and law enforcement agencies were in a development and sustainability of the program; a large portion of the respondents (41%) reported that their programs received "maximum" support from the administrators (see Table 8). Only 1% reported "no support" at all. The values for the degree of deviation of a program from the original CIT model were distributed across scores ranging from zero to seven. The mean for the degree of deviation was 3.3 with a standard deviation of 1.6; the median was 4 and the mode was 4. (see Table 9).

With respect to the dependent variable of SPR officers' job satisfaction rating, majority of the CIT Coordinators rated the SPR officers as either very satisfied (43%) or completely satisfied (35.4%) with their jobs (see Table 10).

Table 1

*Descriptors of Survey Respondents- Representing Agency*

Variable	n	%
<b>Representing Agency</b>	105	
Law Enforcement	80	70%
Mental Health	24	27%
NAMI (other advocacy groups)	1	3%

Table 2

*Descriptors of Socio-Economic Status*

Variable	n	%
<b>Community Socio-Economic Status</b>	93	88.6%
Lower	3	2.9%
Middle	16	15.2%
Lower middle	54	51.4%
Upper middle	16	15.2%
Upper	4	3.8%

Table 3

*Descriptors of Ethnic Racial Status*

Variable	n	%
<b>Ethnic Racial Status</b>	95	90.5%
Hispanic/Latino	7	6.7%
White	79	75.2%
Black or African American	9	8.6%

Table 4

*Descriptors of Population Density*

Variable	n	%
<b>Population Density</b>	90	85.7%
Under 500 residents/ square mile (rural)	36	40%
Over 500 residents/ square mile (urban)	54	45.7%

Table 5

*Descriptors of Need to Address Special Populations*

Variable	n	%
<b>Need to Address Special Populations</b>	86	81.9%
No need	11	10.5%
Low need	17	16.2%
Moderate need	22	21.0%
High need	36	34.3%

Table 6

*Descriptors of Mental Health Resources*

Variable	n	%
<b>Mental Health Resources Availability</b>	102	97.1%
No availability	0	0%
Very low availability	6	5.7%
Low availability	10	9.5%
Moderate Availability	27	25.7%
High availability	33	31.4%
Plenty of availability	26	24.8

Table 7

*Descriptors of Extent of Policies*

Variable	n	%
<b>Extent of Policies in Department</b>	103	98.1%
Maximum	14	13.3%
Moderate	24	22.9%
Low	47	44.8%
Absence of Policies	18	17.1%

Table 8

*Descriptors of Extent of Administrative Mental Health (MH) and Law Enforcement (LE) Support*

Variable	n	%
<b>Extent of Administrative MH and LE Enforcement Support</b>	100	95.2%
No support	1	1%
Low	9	8.6%
Moderate	21	20%
High	26	24.7%
Maximum	43	41%

Table 9

*Descriptors of Degree of Deviation from Original CIT Model*

Variable	n	%
<b>Degree of Deviation from Original CIT Model</b>	103	98.1
0	3	2.9%
1	7	6.7%
2	18	17.1%
3	20	19.%
4	22	21.%
5	17	16.2%
6	13	12.4%
7	3	2.9%



Table 10

*Descriptors of SPR Officer's Job Satisfaction Rating*

Variable	n	%
<b>SPR Officers' Job Satisfaction Rating</b>	99	94.3%
Completely dissatisfied	0	0
Somewhat satisfied	4	3.8%
Moderately satisfied	15	14.3%
Very Satisfied	45	42.9%
Completely Satisfied	35	35.4%

**Expert Interviews.**

This study used a criterion-based selection method to identify a panel of experts who were informative because they had a unique expertise in the area of SPR programs. The experts were identified based on their contribution to the field of Specialized Policing Response programs as evidenced by published literature and research related to SPR programs. Examples of criteria that qualified an individual as an SPR expert included having published research or generated non-research publications on the topic of SPR, having presented at national or local conferences on the topic of SPR, having planned, executed, and/or supervised tasks related to SPR for more than 5 years, and/or having advocated on behalf of stakeholders and policies related to SPR.

**Measurement Method****Survey data collection and measurement.**

The study utilized an on-line survey method to obtain information from the CIT coordinators overseeing SPR programs that had been registered on the national CIT directory website. The CIT coordinators are individuals in charge of coordinating the critical collaborative efforts between law enforcement and mental health agencies. They are individuals in law enforcement, mental health or other interested stakeholders from the community who are appointed to coordinate the collaboration between mental health and law enforcement within the SPR model. The CIT Coordinators have knowledge about the community as well as the specific components of an SPR model that their jurisdictions are implementing (M. Reuland, personal communication, August 14, 2012).

The survey contained questions pertinent to dependent and independent variables and asked the respondents to report, to the best of their knowledge, on both factual information (e.g., whether the community is considered rural or urban or whether there are specific policies related to SPR) as well as their perceptions of certain outcomes, such as an SPR police officers' job satisfaction. The survey asked questions about community characteristics and characteristics of specialized policing response models in the communities where the CIT Coordinators operated.

A survey instrument was developed and utilized to measure dimensions of the different variables included in the study. The study's investigator constructed the survey instrument and tested its face validity by distributing the survey to one graduate school colleague, two CIT stakeholders (a NAMI advocate, a CIT law enforcement officer), and two university professors who researched the CIT topic. In addition to the survey, secondary data were accessed from the U.S. Census Bureau (2010) to obtain the numerical value for the population density corresponding to each community in which

the SPR program operated. The population density data were only able to be verified if the survey respondent entered the name of the jurisdiction in which the SPR program operated.

#### **Expert interviews: Measurement.**

The interview instrument consisted of an oral consent script for participation in the interview and 13 interview questions. The questions asked the participants to comment on results obtained in the study's survey and other issues related to major research questions and hypotheses in this study (see Appendix E). The questions consisted of 12 open-ended questions and 1 closed-ended question. The responses of the interview participants were analyzed in terms of (a) comments on the survey results (i.e., participant's agreement with the finding, participant finding the result surprising but unable to confidently disagree with the finding, participant confidently not agreeing with the finding, or participant not being able to comment due to not having enough information or familiarity with the topic; (b) comments about or reflection upon the possible reasons for the result; and (c) recommendations for future research.

#### **Research Study: Design Benefits and Limitations**

##### **Benefits.**

Survey respondents in this study consisted of CIT Coordinators. Based on a review of relevant literature, the CIT Coordinators have not been used as survey respondents in any other previous study related to the topic of specialized policing response programs. Therefore, for the first time, the current study employed a sample of respondents who possessed first-hand experience and technical knowledge related to the SPR field; CIT Coordinators were expected to have expertise in areas that the current

study targeted: mental health resources, special populations, SPR policies, administrative supports, attitudes of SPR police officers, and characteristics of SPR programs within jurisdictions in which they served.

This study attempted to reach CIT Coordinators from across the country via an on-line survey in order to obtain a large set of data related to variations in community and SPR program characteristics. In addition to analysis of the survey responses, benefits of interviewing experts included access to knowledge and opinion of those who have experience in the field and who can possibly elaborate and reflect on reasons for the study's results.

**Limitations.**

The use of both survey and interview methodologies had a number of disadvantages.

*Inability to establish causal relationships.* The survey method provided a tool in determining the strength and direction of a relationship between variables, but it did not allow one to draw conclusions about causes of outcomes, as an experimental manipulation would have accomplished. Nonetheless, the current study was intended as an exploratory tool that can further provide direction for more robust future studies.

*Absence of comparison groups and controls.*

With respect to the rating of SPR police officers' job satisfaction, CIT Coordinators were only able to provide rating for SPR officers and not for any other officers in the same police department. A job satisfaction rating of an SPR officer may be affected by procedures of an entire department, not just those set by an SPR program. In

the future, it will be helpful to compare a rating of a non-SPR police officer's job satisfaction with that of an SPR police officer.

Also, because CIT coordinators were selected from law enforcement, mental health, and/or other agencies supporting an SPR program, the survey responses may have varied according to the group or profession to which the coordinator belonged. The experience of a CIT Coordinator might also be related to the length of operation of the program and therefore influence the extent to which the coordinator was able to accurately answer survey questions; coordinators who have fulfilled the role for a long time may have more precise knowledge with respect to an SPR program's policies, operations, successes, and barriers than those who have just been assigned to the position.

***Generalizability of the results.*** The current study's sample size was small and was obtained from a list of CIT Coordinators registered on the CIT Center's directory. It is possible that registered CIT Coordinators were more involved in their role as evidenced by their effort to register on the directory and, therefore, more knowledgeable than those who did not register. Criterion-based selection of a relatively small number of expert interview participants in this study may also have not guaranteed that the experts' views were typical or representative of the views of all experts in the field.

Although the database that contained a list of CIT Coordinators was assumed to be complete and up to date, it is possible that it was not being regularly updated. There may be a risk of selective reporting by the CIT Coordinators of their program to the website that maintained the database. Perhaps, those coordinators who were highly satisfied with their programs, were also more motivated and more likely to register on the CIT Coordinators list. Limited time resources may have affected some of the

coordinators' ability to participate in CIT activities, including registering on the website. Many CIT Coordinators fulfill multiple roles in their community, and the coordinator's duties specific to CIT may not be as much of a priority for some coordinators.

***Responder Bias.*** The survey and interview responses were also subject to responder bias. In case of the CIT Coordinators, their reports on issues, such as an extent of availability of mental health resources, might have been influenced by unfamiliarity with the topic, inability to recall or estimate information accurately, and/or a temporary personal attitude toward the issue. For example, it is possible that some CIT Coordinators might have, intentionally or unintentionally, inflated the rating of a job satisfaction of SPR police officers; a possible reason for this is that CIT Coordinators are naturally invested in their programs' development and implementation and they most likely want officers in their programs to have favorable views of the program.

The reports might also have been affected by coordinators' attitude toward their jobs or toward people and agencies on whom they were reporting. For example, if a coordinator had a negative relationship or experience with a local mental health agency, he or she might have perceived the availability of mental health resources lower than it actually was. Future studies related to this topic should aim to obtain direct measures of variables used in corresponding hypotheses.

***Responders' Concerns of Being Linked to the Responses.*** The responders were only made identifiable to the researcher and any personal identification data were protected and removed from access by any other party. Nonetheless, it is possible that the responders feared that they would be linked to their responses and may have responded in

a way that made them look favorable, especially to their supervisor or to the communities in which they operated.

***Survey Validity and Reliability.*** The survey questions were used to measure and operationalize definitions of the variables used in this study. The survey's validity i.e., accuracy in operationalization of the variables, is brought into question because there were no formal procedures to test the construct or criterion validity. Also, the survey has only been distributed to a single sample of CIT Coordinators; only a replication of the results across multiple samples would support the reliability of this survey instrument.

The degree of deviation of an SPR program from the original CIT model i.e., dependent variable used in testing hypotheses 1-5, was measured by addition and omission of program components and each component was assigned a value of 1. Assignment of equal value to all of the components may not have accounted for the significance of each component and how much it contributed to the effectiveness of the program. Also, there was subjectivity in determination what constituted full implementation of some of the more complex components. For example, even though the omission of a component of the officer selection was clear if the survey respondent answered anything but "volunteer" or "chosen based on specific criterion," the "presence" of supportive leader was more subjective because it was determined by the survey respondents' perception of the support. Application of more objective measures of the components and, perhaps, weighing each component based on its contribution to the effectiveness of the original CIT model, would have improved the accuracy of the operational definitions in this study.

Prior to dissemination of the survey to a sample of CIT Coordinators, the survey was piloted for face and content validity: It was distributed to a handful of individuals who were familiar with the CIT topic in order to address any problems with clarity and to obtain feedback on whether the questions addressed what they were intended to measure. This study's investigator followed up with the pilot respondents on the questions related to this study's variables and hypotheses and made necessary adjustments prior to finalizing the survey. However, an interpretation of the pilot survey assumed that the pilot respondents' feedback was accurate and complete which may not have been the case.



## CHAPTER 4

### Results

This study examined a relationship between the degree and types of variations within specialized policing response models and their corresponding community characteristics. It also examined the rating of police officers' job satisfaction as it related to an SPR program's deviation from the original CIT model. The study utilized a survey methodology to collect information from CIT Coordinators in SPR programs around the country on the type of variables that characterized their communities (e.g., level of mental health resources) and the degree to which the community adhered to the components of the original CIT model. After the survey responses were collected, ten experts in the field of SPR programs were interviewed and asked to comment and reflect on the results. The experts' answers were then qualitatively analyzed to determine trends and themes related to the study's research questions.

The following sections provide survey results which include (a) percent of total responses in the survey for demographic variables, (b) descriptive statistics for independent, dependent variables, and control variables, and (c) results of univariate, bivariate, and multiple regression analyses. A summary of statistical analyses of the survey responses is followed by a qualitative analysis of interview responses from the experts as they relate to each of the study's hypotheses.

#### **Univariate Analysis**

##### **Descriptive statistics.**

Descriptive statistics were reviewed for all variables IV1-IV6, DV1, DV2, CV1, and CV2. For the independent variables IV1 (measured at an interval level) and IV5 and

DV1 (measured at an interval level), descriptive statistics included range, minimum and maximum values, mean and its standard deviation, median, mode, and skewness. For the ordinal variables (CV1, CV2, IV2, IV3, IV4, IV5, and DV2), descriptive statistics included mode, median, and skewness.

Table 11 shows that for the control variable of **socio-economic status** ( $n = 93$ ), the most frequent response category was middle class status; for the control variable of the **ethnic/racial status** ( $n = 95$ ), the most frequently reported response corresponded to a White/Caucasian status.

As can be seen in Table 11, the values of the independent variable, **population density** ( $n = 90$ ), range from 24 to 7178; the average value was 1402 with standard deviation of 1597, and the median was 742 (see Table 11). A large number of responses was observed to cluster around low population density values and very few values were observed at high values of population density. This indicates that higher population values pulled the mean away from the median resulting in a positive skew.

For the independent variable of **extent of need to address special populations** ( $n = 96$ ), the mode value indicates that the most frequent type of extent of need was “high”; the median was “moderate”. The distribution of responses was slightly negatively skewed (see Table 11). For the independent variable of **extent of mental health resources** ( $n = 102$ ), the results show the respondents identified “adequate availability” as the most frequent category; the median was “adequate availability” as well. The distribution of responses was slightly negatively skewed (see Table 11).

For the independent variable of **extent of policies** ( $n = 103$ ), the results show that the most frequent category consisted of “low extent”; the median was 3 = *low extent*. The

distribution of responses was very slightly negatively skewed (see Table 11). For the independent variable of the **support of mental health/law enforcement administrators** ( $n = 100$ ) the results show that the most frequent response was “maximum support” and the median was between high and maximum, 4.5 (see Table 11).

For the variable of *degree of total deviation (DVI used in hypotheses 1-5 and IV6 used in hypothesis 6)*, the results show that deviations ranged from 0-7; the average degree of deviation was 3.64 with a standard deviation of 1.67; the most frequently occurring degree of deviation was 4 and the median was 4. The distribution is slightly negatively skewed and otherwise resembling a normal distribution of the variable in the sample (see Table 11). For the variable of *job satisfaction of SPR police officers (DVI)*, the results show that “completely satisfied” was reported most frequently; the median was 4 = *completely satisfied*. The distribution of responses had a slight negative skew (see Table 11).

Table 11

*Descriptive Statistics for Dependent Variables and Independent Variables*

	Socio-economic Status	Ethnic/Racial Status	Population Density	MH Resources	Extent Policies	MH/LE Admin Support	Total Deviation	Job Sat. Rating
Valid	93	95	90	102	103	100	103	99
Mean			1401				3.64	
SD			1596				1.67	
Min			24				0	
Max			7178				7	
Median	3	2	742	4	3	4	4	4
Mode	3	2	84	4	3	4	4	4
Skew	.09	2.35	1.60	-.58	-.36	-.58	-.07	-.70

N=105

*Note.* Multiple modes exist. Smallest value is shown. For variables measured at a ratio and interval levels, statistics include minimum and maximum values, mean, standard deviation (SD), and skewness (skew). For variables measured at an ordinal level, statistics include median, mode, and skewness (skew). For variables measured at a nominal level, statistics include mode and skewness (skew). Variable Coding. Socio-economic status: 1= lower class; 2= lower middle class; 3= middle class; 4=upper middle class; 5= upper class. Ethnic/racial status: 1=Hispanic/Latino; 2= White, 3= Black/African American. MH (mental health) resources: 1= very low; 2= low; 3= moderate; 4= high; 5= plenty. Extent Policies: 1= maximum; 2= moderate; 3= low; 4=absence. MH/LE Administrative Support: 0= no support; 1-2.5= low support; 2.6-3.5= moderate support; 3.6- 4.5= high support; 4.6-5= maximum support. Job Sat. (Job Satisfaction): 0= not satisfied; 1= somewhat satisfied; 2= moderately satisfied; 3= very satisfied; 4= completely satisfied.

Based on the results of the univariate analysis, all variables examined above, were kept and transitioned to be used in bivariate analyses.

**Multicollinearity.**

To determine whether multicollinearity was present, tolerance values and Variation Inflation Factor (VIF) values corresponding to each of the independent

variables, were examined (see Table 12). High tolerance values and VIF values indicated absence of multicollinearity. Following this analysis, all of the independent variables were kept and used in bivariate and multivariate analyses.

Table 12

*Tolerance Values for Independent Variables Predicting DVI*

Independent Variables	Tolerance Values	VIF Values
Population Density	.952	1.165
Special Populations	.979	1.325
MH Resources	.991	1.237
Extent of Policies	.977	1.185
MH/LE Administrative Support	.966	1.176

*Note.* High tolerance values (i.e., close to 1) indicate absence of multicollinearity. VIF values do not exceed 5, further confirming absence of multicollinearity.

**Multiple regression assumptions.**

In addition to multicollinearity, the other assumptions necessary for regression results to be valid, i.e., linear relationship, normal distribution in population of the dependent variable, and absence of auto correlations were tested. A standardized residual scatter plot revealed a linear relationship and a histogram of a fitted normal curve showed a fairly normal distribution of the dependent variable. A Durbin- Watson test revealed a value of 1.68 which indicates absence of autocorrelations.

**Correlations.**

Table 13 presents the bivariate correlations between each of the independent, dependent, and control variables. As can be seen, some correlations exist at a significant level, however, the values are small and do not indicate that there are strong relationships between any of the variables. All of the variables were therefore kept and used in bivariate and multivariate analyses.

Table 13

*Correlations between Independent, Dependent, and Control Variables*

	<b>Variables</b>	1	2	3	4	5	6	7
1	SE status (CV)		-.215*	-.123	-.063	-.017	.064	.050
2	Ethnic/Racial Status (CV)			.009	.025	-.076	-.123	.065
3	Population Density (IV)				-.036	.026	0.002	-.069
4	Extent of Policies (IV)					-.119	.212**	.254**
5	MH Resources (IV)						.290**	.247**
6	MH/LE Administrative Support (IV)							-.355**
7	Total Deviation (DV)							

*Note.* Values close to 1 indicate strong association between the variables.

\*\*Correlation is significant at the .01 level

\*Correlation is significant at the .05 level

### **Bivariate Regression: Testing Hypotheses 1-5**

For each set of hypotheses, bivariate regression was conducted to determine the degree of a relationship between each independent variable and the dependent variable.

Table 14 provides a bivariate examination of each independent variable and the total

deviation from the original CIT model (DV1). Four significant relationships were found between the following independent variables and the dependent variables:

1. Total deviation (DV1) and the extent of need to attend to special populations (IV2).
2. Total deviation (DV1) and the availability of mental health resources (IV3).
3. Total deviation (DV1) and the extent of policies (IV4).
4. Total deviation (DV1) and the law enforcement/ mental health administrative support (IV5).

Population density did not predict total deviation at a significant level (see Table 14).

Table 14

*Bivariate Regressions to Examine Relationship between Each Individual Independent Variable and the Total Deviation from the Original CIT Model*

Variable	N	B(SE)	t	R <sup>2</sup>	F
Population Density	89	-3.848E-5(.000)	-.335	.001	.112
Special Populations	86	.107(.165)	.652*	.005	.425
MH Resources	102	-.449(.137)	-3.278**	.097	10.746
Extent of Policies	103	.562(.172)	3.275**	.096	10.726
MH/LE Administrative Support	100	-.701(.158)	-4.445***	.168	19.754

p<.000\*\*\*

p<.01\*\*

p<.05\*



Although there was a number of significant relationships and one non-significant relationship all the variables were tested in a multiple regression model in order to determine whether the status of the relationships was maintained.

### **Multiple Regression: Testing Hypotheses 1-6**

In order to test Hypotheses 1-5 and determine the influence of independent variables on the degree of deviation from the original model (DV1), the following variables were entered into the multiple regression equation.

IV1- population density of the jurisdiction.

IV2- extent of need to attend to special populations

IV3- availability of mental health resources

IV4- extent of policies addressing law enforcement's response to individuals with mental health in crisis

IV5- support of law enforcement and mental health administrators for the SPR program

$$DV1 = a + b*IV1 + b*IV2 + b*IV3 + b*IV4, + b*IV5$$

An ethnic/ racial status (CV2) and socio-economic status (CV1) of the community were used as control variables in the multiple regression model. After the control variables, CV1 and CV2, were entered into the multivariate regression, the regression generated two models. Model 2 was chosen for further analysis because the  $\Delta R^2$  statistic indicated that the independent variables, which were added after the control variables, had a relationship to the dependent variable. The change in R square statistic ( $\Delta R^2$ ) for the increase in R Square ( $R^2$ ) associated with added variables was 0.255. This means that the information provided by the added independent variables reduces the error in predicting the dependent variable by 25.5% (see Table 15). The probability of the F

statistic ( $F = 2.947, p < .01$ ) for the change in R Square associated with the addition of the predictor variables to the regression analysis, was less than or equal to the level of significance of 0.01 (see Table 15). Therefore the null hypothesis that there was no improvement in the relationship between the set of independent variables and the dependent variable when the predictors were added, was rejected.

Using Model 2 of the multiple regression, the probability of the F value ( $F = 2.947, p < .01$  level) for overall regression relationship for all independent variables and the dependent variable was less than the level of significance of .05 (see Table 5). Therefore the null hypothesis that there is no relationship between the set of all independent variables and the dependent variable, was rejected.

Table 15

*Summary of Multiple Regression Models 1 and 2*

Model	R <sup>2</sup>	Adjusted R <sup>2</sup>	ΔR <sup>2</sup>	F
1	.011	-.020	.011	.350
2	.266	.176	.255	2.947**

p<.000\*\*\*

p<.01\*\*

p<.05\*

Model 2 shows that the independent variables that entered the multiple regression equation explained 17.6% of the variation in the degree to which an SPR program deviated from the original CIT model (see Table 16). The contributions of each individual independent variable are described below as they relate to each hypothesis.

***Hypothesis 1. Communities with higher population densities (non-rural***

*communities) will be more likely to adopt the original CIT model.*

This hypothesis was not supported. There was no significance for the effect of population density (IV1) on the degree to which an SPR program deviated from the original CIT model ((DV1). A probability of the t statistic ( $t = -0.115$ ) for the b coefficient was 0.909 which is not significant at a .05 level (see Table 16).

***Hypothesis 2. The lesser the availability of mental health resources in the community, the greater the deviation of an SPR program from the original CIT program.***

This hypothesis was supported with respect to the direction of the effect (see Table 16). For every unit increase in the mental health resources (IV3), the deviation of an SPR program from the original CIT program decreases by 0.406 units ( $F = 2.947$ ,  $p = .01$ , adjusted  $R^2 = .176$ ).

***Hypothesis 3. The greater the community need is to address a special subset of mentally ill population (e.g., mentally ill who are homeless), the more likely an SPR program is going to deviate from the original CIT model.***

This hypothesis was supported with respect to the direction of the effect (see Table 16). For every unit increase in the need to attend to a special population (IV2), the deviation of an SPR program from the original CIT program (DV1) increases by 0.510 units ( $F = 2.947$ ,  $p = .01$ , adjusted  $R^2 = .176$ ).

***Hypothesis 4. Communities that have access to extensive local and/or state policies on law enforcement's response to people with mental illness will not deviate or will only minimally deviate from the original CIT program.***

This hypothesis was supported with respect to the direction of the effect (see Table 16). For every unit increase in the extent of policies (IV4), the deviation in the SPR program from the original CIT model (DV1) decreases by 0.477 units ( $F = 2.947$ ,  $p = .01$ , adjusted  $R^2 = .176$ ).

***Hypothesis 5. The more the top administrators within a criminal justice and mental health agencies support an existing SPR program or other jail diversion initiatives, the more likely it is that an SPR program will not deviate from the original CIT model.***

This hypothesis was supported with respect to the direction of the effect. For every unit increase in the support of the mental health and law enforcement administrators for the SPR program (IV5), the program's deviation from the original CIT model (DV1) decreases by 0.554 units ( $F = 2.947$ ,  $p = .01$ , adjusted  $R^2 = .176$ ).

Table 16

*Predictors of Program's Deviation from Original CIT Model*

Variable	B(SE)	t
Constant	3.576 (1.782)	2.007*
Ethnic/Racial Status	.123 (.198)	.622
Socioeconomic status	.384 (.265)	1.449
Population Density	-1.587E-5 (.000)	-.115
Special Needs	.510 (.213)	2.390*
Populations		
MH Resources	-.406 (.204)	-1.985*
Extent of Policies	.477 (.213)	2.233*
MH/LE Administrative Support	-.554 (.261)	-2.121*
$R^2$	.266	
Adjusted $R^2$	.176	
$F$	2.947**	
$\Delta R^2$	.255	
$\Delta F$	3.953	

p&lt;.000\*\*\*

p&lt;.01\*\*

p&lt;.05\*

### **Bivariate Regression Results: Testing Hypothesis 6**

In order to test Hypotheses 6 and determine the influence of the deviation of an SPR program from the original CIT model (IV6) on an SPR police officers' job satisfaction (DV1), IV6 was entered into a bivariate regression.

$$DV2 = a + b * IV6$$

*Hypothesis 6. The less an SPR program deviates from the original CIT model, the more likely it is that SPR police officers will be satisfied with their jobs.*

The hypothesis was confirmed with respect to direction of the effect (see Table 17). The total deviation of the SPR program from the original CIT model (IV6) explained 4.5% of an SPR officer's job satisfaction. Although the F value is significant ( $F = 4.535, p < .05$ ), the low value of R-Square indicates very weak relationship. The regression equation indicates that for every unit increase in deviation of an SPR program from the original SPR model (IV6), the satisfaction rating of SPR police officers (DV2) decreases by 0.104 units ( $F = 4.535, p = .05, \text{adjusted } R^2 = .176$ ).

Table 17  
*Predictor of Police Officers' Job Satisfaction Rating*

Police Officer's Job Satisfaction Rating		
Variable	B(SE)	t
Constant	4.501 (.195)	23.041***
Total Deviation	-.104 (.049)	-.2.130*
$R^2$	.045	
Adjusted $R^2$	.035	
$F$	4.535*	

*Note.* N=99

p<.000\*\*\*

p<.01\*\*

p<.05\*

The results of the statistical analyses strongly supported four out of the six hypotheses in this study. The results of survey analysis did not support the prediction that rural communities would be more likely than non-rural communities to deviate from the original CIT program. This result was surprising and is further elaborated on in the qualitative analysis of the expert interviews. Although the independent variable of total deviation from the original CIT model significantly predicted SPR police officers' job satisfaction, the relationship was weak as indicated by the R Square statistic.

The independent variables, including the need to address special populations, availability of mental health resources, support of top administrators for the SPR program, and the extent of SPR policies, all predicted the direction of deviation of the program from the original CIT model.

In summary, the results of the statistical analyses supported some of the hypotheses in this study as well as the predictions found in previous research and literature related to the topic.

### **Summary of Expert Interviews**

Ten experts in the field of SPR programs were interviewed with regards to the survey results. The experts were selected based on specific criteria, which increased the likelihood that their expertise was suitable and applicable to the nature of this study's research topic. The criteria included active participation and/or published opinion or research in the field of SPR programs. The experts were asked to comment on the survey results with respect to each of the study's hypothesis; they were asked to comment on possible reasons for the results as well as provide any recommendations for future research in the area. The quantitative data obtained through statistical analyses of survey



responses were the focus of the experts' answers. These answers were then used to further formulate the conclusions about the quantitative survey results.

**Population density.**

The survey found that there was no difference between the rural and urban communities with respect to their adherence to the original CIT model. Four of the experts confidently agreed with the finding commenting that even though there are many reasons for why the rural communities would have to modify the original CIT model to make it work in their communities, the differences are counterbalanced by the degree of commitment of individual communities and the efforts of their leaders to support an SPR program. One expert commented that it might be equally difficult for urban communities to have enough mental health resources to adopt all the components of the original CIT because lack of mental health resources is a "universal issue". Another expert said that "cosmetic differences" exist, however, if a program is "engaging" (e.g., characterized by sense of identity, ownership, and specialty), it will make up for any of the barriers that may come with the type of community. Four of the experts found the finding surprising as their perceptions were that rural communities had a much harder time adopting all of the components of the original CIT model including the ability to only train officers who volunteer, send officers to training, spend more mental health resources on components such as a 24-hour drop off facility, or transport individuals in crisis in timely manner without taking away from police officers' other duties. One of the experts was surprised by the result because, based on his belief, rural communities come with large geographical size where CIT officers' accessibility to a 24-hour drop off center is much more limited.

Two of the experts did not have enough information to comment on the result of the study as they were not familiar with the issue of implementation in rural vs. urban communities.

In terms of directions for future research, some experts suggested further analysis of single- vs. multi-jurisdictional communities because there is a possibility that rural communities approximate urban communities by pulling together resources that would otherwise be unavailable in a single rural community.

**Extent of need to attend to special populations.**

The survey results showed that the greater the presence of special populations in the community, the more likely the program deviated from the original CIT model. Three of the experts agreed with the finding, one was surprised by the finding, and six did not feel they were able to make a statement one way or the other. Those who agreed with the finding, commented that programs in communities that have strong presence of special populations, such as homeless individuals, are more likely to have additional resources and plans dedicated to address the issue thus the deviation from the original model is most likely by addition of components. Most of the experts commented that strong CIT programs try to enhance the standard core components by addition of other ones that are necessary due to a unique issue such as presence of special populations. One expert wondered if the survey respondents were able to accurately judge the presence of special populations, as special populations are often hidden and typically difficult to assess. Another expert commented at length on the importance of CIT programs to continually assess needs specific to a community and to continuously improve them; thus, deviation

from the original CIT, if it is by addition of components, is actually a right action for a program to take.

### **Mental health resources.**

The survey results showed that the greater the mental health resources in the community, the less likely the program deviated from the original CIT model. All experts agreed that this finding makes sense as the original CIT model assumes access to mental health resources. One expert emphasized that lack of mental health resources is the biggest barrier in establishing programs such as CIT. However, another expert emphasized that communities should not assume that they could not establish a good CIT program just because they have low mental health resources; establishing a CIT program is a goal that communities should aspire to have and nurture continuously. Advocacy for greater mental health resources should be done at state and local levels and CIT is part of that process. Another expert observed a possible relationship between mental health resources, urban communities, and special populations; he suggested that greater mental health resources and greater concentration of special populations, such as homeless people, typically characterize urban communities. This expert did not speculate on whether it is because special populations lead urban communities to have to secure greater amount of mental health resources or whether special populations, such as homeless individuals, are more likely to reside in urban communities where mental health resources are more readily available. This may be a direction for future research.

### **Extent of law enforcement and mental health policies**

The results of the survey showed that the greater the extent of law enforcement and mental health policies, the less likely the program deviated from the original CIT

model. One expert was surprised by the finding, three experts agreed, and six were not able to comment. The expert who did not agree with the finding spoke about how departments may actually avoid formulating detailed policies and protocols due to the fear of lawsuits; policies with respect to how officers need to respond to individuals with mental illness in crisis actually may not be desirable, as officers still have to develop their own “style” to handle crisis even after receiving general direction on de-escalation. Experts who agreed with the finding spoke about the original CIT model as being characterized by detailed policies and documentation; therefore it was not surprising to them that the programs with more policies would be less likely to deviate from the original model. Those who had trouble reflecting on the issue, replied that the survey question might have not been clear to the respondents because the word “extent” might have represented a variety of things such as number of pages, types of policies, accessibility of a policy, and so on. Some experts reported that the respondents might not have been previewed to all the policies for both law enforcement and mental health departments depending on their respective departments. One expert suggested that perhaps the extent of policies was not a component that was critical to adherence to the original CIT model. Another expert replied that if there were to be a deviation from the original model, it might be due to policies that were added on to the standard ones; this expert thought this was a desirable outcome that would not indicate a deviation from the original CIT model; CIT welcomes enhancement by addition. One expert recommended further data analysis to determine the types of components that were omitted.

**Support of mental health and law enforcement administrators.**

The results of the survey showed that the greater the support of the law enforcement and mental health administrators for the program, the less likely the program deviated from the original CIT model. Nine of the experts agreed with the finding. These experts emphasized the importance of leaders or “champions” in sustaining the critical components of the original model. One expert commented that the administrative support and partnership can help “buffer programs against budget shortfalls” that they may individually experience. One of the experts was hesitant to reflect on the result because he was not familiar with the issue of administrative support within SPR programs.

**Geographical size and population density.**

Survey results found that the population density did not make a difference in how much a program deviates from the original CIT model. Three of the experts agreed, three disagreed, and four were not able to disagree or agree. Those who agreed were not surprised by the finding saying that the CIT model should be easily adapted in variety of communities (small and large) and that the infrastructure of a program itself and stakeholders’ commitment to making positive change through the program are far more critical to whether a CIT program will be sustainable. Comments by experts who found the finding surprising included statements about communities with low population densities and those in large geographical areas naturally struggling to apply the CIT components. For example, an effective CIT program is characterized by efficiency with which police officers transport individuals in crisis to central drop-off locations; in a low population density area, facilities are more likely to be spread out therefore rendering the officers’ travel time lengthy.

**Police officers’ job satisfaction.**

According to the statistical model, the degree of deviation from the original CIT model poorly predicted an SPR officers' job satisfaction with the program. Most experts believed that a stronger fidelity of an SPR program should result in higher SPR officers' job satisfaction with the program and emphasized the importance of making sure that programs not only provide the 40-hour training to the CIT officers, but also continue to support the officers afterward. Officers must find the techniques they learned in training to be effective and must have positive experiences with the mental health system in order to like what they do as part of an SPR model. One expert talked about officer satisfaction coming through multiple layers of partnership between mental health, law enforcement, and advocacy groups; officers must feel supported and must have a sense of ownership of the program. Another expert did point out that in a recent, not yet published study, it was found that there was no difference in job satisfaction of CIT officers vs. non-CIT officers. He encouraged that more research should be done in the area.

**Most important component of an effective SPR program.**

Interview participants were asked to name the single most important component of an effective SPR program. Nine experts named collaboration/partnership between the mental health, law enforcement, and consumer advocacy groups as a critical to effectiveness of an SPR model. One expert emphasized the presence of a coordinator overseeing the collaborative interactions between the different agencies as the most critical factor.

**Strict adherence to original CIT program.**

Interview participants were asked whether they believed that a strict adherence to the original CIT model mattered and were asked to provide a rating on a scale of 0-5,

with 0 = *does not matter* and 5 = *significantly matters*, of how much it matters that the adherence is strict. Two experts stated that strict adherence was necessary and rated strictness at 5 = *significantly matters*. Seven experts agreed that adherence is important, but flexibility should be allowed because communities are so different. Five of those seven experts provided a rating of 4 and two experts did not provide a numerical rating. Comments in support of flexibility included statements about how jurisdictions differ in their ability to implement the different core components of the CIT model. For example, smaller police departments may have to train all of their officers instead of making it voluntary. Experts said that it is important that programs are allowed time to work toward all of the core elements of the CIT and that they may not be able to afford to implement all of the components immediately. Also forgoing core components is very different from adding additional ones. Choosing not to work toward implementation of all of the core components is not desirable; adding components to enhance the program is highly commendable. One of the experts refrained from providing opinion on whether strict adherence matters because he stated that there are no current data to draw any conclusions.

**Variables influencing police officers' rating of program effectiveness.**

Interview participants were asked to name variables that, in their opinion, influenced police officers' rating of an SPR program's effectiveness. The responses included the following variables:

- quality of the 40-hour training
- ability to volunteer vs. being told to participate in training
- sense of strong collaboration between mental health and law enforcement

- ability to successfully divert individuals with mental illness from jail to treatment
- experiencing positive outcomes
- ability to use de-escalation techniques successfully (seeing it work)
- being recognized and rewarded for their work (e.g., an annual awards banquet)
- support of the supervisor and people at multiple agency layers
- sensing enthusiasm of the agencies for the CIT program
- feeling that the training has increased their safety
- experiencing genuine positive interactions with people with mental illness
- feeling their input is taken
- having a sense of ownership, identity, partnership, and specialization

One of the experts added a comment about positive changes that he thinks have taken place within law enforcement agencies, however not so much within mental health. He said that police officers are consistently more positive while there is a visible regression in the professionalism of mental health workers; this is most likely due to mental health resources being cut in jurisdictions across the nation.



## **Chapter 5**

### **Discussion**

Since the times of deinstitutionalization, a disproportionate involvement of persons with serious mental illness in the criminal justice system has captured the attention of stakeholders in the field. “While mental health budgets are being reduced in many states, police departments across the country, attempt to create programs designed to improve officers’ ability to safely intervene, link individuals to mental health services, and divert them from the criminal justice system when appropriate” (Watson & Fulambarker, 2012, pg.71 ). Crisis Intervention Team model is one of those programs and although CIT has been identified as both a “Promising Practice” (International Association of Chiefs of Police, 2010) and a “Best Practice” model for law enforcement (Thompson and Borum, 2006), there is a question of whether the model and all of its core elements can feasibly be implemented in different types of communities and with equal success. (Council of State Governments, 2010).

The current study examined the degree of deviation of a specialized policing response models from the original CIT model and its core elements as related to the following community characteristics: population density, mental health resources, need to address special populations, extent of local and state policies, and the support of criminal justice and mental health administrators for an SPR program. These characteristics were originally recommended by the Council of State Governments (2010) as variables that should be examined in order to find out how different communities adapt the core components of the original CIT model. This study also examined job satisfaction of SPR police officers as related to the program’s deviation from the original CIT model.

In order to guide policy development in the area of jail diversion at a level of first encounter between an individual with mental health diagnosis and law enforcement, it is important to determine patterns of variations in SPR models as related to community characteristics. With very few studies examining the relationship between community characteristics and variations in the SPR models (Council of State Governments, 2010; Ruland et al., 2009; Steadman et al., 2000; Steadman et al., 2001; Watson et al., 2011; Watson et al., 2008), this study was designed to investigate the relationship between these two multi-level variables in order to provide insight into how specialized policing responses could be tailored to the needs of a particular community.

This study utilized a survey and interview methodologies to answer research questions that have been derived from important issues raised in literature and by community stakeholders (Compton et al., 2008; Compton et. al., 2012; Council of State Governments, 2010; Deane et al., 1999; Dupont & Cochran, 2000; Hoover, 2007; Oliva & Compton, 2008; Ruland et al., 2009; Steadman et al., 2000; Watson et al., 2011; Watson et al., 2008). Multiple regression analyses indicated that mental health resources, local and state SPR policies, extent of need to support special populations, and the degree of support of criminal justice and mental health administrators for the program, were significant predictors of program's deviation from the original CIT program. Population density was not a significant predictor of program's deviation from the original CIT model. Job satisfaction of police officers who were part of an SPR program did not strongly correlate with how much the program deviated from the original CIT model. Interviews with experts in the field of specialized policing response along with other research in the area, provided insight into possible reasons for the results.

The following sections elaborate in more detail on the findings as they relate to variables used in data analysis.

### **Population density.**

Previous research showed that rural communities (i.e., characterized by lower population density) have more difficulty with implementing the original CIT model because it requires components, such as a speedy access to mental health facility (Watson et al., 2011). Therefore, this study's finding that the population density did not predict program's deviation from the original CIT model, was surprising. However, many of the experts who were interviewed expressed that the degree to which a community can adapt the original CIT should not be affected by its rural or urban status; according to some of the experts, the primary force behind the CIT's effectiveness is an extent to which community stakeholders support implementation of a program over time and how strongly they advocate for inter-agency collaboration. Furthermore, many communities, such as New River Valley in Virginia, address issues by creating strong inter-agency linkages and by combining multiple jurisdictions to allow for exchange of resources between multiple communities (Council of State Governments, 2010).

Because this study used survey as a primary method of data collection, it is possible that the results reflect underrepresentation by communities that are not as dedicated to developing their SPR program; for the variable of population density, it is possible that CIT Coordinators, who responded to the survey, represented communities that had a strong dedication to the CIT model to begin with, and therefore did not represent *all* of the communities in the United States that used an SPR model.

### **Special populations.**

The extent of need to support special populations correlated with the degree to which a community adapted the original CIT model: The greater the extent of need to support special populations, the more a program deviated from the original CIT model. The study's hypothesis was that the deviation from the original model was due to an addition of components that addressed special populations. Because this study did not analyze whether the degree of deviation was due to component addition or omission, it is not possible to conclude that the deviation was in fact due to addition. Communities with higher need to attend to special populations may omit components of the original CIT model in order to allocate more resources towards special populations. Experts in this study's interview emphasized that, if the deviation was due to an addition of a component, it should not be considered objectionable; CIT encourages development of new solutions to improve outcomes related to the individual community's needs.

**Mental health resources.**

The study found that communities with greater mental health resources were more likely to adhere to the original CIT model. This finding is not surprising since CIT model does require dedication of mental health resources, including ability of officers to transfer individuals into care of mental health professionals without a delay; for this to work, mental health professionals, along with an appropriate mental health facility, must be readily available. Many of the experts emphasized that a successful CIT program requires a significant amount of collaboration between the mental health, law enforcement, and advocacy groups. Mental health agencies are especially influential in the collaboration process because they are more likely to facilitate enhanced partnership between the agencies. Where mental health supports are already stressed and stretched out,

collaborative efforts are more likely to be weak or to fail. Some experts who participated in this study's interview, emphasized that communities with low mental health resources should not be discouraged from considering CIT as an appropriate model because the ongoing advocacy that the CIT model encourages eventually leads to increased mental health resources.

One limitation to this study's measure of mental health resources is that it was reflected by CIT Coordinators' rating of the availability and not by a direct measure, such as a number of mental health providers in the area. Future research should incorporate direct measures if possible.

#### **Extent of local and state policies.**

Crisis Intervention Team model appears to support use of detailed policies and procedures related to law enforcement's response to individuals with mental illness in crisis. The authors of Council of State Governments (2010) report recommend and prescribe that departments create policies related to CIT training, interagency agreements, size and scope of the program, and the role of law enforcement, dispatch, patrol, and mental health agencies. A sample of policy topics for the Memphis Police Department can be seen in Appendix F.

The regression analysis showed that programs that deviate more from the original CIT model have a lesser "extent of policies" related to law enforcement's response to individuals with mental illness. One of the experts interviewed in his study commented that police department leaders may avoid putting extensive policies into practice for fear that detailed specifications will make police officers and department managers more liable in the event that a procedure is not followed step by step. Also, because police

officers' response to individuals with mental illness is highly unpredictable and officers need to utilize creativity and problem solving on the spot, step-by-step procedures may not be conducive to a dynamic response required by the CIT officers.

The finding should be interpreted with caution. The survey question asked about the "extent" of policies in each of the relevant departments (law enforcement, mental health, dispatch), and the term "extent" might have been interpreted in different ways (e.g., as number of pages, detail of policy, accessibility of policy etc.) by different survey respondents. This might have led to responses that were based on subjective interpretation.

Also, CIT coordinators might not have the knowledge of the extent of policies outside of their respective departments. Members of the law enforcement department represented 70% of the CIT Coordinators in this sample, and it is possible that they were only aware of the law enforcement policies and not policies of mental health and dispatch. This author might have inaccurately assumed that CIT Coordinators would typically be aware of information pertaining to all agencies involved in the CIT collaboration but such may not be the case.

Issues related to policies and procedures should continue to be addressed by future research. Lee and Vaugh (2010) in their paper on civil and organizational liability for use of excessive force by police officers emphasized that "...the primary concern of police organizational management should be solid managerial principles and administrative policies" (pg. 203). In their analysis of court cases, the authors found six cases of municipalities being liable for unconstitutional or missing policies related to deadly force. Historically, use of deadly force has presented as a grave concern for police

agencies responding to people with mental illness in crisis (e.g., Allen v. Muskogee, Oklahoma, 1997) therefore a design and extent of SPR programs' policies should become a priority for law enforcement agencies.

**Support of law enforcement and mental health administrators for the SPR program.**

This study found that the greater the support of the top administrators for the program, the more the SPR program adheres to the original CIT model. The original CIT model assumes administrative support and collaboration therefore this finding was not surprising to any of the experts. The experts emphasized the importance administrative support for the police officers who implement the techniques learned in the training, out on the street; the ongoing support is most likely one of the reasons that police officers respect the program and adhere to its components. As one of the experts stated, the top administrators in a program are responsible for establishing a “sense of identity, partnership, and ownership” in all who are part of the CIT program (S. Cochran, personal communication, April 6, 2015). Another expert spoke about an importance of a “champion,” most likely someone from the top administration, who should be a key role model for the program's support and for the enthusiasm about the program's goals and achievements.

**SPR police officers' job satisfaction.**

The results of the survey indicated that police officer's job satisfaction did not strongly correlate with the program's deviation from the original CIT model. Because CIT is well known for providing extra support, encouragement, and recognition to officers in SPR programs, SPR officers should be fairly satisfied with their roles. Future

research should examine the issue of officers' job satisfaction and should measure the satisfaction variable by directly asking officers for self-rating. SPR officers' job satisfaction should be compared with that of non-SPR officers in the department as well as with the satisfaction of SPR officers from other departments.

### **Additional Conclusions and Considerations**

The Justice Center, in partnership with Police Executive Research Forum and with support from Bureau of Justice Assistance, developed a collection of resources for law enforcement practitioners and their community partners; the current study incorporated the information provided in these publications to formulate its hypotheses and provide policy recommendations related to best practices in the area of police responses to mental health crisis calls. In 2004, using results of a survey of 80 law enforcement agencies and follow up interviews, the Police Executive Forum provided a guide to implementing police-based diversion programs. The guide emphasized that the specialized policing response programs needed to incorporate strong mental health-law enforcement collaboration, creative ways of increasing mental health resources, attention to special populations, and detailed policies that guide law enforcement response at the scene, disposition decisions, transportation, and linkage of individuals with mental illness to mental health resources. Similar to this study, The PERF publication used the CIT model as a reference for evaluating how different communities designed their own SPR programs. As in this study, the authors of the publication also anticipated that different communities would adapt the CIT model to their own unique needs. The current study's findings supported the 2004 PERF publication by discovering a relationship between the community's ability to adhere to the best-practice model i.e., the CIT model, and some of



the community characteristics that were listed in the PERF publication, namely mental health resources, mental health-law enforcement collaboration, special populations, and extent of policies. Communities that were able to more strictly adhere to the CIT model were characterized by greater availability of mental health resources, greater extent of collaboration between mental health and law enforcement agencies, and greater extent of policies.

With reference to special populations, the authors of the 2004 PERF publication, found that communities often created ways to attend to subsets of special populations, such as homeless individuals suffering from symptoms of mental illness, by adding specialized response units to an existing SPR team. For example, in Albuquerque, NM, the SPR program added a Health Care for the Homeless unit to better individualize its response to the homeless population. As hypothesized in this study, these components were often added to the existing components of a CIT program; therefore, even though programs deviated from the original CIT model, according to the PERF guidelines, they did so by addition and in order to enhance their effectiveness and customized service. Experts who were interviewed in this study reinforced the belief that program's deviation by addition should be encouraged if it improved the quality of SPR program's service.

The current study provides insight into variables that should be considered when designing a specialized policing response program to address the needs of mentally ill population within a community. There is evidence that communities that are better able to adapt the core elements of the original CIT model have more mental health resources. However, the causal relationship is not clear. It may be that certain communities have more mental health resources because they have chosen to embrace stricter adherence to

the core components of the original CIT model. On the other hand, it is possible that pre-existing mental health resources lead communities to have a better ability to incorporate the core components of the CIT model. Finally, there may be a third variable that moderates a relationship between availability of mental health resources and adherence to the original CIT model. Future research should further explore this matter using control variables besides socio-economic status and ethnic racial status.

Consistent with previous research and expert statements, the results of the survey supported the importance of support of top administrators in both law enforcement and mental health agencies for the operations of a program. A “champion” who is able to coordinate the collaborative efforts of the different agencies is one of the keys to program’s success. Since the original CIT model is associated with positive outcomes (Watson et. al., 2012), its correlation with high levels of administrative support is not surprising.

This study examined the importance of strict adherence to an original innovation i.e., the CIT model. The experts’ feedback on strict adherence was mixed. Most experts advocated for stricter adherence to ensure that the core elements were not omitted; adding elements did not seem to be regarded as a problem. In other words, deviation by addition of elements was actually a welcome feature of an effective CIT program. Nonetheless, this author would encourage further investigation in this area particularly because addition of elements typically requires allocation of resources (e.g., human, financial etc.). If an element has not been proven to be effective through systematic replication and examination of outcomes, allocation of resources and efforts should be carefully weighed to ensure that the addition is not a waste of taxpayer’s money. Leaders who decide what

kind of program will best fit their community's needs, must consider cost-effectiveness, especially in light of budget cuts within the mental health area.

CIT has been recognized as a promising and a best-practice model in the area of specialized policing responses but it has not yet acquired a label of an "evidence based" model. The next step, for proponents of this model, is to collect data on direct outcomes and use these data to compare programs that 1) closely adhere to the original CIT model, 2) do not necessarily incorporate the core elements of the CIT model but still consider themselves specialized (e.g., train portion of their officers to respond to mental health calls), and 3) programs that do not have a specialized unit of officers but utilize all of their officers in responding to mental health calls.

Data related to direct outcomes, such as accuracy of identification of mental health calls by dispatch, rate of jail diversion, or rate of permanent linkage of individuals with mental illness to mental health services, are very difficult to obtain. Appendix G shows an example of a form which CIT officers may use to provide information about an outcome of a mental health call. Many programs do not collect detailed data as illustrated on this form because it is often perceived by police officers as cumbersome. This issue should be examined in further research to determine what factors in any particular police department contribute to success of data collection. This author believes that investment in data would allow the communities to access better information and tailor their programs to fit the needs of the community in a more efficient and cost-effective way. One of the original founders of the CIT model made a number of references in the interview to what makes a successful CIT program. He emphasized concepts such as "specialization", "ownership", "sense of identity", "collaboration", and "partnership" (S.

Cochran, personal communication, April 6, 2015). It is critical that research in the area turns toward defining these concepts in a measurable way and studies them so that communities can incorporate what is evidence-based into their program initiatives.

The issue of specialization should also be examined as related to SPR programs across the country. In his 2000 paper, James Fyfe suggested few principles for officers responding to emotionally disturbed persons (EDPs) (Fyfe, 2000). He claimed that these principles can be “taught and absorbed in no more than a couple of days” (pg. 347). Fyfe (2000) also mentioned that adherence to the principles he has described would “minimize the need for special units charged with particular responsibility for dealing with EDPs, reducing division within policing, and following the principle, well-known in both policing and medicine, that no specialty should be created unless its members can perform their task significantly better than can generalists” (pg. 347). On the other hand, the original founders of the CIT model, emphasized that a program designed to address law enforcement’s response to people with mental illness in crisis, needs to be “more than a training” (S. Cochran, personal communication, April 6, 2015) and that ongoing nurturing of the program through specialization, collaboration and maintenance of self-identity, are critical to the success of any such program (S. Cochran, personal communication, April 6, 2015). Clearly, there is evidence that not all experts in the field agree on the extent to which programs should specialize in their response to special populations.

Another research question worth examining relates to the efficacy of pre- vs. post-booking programs. Although communities around the country focus their attention and effort on determining which pre-booking model to implement, the utilization and benefit

of post-booking programs should not be dismissed. Pre-booking programs, like CIT, may take a long time to make a positive difference and individuals with mental illness who are not diverted through CIT and who end up in jail, require immediate intervention.

Recently, the Cook County Jail in Chicago, IL, one of the largest jails in the country, appointed a clinical psychologist as its executive director (Block, 2015). One-third of Cook County's inmates are diagnosed with mental illness. The executive director, Nneka Jones Tapia, attributes the high rates of mental illness and her subsequent appointment as the executive director, to the lack of mental health services in the community which, as she claimed, was caused by closing of six mental health clinics and a refusal of local hospitals to admit individuals with mental illness (Block, 2015). It may be that the dire situation and the overwhelming prevalence of mental illness in jails in Chicago have led to an unusual choice for an executive director but the outcomes of this decision should be studied in terms of any benefits to the mentally ill individuals who enter the criminal justice system. Although jail diversion of mentally ill individuals is generally seen as a desirable outcome, when it does not work, it may be prudent to secure back-up plans and ensure supports at the post-booking end of the process.

In recent months, there has been an increase in negative attention toward law enforcement's use of excessive force, specifically towards members of racial minority groups. It may be appropriate to assess these recent developments through lenses of police behavior and subculture in general, as opposed to only looking at the context of racial relations. In other words, the reasons for police officers' seemingly excessive response to members of racial minority groups may be the same as the reasons for excessive response toward individuals with mental illness in crisis or under any

circumstances where officers have little or no information or face a suspect who does not fit a typical offender profile. Research documents plenty of factors that contribute to police officers' behavior including lack of training, lack of organizational policies, and situational and environmental factors (Lee et. al., 2010). Micucci et al., (2005) pointed out that "Police violence and associated forms of misconduct darken the police image, inhibit police effectiveness, reduce criminal justice system efficiency, usurp judicial authority, promote selective and discriminatory enforcement, and erode public trust and confidence in police and the American system of justice" (p. 496). It is critical that programs such as CIT along with other initiatives within the law enforcement field recognize the need to address police officers' training and support as something that can be achieved collectively.

Law enforcement officers and organizations, through programs such as CIT, have contributed too many valuable and honorable outcomes and, as in the case of CIT, have stepped up to make up for deficiencies in other agencies (e.g., mental health). It is therefore important to expand and maintain the line of research that investigates police behavior across multiple issues.

The diffusion of innovation theory proposes that innovations, such as the Memphis CIT model, eventually go through a process of "reinvention" (Rogers, 2003). The reinvention is defined as "the degree to which an innovation is changed or modified by a user in the process of its adaptation and implementation" (Rogers, 2003, pg. 17). This study found that, indeed, the degree of adaptation of the original CIT model was indeed correlated with community's access to mental health resources, acuity of presence of subset of special populations such as mentally ill who were homeless, the extent to

which the SPR policies were documented in the law enforcement, mental health, and dispatch departments, and how much the SPR program administrators supported the program. Majority of the experts who were interviewed in this study agreed that strict adherence to the original CIT model (i.e., the original invention) is important, but flexibility should be allowed because communities do have different needs and, at any point in time, may not have resources that are required to implement the original model with 100% fidelity. Omission of core components of the original model is not encouraged but as long as programs strive to implement missing core components by creating measurable objectives towards achieving them, the program's direction is generally acceptable. Majority of the experts did not think that addition of new components to the core ones should be considered a deviation from the original model. The overall sentiment shared by the experts interviewed in this study was that a deviations from the core components of the original CIT model are understandable and often have to do with barriers to access necessary resources; but just because a core component requires significant amount of resources, it should not be eliminated from a list of program's goals. Creativity in use of resources and growth of resources through partnership with other programs and inter-agency collaborations, may be a light at the end of the tunnel for many communities where the proper resources are lacking.

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## APPENDIX A

### CIT Coordinators' Survey

**Note: If you are not in a role of a CIT Coordinator for your jurisdiction, please, do not respond to this survey. Please, answer the following questions to the best of your knowledge. This survey should take no more than 30 minutes to complete.**

1. Check the agency of which you are a member:
  - Law Enforcement
  - Mental Health
  - NAMI Affiliate
  - Advocate
  - Other (please, specify): \_\_\_\_\_
  
2. Name of the jurisdiction in which your CIT program operates: \_\_\_\_\_
  
3. How would you classify the type of the community in which the CIT program operates?:
  - Rural
  - Suburban
  - Urban
  - Tribal
  - Don't know
  
4. Indicate the average socio-economic status of the community in which the CIT program operates:
  - Lower class (average household income \$0-\$19,999/year)
  - Lower Middle Class (average household income \$20,000- \$29,000/year)
  - Middle Class (average household income \$30,000- \$59,000/year)
  - Upper Middle Class (average household income \$60,000-99,999/year)
  - Upper Class (average household income \$100,000+/year)
  - Don't know
  
5. Indicate the major ethnic/racial group that characterizes the community in which the CIT program operates:
  - Hispanic or Latino
  - White
  - American Indian or Alaska Native
  - Asian
  - Black or African American
  - Native Hawaiian or Other Pacific Islander
  - Don't know
  
6. Which mental health and/or law enforcement supports does your jurisdiction utilize (check all that apply)?:
  - Law enforcement officers without specialized training respond to mental health calls
  - Specially trained law enforcement officers (e.g., CIT) respond to mental health calls
  - The police department hires a mental health professional or a mental health nurse to assist officers with mental health calls
  - A mental health professional or a mental health nurse employed by mental health agency always travels with officers to respond to mental health calls

- The jurisdiction utilizes a special mobile crisis response team consisting of law enforcement and mental health which functions independently of police department and mental health
- Don't know
- Other: \_\_\_\_\_

7. What is an estimated number of law enforcement officers actively responding to calls in the community in which the CIT program is operating?:

- Less than 10
- 11-20
- 21-30
- 31-40
- 41-50
- 51-60
- 61-70
- 71-80
- 81-90
- 91-100
- More than 100
- Don't know

8. How long has the CIT program been operating in your community?:

- Less than 6 months
- 7-12 months
- 2 -3 years
- 4-7 years
- 8-11 years
- More than 12 years
- Don't know

9. Which one of the following best describes the CIT program operating in your community?:

- Single-jurisdictional
- Multi- jurisdictional
- Part of a state-wide effort
- Other: \_\_\_\_\_
- Don't know

10. In terms of advancement of operation, which one of the following describes the CIT program in your community?:

- Fully self-sustained
- Close to being self-sustained
- Just developing
- Not yet developed
- Don't know

11. If the CIT program in your community is part of a state-wide effort, on a scale of 0-5, how would you rate the support that the program receives from the state officials, with 0 = no support and 5= significant support?:

0            1            2            3            4            5            Don't Know

12. Indicate the number of CIT training hours that are available for each of the following groups

**Police Officers**

Less than 5 hrs	6-12 hrs	13-19hrs	20-26hrs	27-33 hrs	34-40 hrs	More than 40 hours
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Don't know

**Fire and Rescue Workers**

Less than 5 hrs	6-12 hrs	13-19hrs	20-26hrs	27-33 hrs	34-40 hrs	More than 40 hours
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Don't know

**Emergency Dispatch Workers**

Less than 5 hrs	6-12 hrs	13-19hrs	20-26hrs	27-33 hrs	34-40 hrs	More than 40 hours
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Don't know

**Other Groups (e.g., Social Workers, University Employees, Students)**

Less than 5 hrs	6-12 hrs	13-19hrs	20-26hrs	27-33 hrs	34-40 hrs	More than 40 hours
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Don't know

13. How are the law enforcement officers selected for the CIT program (check all that are applicable)?

- Self-selected/Volunteer
- Chosen by supervisor based on a specific criterion, such as experience level
- Mandated to participate
- Don't know
- Other (please describe): \_\_\_\_\_

14. Are there specific written policies and procedures describing CIT operations in the operational handbooks of the following agencies/groups?:

Law Enforcement	Yes	No	Don't know
Mental Health	Yes	No	Don't know
Dispatch	Yes	No	Don't know

15. How often does the CIT steering committee (i.e., representatives of mental health, law enforcement, advocacy, other community members) meet to address CIT operations and issues:

- Every month
- Every quarter
- Once a year
- Other
- There is no CIT steering committee established in the jurisdiction
- Don't know

16. On average, how many hours of a refresher or advanced CIT training per year does the CIT program offer to the Law Enforcement Officers?

- 0
- 1-5
- 6-10
- 11-15
- 16-20
- More than 20
- Other: \_\_\_\_\_
- Don't know

17. What is the approximate annual cost of the specialized CIT training, including refresher training, guest speakers, food, replacement of officers who are in training?:

- Less than \$499
- \$500-\$1,499
- \$1,500- \$2,499
- \$2,500-\$3,499
- \$3,500-\$4,499
- \$4,500-\$5,499
- \$5,500-\$6,499
- More than \$6,500
- Don't know

18. If your jurisdiction provides the CIT training for law enforcement officers, please check *any applicable* components of the training that your CIT program provides:

- Overview of mental illness from multiple perspectives including persons with mental illness, family members, and mental health professionals
- Specific signs and symptoms of serious mental disorders
- Common problem of co-occurring disorders including co-occurring substance abuse and mental illness, along with co-occurring development disability and homelessness
- The influence of culture and ethnicity on the topic of mental health and how it is dealt with inside those cultures and ethnicities should be discussed as it applies to the cultural and ethnic makeup of the particular community
- Panel discussions
- Overview of psychiatric medications
- Overview of the local mental health system and services that are available
- Overview of mental health commitment law
- Comprehensive training in how to de-escalate a mental health crisis
- Sufficient practice, through role play, in de-escalation of mental illness crises so that all students are involved directly in the role play
- Field trips which give officers an opportunity to talk with consumers and emergency mental health personnel
- Graduation ceremony or similar event with awarding of CIT pins and certificates
- Site visit to an established CIT program (e.g., Memphis CIT)

1. On a scale of 0-5, where 0= no availability and 5= plenty of availability, rate the availability of mental health resources in the community in which the CIT program operates:

0      1      2      3      4      5      Don't Know

20. On a scale of 0-5, how would you rate the involvement of each of the following groups in the development or sustainability of the CIT program, with 0= no involvement and 5= significant involvement:

**Mental Health Agency Leaders**

0      1      2      3      4      5      Don't know

**Law Enforcement Agency Leaders**

0      1      2      3      4      5      Don't know

**Other Local Mental Health Advocacy Group (e.g., local NAMI)**

0      1      2      3      4      5      Don't know

**Families of persons with mental illness**

0      1      2      3      4      5      Don't know

**Police Department's Chief**

0      1      2      3      4      5      Don't know

21. On a scale of 0-5, with 0= no collaboration and 5= very significant collaboration, how would you rate the collaboration between the law enforcement and the mental health agencies:

0      1      2      3      4      5      Don't know

22. How would you describe the details of a formal written agreement or contract between the local law enforcement and mental health agencies in your jurisdiction, regarding the response of law enforcement to a mental health crisis:

- No written agreement
- Written Agreement with minimal detail
- Very detailed written agreement
- Significant extent
- Don't know

23. Does the immediate or neighboring community have a history of event(s) that includes a serious injury or death of a person with mental illness while interacting with law enforcement officers?

- Yes
- No
- Don't know

24. Does the community in which the CIT program operates have access to a no-refusal, 24-hour center to which the officers can bring the individual and leave them for supervision of mental health professionals?

- Yes, it is in early stages of development
- Yes, it is fully operational
- No, there is no such center
- No, there is no such center but there is a written contract between local law enforcement agency and a local hospital(s) that specifies priority for admission of persons with mental illness brought in by law enforcement.
- Don't Know

25. On a scale of 0-5, with 0= completely dissatisfied and 5= completely satisfied, how would you rate the job satisfaction of law enforcement officers who are part of the CIT program:

0      1      2      3      4      5      Don't know

26. What is the primary source of funding for training of law enforcement officers and operations of CIT program?:

- Individual /Community donations
- In-kind donations
- Federal or State Grant
- Specific allocation within federal budget
- Foundation Grant
- Local Mental Health budget
- Local Law enforcement budget
- Combination of sources (donations, budget allocations from federal, state, or local resources)
- Don't know

27. Does the CIT program have a university/collage affiliation?

- Yes
- No
- Don't know

28. On a scale of 0-5, with 1= extremely poor accurate identification, and 5= very accurate identification, how would you rate the ability of emergency dispatchers to identify mental health calls?

0      1      2      3      4      5      Don't know

29. On a scale of 0-5, with 1= no evaluation in place and 5= advanced evaluation in place, how would you rate the CIT program's evaluation methods?

0      1      2      3      4      5      Don't know

30. If the CIT program includes collaboration between agencies other than mental health and law enforcement, please, check any other applicable agencies:

- Municipal, county, state governments
- Local Veterans Administration
- Special population (e.g., homeless) advocacy groups
- Substance Abuse Service Agencies
- Other: \_\_\_\_\_
- Don't know

31. If you collect data related to the outcomes of CIT program, please, check off items that the data collection usually includes:

- Total duration of police response to mental health call
- Police injuries
- Citizen injuries
- Disposition of mental health calls (e.g., arrest, resolved on scene, transport to mental health facility etc.)
- Other (please, specify):
- Don't know

32. On a scale of 0-5, with 0= no adherence and 5= 100% adherence, how would you rate your CIT's adherence to the original Memphis CIT model?

0      1      2      3      4      5      Don't know

***Thank you for participating in this survey. Your effort will advance the cause of CIT research significantly.***

## APPENDIX B

### Survey Response Coding for Independent and Dependent Variables

	<b>How measured:</b>	<b>Survey Coding criterion:</b>
<b>Population Density (IV1)</b>	Defined by census bureau: population size/ jurisdiction area	N/A
<b>Extent of need to attend to special populations (IV2)</b>	Survey Question #30. 0- no need 1- low need 2- moderate need 3- high need	0= veterans, homeless, nor substance abuse checked 1= one of the agencies (veterans, homeless, or substance abuse checked) 2= two of the agencies (veterans, homeless or substance abuse checked) 3= three of the agencies (veterans, homeless or substance abuse checked)
<b>Availability of Mental Health Resources (IV3)</b>	Survey Question #19 0- no availability 1- very low availability 2- low availability 3- moderate availability 4- high availability 5- plenty of availability	Numerical value indicated by the respondent on a scale of 0-5
<b>Extent of specification in department policies (IV4)</b>	Survey Question #14 1- maximum extent 2- moderate extent 3-low extent 4-absence of policy	1= 3/3 departments checked "yes" for presence of written policies 2= 2/3 departments checked "yes" for presence of written policies 3= 1/3 departments checked "yes" for presence of written policies 4= 0/3 departments checked "yes" for presence of written policies Departments: Law Enforcement, Mental Health, Dispatch
<b>Extent of administrative mental health and law enforcement support (IV5)</b>	Survey Question #20	Numerical value indicated by the respondent on a scale of 0-5 averaging the mental health and law enforcement support scores. For example if respondent scored 2 under mental health supports and 3 under law enforcement supports, the score would value entered would be 2.5. 0- no support 1-2.5- low support 2.6-3.5- moderate support 3.6-4.5- high support 4.6-5- maximum support
<b>Degree of deviation of SPR program from the original CIT model (IV6 and DV1)</b>	Survey Questions <ul style="list-style-type: none"> <li>• #6- used to determine number of new components added</li> <li>• #12, #13 #14, #18, #20, #21, #24, #31- used to determine number of components omitted</li> </ul> <p>A= # of elements omitted B= # of elements added Total deviation= total number of elements omitted + total number of elements added (A+B)</p>	Numerical value corresponding to total deviation score. Total deviation = total number of core elements omitted + total number of new elements added <i>Elements:</i> <u>Counted as Addition</u> Q#6- counted each as 1 addition:1) police department hires mental health professional, 2) mental health professional traveling with officers, 3) special mobile crisis unit utilized <u>Counted as omission if respondent did not check:</u> Q#12- "34-40" OR "40" for Police Officers <u>and</u> "6-12" for Dispatch Q#13- "self-selected" Q#14- "yes" for all agencies (Law Enforcement, Mental Health, and Dispatch) Q#18- 10/12 boxes; graduation ceremony or site visits could be excluded Q#20- "4" or "5" for "Police Department Chief" Q#21- "4" or "5" Q#24- "in early stages of development" or "fully operational"
<b>SPR Police job satisfaction (as rated by the CIT Coordinator)</b>	Survey Question #25 0-completely dissatisfied 1-minimally satisfied 2- somewhat satisfied	Numerical value indicated by the respondent on a scale of 0-5



	3- moderately satisfied 4- very satisfied 5= completely satisfied	
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## APPENDIX C

### Expert Biographies

EXPERT NAME	BIOGRAPHY
Fred Frese	<p><b>Frederick J. Frese, Ph.D.</b> Dr. Frese is a psychologist practicing in Akron, Ohio. He is a member and formerly the Vice President of the national board of directors of National Alliance on Mental Illness. Dr. Frese is diagnosed as having schizophrenia. He is also a former Director of Psychology at Western Reserve Psychiatric Hospital and is on the faculty of Northeastern Ohio Universities College of Medicine. A member of the National Alliance for the Mentally Ill (NAMI) since 1985, Dr. Frese is now in his third term as a member of NAMI's National Board. He is also a member of the American Psychological Association Task Force for the Seriously Mentally Ill and was the founding president of the APA's section for psychologists serving persons with serious mental illness. Dr. Frese has served as a consultant to the Department of Veterans Affairs, to NIMH, and to SAMHSA's Center for Mental Health Services. He has testified before several congressional committees on mental health service priorities. He has published extensively, and is on the advisory review boards of professional journals, including Schizophrenia Bulletin. He has delivered more than 1000 invited presentations on serious mental illness in some 48 states as well as in Canada, Japan, Australia and Europe. He has appeared on CNN, NPR, Nightline, the ABC Evening News, and has co-produced a widely distributed training video about coping with schizophrenia.</p>
Amy Watson	<p><b>Amy Watson, Ph.D.</b> Dr. Watson is an associate professor at Jane Addams College of Social Work at University of Illinois of Chicago. Her research focuses on police encounters with persons with mental illnesses and the Crisis Intervention Team (CIT) model. She has conducted National Institute of Mental Health (NIMH) funded research on the experiences of persons with mental illnesses in police encounters (Police, Procedural Justice and Persons with Mental Illnesses) and developed a measure of perceived procedural justice in these encounters that is being used in projects in the United States and Canada. She has completed several federally funded studies of the Crisis Intervention Team model and is currently in the field with a \$3.1 million multi-method study of Chicago's CIT program (CIT &amp; MH Service Access in Police Contacts: Impact on Outcomes of Persons with Serious Mental Illnesses) that examines crisis encounters from officer and call subject perspectives and the role of service accessibility and neighborhood characteristics in outcomes for persons with mental illnesses in the 12 months following their focal police encounter. Dr. Watson has published extensively on this work and presented findings to local, national and international audiences. Dr. Watson has also conducted research and provided consultation to programs serving persons with mental illnesses with criminal justice system involvement. These include mental health courts and prison re-entry programs. Prior to joining the faculty at UIC, she was the project director and co-investigator National Institute of Mental Health Research Infrastructure Support Program grant that funded the Chicago Consortium for Stigma Research (PI Corrigan). This was an interdisciplinary project focused on understanding and reducing mental illness stigma that included multiple studies and dissemination of findings to academic, professional and advocacy and community audiences. Dr. Watson continues to be interested in mental illness stigma and incorporates considerations of the impact of stigma in all of her work. Dr. Watson work has been recognized locally and internationally. In 2008, she received the Young Researcher of the Year Award from NAMI of Greater Chicago and in 2013, she was the recipient of the Crisis Intervention Team International CIT Researcher of the Year Award. Early in her career, Dr. Watson worked as a probation officer on a specialized mental health team.</p>
Michael Compton	<p><b>Michael Compton, M.D., M.P.H.</b> Dr. Compton is a professor and director of research initiatives in psychiatry and behavioral sciences and professor of prevention and community health at the George Washington University School of Medicine and Health Sciences, has been elected to the Board of Directors of Crisis Intervention Team (CIT) International.</p>
Michael Woody	<p><b>Lieutenant Michael S. Woody.</b> Lt. Woody is was the Director of Training for the Akron Police Department. The Akron Police Department received \$1.3 million dollars from the federal government to start up the CIT program. Of the 18,500 police departments across the country that have grants Akron was picked as one of 500 that are being showcased as "Best Use of Funds". Lt. Woody received the national "The Major Sam Cochran Award for Compassion in Law Enforcement" in 2002 and "The Heart of Gold Award" in 2001 from the Mental Health Board of Summit County. He is currently affiliated with the Northeast Ohio Universities College of Medicine in Rootstown, Ohio.</p>

<b>EXPERT NAME</b>	<b>BIOGRAPHY</b>
Sam Cochran	<b>Major Sam Cochran</b> was the coordinator of the Memphis Police Services Crisis Intervention Team (CIT). He retired from the Memphis police department after over 30 years of service and now provides consultation to CIT programs throughout the nation. He holds a Master’s degree in Political Science from the University of Southern Mississippi. In addition to his nationally recognized work with the CIT program, Major Cochran was a coordinator for the Hostage Negotiation Team and the Critical Incident Services (CIS) for the Memphis Police Department. During his time as a law enforcement officer, Major Cochran (ret.) served in uniform patrol, the investigative division and was been an instructor at the training academy. Mr. Cochran is nationally known for his work in the field of crisis intervention. In addition to receiving the City University of New York (CUNY) John Jay College of Criminal Justice, Law Enforcement News Person of the Year Award (2000), the National Alliance of the Mentally Ill (NAMI) has named their annual law enforcement advocacy award after Sam Cochran. He has worked with police departments throughout the nation as well as departments in Canada, Australia, and England
Randy Dupont	<b>Randy Dupont, Ph.D.</b> Dr. Dupont received his PhD in Clinical Psychology from the University of Texas at Austin. He has worked with the Memphis Police Department as instructor and lead consultant to the Crisis Intervention Team (CIT) where he provided consultation to municipalities nationwide. He has been the principal investigator or co-principal investigator on over \$10 million in research and program development grants. He has been an invited presenter at a number of national conferences and has published in the fields of officer safety, issues concerning the use of force, jail diversion, victimology and addictive disorders. His current work focuses on the use of technology to enhance police crisis intervention training and CIT program outcomes.
Laura Usher	<b>CIT Program Manager; NAMI advocate</b> Ms. Laura Usher managed a national technical assistance center providing support to hundreds of police crisis intervention teams. She provided direct assistance to local leaders through presentations at national conferences, resource development, webinars and phone and email consultation. She has researched and wrote numerous national reports on best practices in law enforcement responses to people with mental illness in crisis, and researched and co-authored national reports on state mental health systems.
Tom Von Hemert	<b>Tom Von Hemert</b> is the Crisis Intervention Team Coordinator for Charlottesville, Albemarle, Fluvanna, Goochland, Greene, Louisa, Madison, Orange and Nelson Counties in Virginia. Recognized for his success within the CIT area and managing collaboration between the law enforcement and mental health in these counties.
Richard James	<b>Richard James, Ph.D.</b> One of the Crisis Intervention Team Originators - Memphis Police Department – 2007. His crisis intervention strategies book has sold over 100 thousand copies and been translated into Korean and Chinese. He is one of the founders of the Memphis Police Department’s model for training police officers to do crisis intervention with the mentally ill. That model is now used in over 2400 police jurisdictions in the United States and in Canada, Australia, the United Kingdom, and Sweden.
Mark Munetz	<b>Mark R. Munetz, MD.</b> Dr. Munetz is Professor and the Margaret Clark Morgan Endowed Chair of Psychiatry at Northeast Ohio Medical University (NEOMED) and Senior Clinical Consultant of the County of Summit Alcohol, Drug Addiction and Mental Health Services Board. Dr. Munetz received his B.A. from the University of Pennsylvania and is a graduate of the University of Pennsylvania School of Medicine. Dr. Munetz was an intern in psychiatry and internal medicine at the Lafayette Clinic and Hutzel Hospital in Detroit and completed his psychiatry residency at Western Psychiatric Institute and Clinic, University of Pittsburgh. He has held faculty positions at the University of Pittsburgh, University of Massachusetts, and Case Western Reserve University. Dr. Munetz has been the Director of Community Psychiatry at NEOMED since 1992. Dr. Munetz helped plan and implement the first Crisis Intervention Team training program in Ohio and was involved in the planning for the first Mental Health Courts in the state. A past president of the Ohio Psychiatric Association, Dr. Munetz has been recognized with an Exemplary Psychiatrist Award from the National Alliance on Mental Illness (NAMI). Dr. Munetz has authored a number of publications in the area of Crisis Intervention Team and Mental Illness.

## **APPENDIX D**

### **Core Components of the Original CIT Model**

(Dupont, Cochran, & Pillsbury, 2007)

1. 40 hour training for police officers and competency- based training for dispatch
2. Selection of officers based on voluntary criterion
3. Availability of a close 24- hour, no refusal drop off option such as a designated facility or hospital emergency room
4. Presence of an appointed “chief” or a leader who actively supports specialized policing response efforts
5. Extent of mental health and law enforcement collaboration defined as a number of components that strengthen the collaboration between law enforcement and mental health agencies including existence of planning committee groups, program coordination groups, existence of contract/agreement between law enforcement and mental health agencies with reference to specialized policing response and exchange of information to successfully measure outcomes and facilitate the process of pre-booking jail diversion

## APPENDIX E

### Oral Consent Script for the Interview and Interview Questions

My name is Anna Young and I am a doctoral student in Public Policy and Administration at Virginia Commonwealth University. I am studying Specialized Policing Response (SPR) programs and their role within specific communities. I am interested in assessing how variables, such as community type (i.e., rural, urban, suburban), or community resources, influence the choice of Specialized Policing Response components. I am also assessing variables that influence police officers' perceptions of Specialized Policing Response programs.

I am conducting interviews with experts in the field of Specialized Policing Response programs. I have identified you as an expert in the field of Crisis Intervention Team model based on literature that linked your name to direct work and/or research related to CIT and/or Specialized Policing Response models.

*Do you have any questions about my research, the interview, or me?*

If you do think of any questions that you would like to ask me after we finish the interview, please contact me by phone at 804-310-7247 or via email at amyoun@myemail.vcu.edu

Now I will tell you about the potential benefits and risks to participation in this interview:

**Benefits:**

The benefit of participating in this study is that any information that you provide can potentially guide development of local and state policies and procedures that may improve and support the efficiency, effectiveness, and sustainability of any single CIT/SPR program, as it relates to its individual community needs.

**Risks:**

It is not likely that there will be any serious harms or discomforts associated with the interview. If you provide permission for your responses to be directly quoted in my study with the understanding that the quotes will be directly associated with your name, those responses may be publicly accessed if published or otherwise disseminated to the public through media.

*Do you provide permission for your responses to be directly quoted and associated with your name?*

*Yes*

*No*

If you are not giving permission to have your responses linked to your name, I will keep your responses confidential and they will not be published or shared beyond the research team unless we have your permission. All responses that you provide will be kept anonymous. Any paper-based or audio-records will be kept in secure location and only accessible to research investigator and other authorized study personnel.

*Given the risks described, do you still want to participate in the interview?*

**Yes**

**No**

The interview will take approximately about 15-30 minutes. I will take handwritten notes to record your answers and, with your permission, audio- tape the interview.

*Do you give permission for me to audio tape the interview?*

Yes

No

You do not need to answer questions that you do not want to answer or that make you feel uncomfortable. You can stop the interview at any time.

**Voluntary participation:**

- Your participation in this interview is voluntary.
- You can decide to stop at any time and there will be no adverse consequences to you for stopping your participation.
- If you decide to stop we will ask you how you would like us to handle the data collected up to that point.
- This could include returning it to you, destroying it or using the data collected to that point.

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**Interview Questions**

1. The results of this study indicated that the urban and rural communities did not differ from each other with regards to their application of components of the original CIT model.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  2. The survey found that SPR programs in jurisdictions which had a strong support of law enforcement and mental health administrators for the SPR program, were less likely to deviate from the original CIT model.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  3. The survey found that the greater the extent of policies related to law enforcement's response to people with mental illness in a jurisdiction where the program operated, the more the program deviated from the original CIT model.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  4. The survey found that the greater the presence of special populations (such as homeless population) in the community where the program operated, the more the program deviated from the original CIT model.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  5. The survey found that the more mental health resources the community had, the less likely the SPR program deviated from the original CIT model.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  6. The survey found that population density and the jurisdiction size did not affect how much the SPR program deviated from the original CIT model.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  7. The results of this study indicated that the higher the satisfaction of the police officers with the program, the less likely the model deviated from the original CIT program.  
*Do you agree with this finding and can you provide thoughts/feedback/comments on this finding?*
  8. What do you think is the single most important component of an effective SPR model?
  9. Do you think that strict adherence to the original CIT model matters?
  10. On a scale of 1-5, with 0= does not matter at all and 5= significantly matters, to what extent do you think the strict adherence matters?
  11. What are some of the factors/ variables, in your opinion, that influence police officers' rating of the SPR/CIT program's effectiveness?
  12. Are there any other variables, besides the ones we talked about so far, that you think influence the effectiveness of an SPR program?
  13. Do you have any other comments or questions related to the questions I asked or any other considerations?
-

**Closing interview statements:**

*Do you have any questions about the study or about this interview?*

I would be pleased to send you a short summary of the study's results when I obtain the results. Please let me know if you would like a summary and what would be the best way to get this to you.

If you have any questions about this study or would like more information you can call or email me at (804) 310-7247 or at [ayoung@mymail.vcu.edu](mailto:ayoung@mymail.vcu.edu)

**APPENDIX F****MPD Policies and Procedures Related to CIT- an Example****MEMPHIS POLICE DEPARTMENT POLICY AND PROCEDURES SECTION:****Dealing With Mentally Ill / Crisis Intervention Team**

Date: 01-21-10 Chapter IX Section 1: Dealing With Mentally Ill / Crisis Intervention Team Page 1

## Dealing With Mentally Ill / Crisis Intervention Team

## Crisis Intervention Team

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## Handling Calls to Mental Health Facilities

.....3

## Mental Health Community Resources

.....11

## Non-Emergency Civil Commitment

.....4

## Recognition of Mental Illness

.....2

## Taking Mentally Ill Persons into Custody

.....4

## Transporting of Emergency Commitment Persons .....5

## Transporting to the Crisis Assessment Center

.....5

## Transporting by Ambulance

.....7

## Transporting Juveniles

.....8

## Transporting Patients from a Private Hospital to another Facility .....9

## Transporting to MMHI

.....9

## Transporting from a Private Hospital Regarding 33-6-401 Disturbance Calls .....10

## Transporting Request: Physician, Psychologist or Mobile Crisis .....10



**APPENDIX G****CIT Call Response Form- an Example****CRISIS INTERVENTION TEAM STAT SHEET**

(To be completed on crisis calls involving mental illnesses)

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Scene Time: \_\_\_\_\_

Location: \_\_\_\_\_ Ward: \_\_\_\_\_

Consumer Name: \_\_\_\_\_ Sex/Race: \_\_\_\_\_ Age: \_\_\_\_\_

Address: \_\_\_\_\_

Complainant: Name &amp; Address – If complainant is unknown, list how call was reported:

Supervisor (Commanding Officer) on scene: ( ) yes ( ) no

CIT Officer(s): 1. \_\_\_\_\_ 2. \_\_\_\_\_

**EQUIPMENT / TECHNIQUE:**

( ) Verbalization

( ) Handcuffs

( ) Ripp Hobble

( ) Chemical Agent(s) - Report Required

( ) Less-Lethal Equipment - Report Required: (specify) \_\_\_\_\_

( ) Other (specify) \_\_\_\_\_

**CONSUMER and/or OFFICER INJURY:**

( ) Prior to Police arrival - Consumer (Explain in Arrest Ticket narrative or on back of this document)

( ) During Police presence - Consumer (Explain in Arrest Ticket narrative or on back of this document)

( ) None/Unknown - Consumer

( ) Officer(s) (Total number of officer(s) injured # \_\_\_\_\_)

**DISPOSITION OF PERSON TAKEN INTO CUSTODY: See \***

\* A summary of the arrest event is not required on this document if a copy of the arrest ticket is attached and submitted to the officer's workstation.

( ) TCA 33-6-401 Emergency Commitment with pending criminal charges

( ) TCA 33-6-401 Emergency Commitment without pending criminal charges

**DISPOSITION OF PERSON NOT TAKEN INTO CUSTODY: See \***

(\*) A brief Summary is required on the back of this document.

( ) Complaint unfounded, requiring no police action. (\*)

( ) Consumer stabilized requiring no further police intervention. (\*)

( ) Other (\*)

( ) Complainant and/or Consumer not located

**OTHER INFORMATION:**

Armed - Yes ( ) No ( ) Weapon: \_\_\_\_\_

Veteran - Yes ( ) No ( )

**TRANSPORTING:**

( ) Consumer transported by MPD car \_\_\_\_\_ to \_\_\_\_\_

( ) Consumer transported by MFD unit \_\_\_\_\_ to \_\_\_\_\_

**NARRATIVE**

Routing Procedures: