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Police Encounters, Mental Illness and Injury: An Exploratory Investigation

Amy N. Kerr^{1,2,*}, Melissa Morabito³, and Amy C. Watson¹

¹ University of Illinois at Chicago

² Loyola University-Chicago

³ UMASS-Boston

Abstract

Police encounters are believed to be particularly dangerous for people with mental illness and police officers. Despite widespread concern among advocates, researchers and police professionals, little is known about the details of these interactions including the occurrence of injuries. In the current study, we explore injuries to people with mental illness and officers to determine the extent to which situational and individual factors predict injuries. Findings suggest that injuries during police calls involving persons with mental illness are infrequent and rarely require medical attention. Predictors of injuries in these calls are similar to those in police encounters with the general population.

Police administrators, researchers and community members share many concerns related to the police use of force, including proper training and legality of its use, and accountability of officers who have engaged in such behaviors. In instances of police force, concern for the safety of police officers and citizens is paramount. When suspects resist police authority or force is used, the potential for injury is always a serious consideration. Injury can result in costly medical care, lost work hours and potential lawsuits. Members of the media, researchers, and police practitioners have stated repeatedly that police interactions with people with mental illness are among the most dangerous calls for service to which officers must respond (c.f. Treatment Advocacy Center, 2005) and can be equally, if not more, dangerous for people with mental illness (Cordner, 2006). This fear of dangerousness has been the basis for the creation of specialized interventions such as Crisis Intervention Teams (CIT) (Reuland et al, 2009).

Despite the widespread concern, little is known about interactions between people with mental illness and the police, such as the injuries that occur during such interactions or the effects of CIT on injury rates. The FBI reported that 1,114 officers nationally were assaulted during a call responding to a person with mental illness in 2007 (Federal Bureau of Investigation, 2008). Although any assaults and subsequent injuries to officers or citizens are tragic outcomes of police encounters, this number does not support the notion of a large-scale problem involving police encounters with people with mental illness. No studies that we are aware of have reported the number of injuries to people with mental illness that have

Corresponding author: Amy N. Kerr, Jane Addams College of Social Work, University of Illinois at Chicago, 1040 W Harrison Street, MC 309, Chicago, IL. 60607. 312 996-0031. amynkerr@gmail.com.

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resulted from police encounters. Further, no data have described the extent or type of injuries that result from police encounters with people with mental illness or the situational factors that predict injuries. Finally research indicates that CIT calls with people with mental illness have low violence potential, and even when the risk is serious, force is rarely used (Skeem & Bibeau, 2008). However the effect that a specialized intervention, such as CIT, might have on the likelihood of injury has not been studied.

The purpose of this paper is to begin to fill this gap in the literature by conducting an exploratory analysis of encounters between the police and people with mental illness to better understand the injuries that can result from these incidents. We review the literature on outcomes of police encounters with people with mental illness, giving specific attention to studies that focus the use of force and dangerousness. Following this review, we present an analysis of the injuries to police officers and people with mental illness in Chicago. Finally, we examine the role of CIT in explaining these injuries.

Policing People with Mental Illness

Police encounters with people with mental illness have been described as dangerous for all parties involved. The police have been criticized for overzealously responding to calls for service involving people with mental illness (Davis, 1991) and using arrest or force as a means of 'handling' a population perceived as difficult (Teplin, 1984). More recent empirical studies, do not support these assertions (Engel & Silver, 2001). In fact, Engel and Silver (2001) found evidence to suggest that mental illness might serve as a protective factor for citizens—making formal action such as arrest *less* likely. For police, there is some evidence suggesting that responding to a call involving a person with mental illness might be among the most dangerous (Margarita, 1980; c.f. Treatment Advocacy Center, 2005) though the conclusions are far from definitive. As such, it is difficult to predict the extent of injuries resulting from encounters between the police and people with mental illness.

In response to criticisms about their approach toward handling calls for service that involve people with mental illness and tragic incidents in such cases that have been reported by the media (Stephey, 2007) and concerns about officer safety, police departments and communities have developed specialized responses to address the needs of people with mental illness. The Crisis Intervention Team (CIT) model is possibly the best known and most widely adopted model for improving police response to persons with mental illness (Watson et al., 2009). CIT is a police-based, pre-booking approach with specially trained officers who provide first- line response to calls involving a person with mental illness and who act as liaisons to the mental health system (Borum, Deane, Steadman, & Morrissey, 1998). The intervention is based on a model developed by the Memphis Police Department (Council of State Governments, 2002) and has been hypothesized to improve officers' abilities to more safely interact with persons with mental illness, including reductions in the use of force and subsequent injury to both police and citizens (for a complete discussion of the elements and hypothesized outcomes of CIT see Watson et al. 2008).

Police Encounters with Persons with Mental Illness

Measuring police responses to people with mental illness can be difficult for police departments and researchers alike. Officers often do not record police encounters that end with informal dispositions or mild injuries. When encounters are documented, calls for service might not be identified as involving people with mental illness (Watson et al., 2009). The lack of documentation can be a barrier to better understanding the type and extent of any problems resulting from these encounters.

Participant observations—specifically, researchers riding along with police officers—have provided much of the data on police encounter with person with mental illness (c.f. Teplin 1984, Engel and Silver, 2001). For example, Teplin (1984) found evidence to suggest that people with mental illness were disproportionately arrested compared to members of the general population in a study of police encounters in Chicago. In contrast, as part of the Project on Policing Neighborhoods (POPEN) study, Engel and Silver (2001) found the opposite result, namely, that mental illness did not increase the likelihood of arrest (see Engel and Silver (2001) for a description of the POPEN study). These large-scale observational studies, however, require extensive financial, personnel, and police resources, making them difficult to undertake. Empirical evidence about the likelihood of injury resulting from an encounter between the police and people with mental illness is scant and when available does not completely address the problem of injury (c.f. Engel and Silver, 2001).

The outcomes associated with CIT have been studied. Research suggests that CIT has many positive outcomes for police officers, resulting in greater knowledge about mental illness and community resources (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006). CIT can also increase the identification of calls for service involving people with mental illness as well as referrals and transports to emergency services (Teller, Munetz, Gil, & Ritter, 2006; Watson et al., 2009). However, evidence about the effectiveness of CIT in reducing arrest and force is mixed. For example, Watson and associates (2009) found no evidence that CIT reduces the likelihood of arrest for people with mental illness. Other evidence suggests that CIT training has an indirect effect on police use of force, but no direct effect was found (Morabito et al. 2010). These studies, however, are far from conclusive and more information is needed regarding the effectiveness of CIT in reducing arrests and the use of force.

Violence, the Use of Force, and Resulting Injury

Mental illness might not explain much or any variation in the use of force and injuries among citizens and police officers. Rather, the criminal justice literature overwhelmingly suggests that situational factors are the most predictive of the outcomes of these encounters rather than characteristics of the individual (Morabito, 2007). Perhaps the same situational characteristics that explain the use of force and injury in encounters with the general population also explain these same outcomes with people with mental illness.

In the general population, factors such as demeanor, hostility, and impairment explain most of the variation in the use of force by police officers and resulting injuries that occur as a result (Alpert & Dunham, 1999; Alpert, Dunham, & MacDonald, 2004). Police typically use force when they are trying to make an arrest and the suspect is resisting (Adams, 2004). These are the situations when injuries are most likely to occur—either to the police officer or the suspect. People with mental illness might be more vulnerable to injury because officers misinterpret their behavior and demeanor. Persons with mental illness, experiencing an acute crisis, can appear to be ignoring an officer when really they might not understand the officer's instructions (Cordner, 2006). Mental illness can exacerbate a hostile demeanor or the appearance of resistance, depending on how the symptoms are manifested. Other factors such as the type of and seriousness of the crime can also influence the likelihood of the use of force and resulting injuries regardless of mental health status (MacDonald, Manz, Alpert, & Dunham, 2003).

Few studies of officer safety have identified the factors that predict injuries from non-lethal means (Mesloh, et.al., 2008). According to the FBI data, the largest percentage of assaults reported was to officers responding to disturbance calls (Federal Bureau of Investigation,

2008), which encompass a wide range of crimes and suspects but typically include bar fights and domestic disturbances. Domestic disturbance could include calls involving people with mental illness.

The effect of CIT on the use of force and injuries is unclear. Research has been mixed about the effectiveness of CIT generally, and no published studies have examined its impact on injuries (Watson, Morabito, Draine, & Ottati, 2008). This suggests that while CIT training should be controlled for in any model that attempts to explain officer behavior, it is unclear that such training will predict injuries. Nonetheless, CIT training might explain some of the differences in injuries among officers and people with mental illness.

The Current Study

The current study explored injuries sustained during officer encounters with individuals with mental illness in 4 Chicago Police Department (CPD) districts in early 2008. The analysis included 865 incidents in which officers and subjects sustained injuries over the previous month as reported by the participating officers.

The Chicago Police Department keeps records on major injuries to officers and subjects but the reports rarely contain reliable indicators of the mental health status of the individual involved in the encounter. Additionally, the CPD does not require reports on mild injuries, such as bruises or scrapes, so officers often do not complete paperwork for these incidents. For these reasons, we relied on the officers' self-reports on the number and type of injuries, as well as the mental health of the subject for calls they responded to in the month prior. In the following section, we describe the sampling and data collection procedures and provide descriptions of the injuries experienced by the officer participating in the study, other officers on the scene and the subject. Then, using the proportion of calls where injuries occurred, we explore the situational predictors of injuries in calls involving individuals with mental illness. Finally, we discuss the post-hoc analysis of subject resistance as a mediator of the relationship between officer use of force and injuries to those involved in the encounter.

Hypotheses:

1. Officer and subject injuries will be a rare occurrence in calls with individuals with mental illness and will primarily involve mild physical harm.
2. The situational characteristics, including officer use of force, subject resistance, subject demeanor and subject impairment, will explain much of the occurrence of injuries sustained by officers and subjects during calls with individuals with mental illness
3. Encounters with persons with mental illness that are handled by CIT- trained officers will result in fewer injuries to all parties than calls handled by officers without CIT training.

Sampling and Data Collection Procedures

We sampled sworn officers with a minimum of 18 months of service from the district personnel lists of four Chicago Police districts. District A and B were initially chosen because they were part of the Chicago Police Department's (CPD) pilot CIT program, which was instituted in 2005. After experiencing success with the initial pilot program, the CPD rolled out the program in all 25 police districts in 2007. The Chicago CIT program invites officers to volunteer for training that provides them with skills in handling individuals with mental illness, general information about mental illness and the mental health system and

specific resources that are available to police officers who encounter individuals with a mental illness, as well as opportunities to practice their skills in a role playing scenario.

Because we were interested in the effect of CIT on encounters with persons with mental illness, we chose two comparison districts, Districts C & D, that were similar to the pilot Districts A & B, respectively. Both comparison districts shared borders with their respective pilot district; two districts were located on the south side of the city (District A & District C), and two were located on the north side of the city (District B & District D). Because of their close proximity, the districts had very similar social environments in terms of the mental health resources available to them, the level of social disadvantage as well as distinct racial compositions as detailed below (See Table 1).

The north side districts had slightly more diversity with a majority of Caucasian residents (65.93% in District B; 74.28% in District D) whereas the south side districts were predominately African American (98.43% in District A; 98.72% in District C) with little representation of other racial or ethnic groups. Additionally, the south side districts had vastly fewer mental health resources and were more disadvantaged than the north side districts (See Table 1). The core difference between the comparison districts, and the current study's focus, was the relatively lower number of CIT officers in Districts C & D because they were introduced later to the CIT program (See Table 2).

After selecting the districts, the researchers secured district personnel lists from the district commanders to proportionately sample officers based on their watch. Of the 333 selected officers, 17.4% declined and 17.7% of the selected officers were not contacted because of extended leaves or departmental transfers. The total number of officers who participated in the research was 216 and, of these, 131 reported at least 1 call with a person with mental illness in the past month. The demographics of the obtained sample are similar to that of the Chicago police force (Chicago Police Department, 2007) (See Table 2).

Officers selected for participation received letters informing them of their selection and providing contact information if they chose to decline to learn about the study. Researchers and assistants announced the study at each District's 3 watch roll calls one week prior to distributing recruitment letters to familiarize them with the process. We then worked with watch commanders to schedule times to meet with officers during their duty hours to discuss the study. The watch commanders and officers were informed that all of the selected officers would learn about the study and that agreeing to meet with the research team did not require participation in the study. Thus Chicago Police Department personnel were unaware of the individual officers' final participation decision.

If the officer volunteered to participate, the researcher obtained consent and administered the 45- minute interview in a private area at the district headquarters. The interview included four parts. The first section asked officers to recall their last encounter with a person with a mental illness and report the details of the incident. The second section involved recalling all calls with persons with mental illness in the past month and the details of these calls. This was followed by questions concerning the district's handling of mental health calls, academy and CIT training related to mental health calls, and personal attitudes towards these calls. The final section of the interview focused on opinions of the mental health system in their area. The interview was followed by a brief questionnaire to obtain demographic information.

The Model

Dependent Variable

For the current analysis, the dependent variable was the proportion of officer-citizen encounters involving a person with mental illness in the past month in which an injury occurred. The injury could have been experienced by the officer participating in the research, another officer involved in the call or the subject with mental illness. Injury was defined as any mild physical harm including bruises or major physical harm involving outpatient or inpatient treatment. The total number of calls with a person with mental illness as well as the number of calls with any injury was determined by officer self-report. No other data sources were used to determine the presence of a person with mental illness in the calls. Research suggests that officers transporting individuals to crisis centers typically make accurate judgments on the need for mental health care (Strauss et al., 2005; Teplin, 1984).

Predictor Variables

The predictor variables included in our model were drawn from the criminal justice literature. These included situational characteristics, subject characteristics and officer characteristics:

The Use of Force—In Chicago, force was measured on a continuum. As such, the language in our measure corresponded with the force continuum, which officers learn through the CPD Academy and is located in each officer's manual in order to foster officers' comprehension of the policy (Chicago Police Department, 2003). Officers were asked to self-report the number of calls involving a person with mental illness in the past month and indicate the highest level of force that the situation necessitated: (1) My mere presence was enough; (2) Verbal warnings, commands, and/or persuasion were necessary; (3) Physical control of the suspect, such as holding, open hand strike, and/or knee strike, was necessary; (4) The use of a weapon other than my firearm, such as a taser, baton, and/or chemical weapon was necessary; (5) The use of my firearm was necessary. The number of calls in each category was used to create a proportion of all calls involving a person with mental illness in the past month. These proportions were used to calculate a Force Index; higher numbers indicated greater levels of force.

Resistance—Individuals who respond to officers with more resistance are more likely to encounter police force than more compliant subjects (c.f. Crank, 1997; Reisig, McCluskey, Mastrofski, & Terrill, 2004). More force is associated with an increased likelihood of injury; thus, it is important to capture the amount of resistance that officers experience. We operationalized resistance as officers' reported levels of subjects' physical resistance and resistant demeanor.

Physical Resistance was measured as officers' self-report of the highest level of resistance exhibited by the subject for each call within the past month. Officers chose from the following categories as adapted from the Chicago Police Department continuum of force (Chicago Police Department, 2003): 1) Cooperative: The subject exhibited no resistance such that they were cooperative with or without direction. 2) Passive Resister: The subject exhibited passive resistance in that he/she made non-movements in response to verbal and other directions such as stiffening to dead weight. 3) Active Resister: The subject exhibited active resistance such that he/she made movements to avoid physical control such as fleeing or pulling away. 4) Assailant: The subject attacked you or another officer such that the subject's actions were likely to cause death or serious physical injury with or without weapons. Using the total number of calls with a person with mental illness in the past month, the proportion of calls for each resistance category was calculated. As with force,

these proportions were used to calculate a Resistance Index; higher scores indicated a greater level of resistance.

Demeanor—For our second measure of resistance, the officers were presented with the following 4 categories that represented different levels of a resistant demeanor: 1) The subject displayed combative/assaultive behavior. 2) The subject was verbally abusive. 3) The subject was upset/angry/agitated. 4) The subject had a calm demeanor. We asked the officer to choose the highest level of resistance for each call they experienced in the past month and indicate the number of calls for each category. These numbers were used in conjunction with the total number of calls in the past month to create a proportion. An index for the resistant demeanor was created from the proportions; higher numbers indicated a more resistant demeanor.

Subject Impairment—Past research has found that subject intoxication has an impact on the likelihood of injuries in a call. To account for this, we asked officers to report their perception of the person with mental illness's level of drug or alcohol impairment. Officers indicated the number of calls in the past month in which they perceived that the person with a mental illness was under the influence of drugs or alcohol. This information was used to calculate the proportion of calls in which a subject was impaired in the last month.

CIT Training—Officers were considered CIT trained if they had completed the 40 hour training session through the Chicago Police Department. The variable was coded as 1 for “CIT trained Officer” and 0 for “Non-CIT trained Officer.”

Analysis Strategy

We used a linear regression to test whether force, resistance impairment and CIT training could explain the proportion of calls with injury. According to the Chicago continuum of force, officers base their use of force on the presentation of resistance by the subject. We performed a series of post-hoc analyses to test resistance as a mediator between the relationship between force and injury.

Results

Encounter Descriptions

Officers encountered persons with a mental illness an average of 4.00 times per month ($SD=9.78$) with a range of 0 to 110. The majority of these calls involved male (64.73%) and African-American (77.57%) subjects. Non-Hispanic Caucasians and Hispanic Caucasians constituted 17.11% and 3.35% of the sample, respectively. The remainder of the subjects' reported races comprised less than 1% of the calls.

Dependent Variable

As expected, the average proportion of calls in which an officer or subject was injured per total number of calls with individuals with mental illness in the past month was small ($M=0.089$ ($SD=0.22$)). Additionally, officers reported a mild injury that did not need medical care as the most common type of injury. The number of calls for each level of injury for the officer, other officers on the scene, and the subject are listed in Table 3. Our results showed that fewer officers received medical care ($N=14$) than subjects ($N=25$), but officers reported more mild injuries to themselves or colleagues ($N=57$) than to the subject ($N=26$). Hence, the typical call involving a person with mental illness resulted in no injuries to the subject or the police officers involved, and, if they did occur, most were mild injuries.

Independent Variables

A breakdown of the total number of calls for each category of force used with a person with mental illness is shown in table 4. Our results indicated that, on average, officers used Verbal Warnings and, Commands and Persuasion more than any other types of coercion. As expected, use of any weapon was very rare and no firearm use was reported. Using the Force Index, we found that the average proportion of force used in calls with a person with a mental illness was low ($M=1.94(SD=.55)$).

The average number of calls for each resistance category is provided in table 5. On average, calls with cooperative subjects with mental illness were the most common for officers, although they averaged at least one call a month with a resister. The highest level of resistance, assailant, was rare. The Resistance Index showed that the average level of resistance the officers see in calls with mental illness was low ($M= 1.67(SD=.65)$).

Regression Analyses

The model explained a significant proportion of variance for the proportion of calls with injuries ($R^2= .17$, $F(5,128)=5.11$, $p<.001$). Based on our analysis, as seen in Table 6, our hypotheses are only partially supported. The resistance index, a measure of physical resistance, was the only significant predictor of the proportion of calls with injuries. The other variables did not significantly influence injuries, countering our predictions. Notably, the data did not support our hypothesis that CIT training would reduce injuries during encounters with persons with mental illness.

Post-Hoc Analyses

The amount of force applied in calls should act as a strong predictor of injuries. Contrary to the literature, our findings did not suggest officer use of force affects injuries during encounters between police and citizens with mental illness. To further explore the finding, we tested whether resistance might mediate the relationship between use of force and injury. As expected, when the model was tested without the influence of either measure of resistance, force significantly predicted injury ($R^2=.13$, $F(3, 128) = 6.18$, $p<.001$, $b_{force}= .11$ (.034), $p<.01$, $b_{influence}= .093$, $p=n.s.$ (.050), $b_{CIT} = .022(.036)$, $p=n.s.$).

Baron and Kenny's (1986) method to test for mediation, requires a series of three regressions. First, the variation levels of the Independent Variable (Force) must account for the mediator (Resistance). Our results showed that force significantly predicted resistance ($R^2 = .32$, $F(1, 128) = 59.5$, $p<.001$). In the second equation, the independent variable (Force) must be shown to affect the dependent variable (Injury). Our analysis indicated that force significantly predicted injury ($R^2 = .10$, $F(1, 128) = 14.34$, $p<.001$). The final equation must show that the effect of the independent variable (Force) on the dependent variable (Injury) is less when the mediator (Resistance) is introduced to the equation. We found that when controlling for Resistance, the effect of the force on the injuries is reduced to non-significance ($R^2 = .16$, $F(2, 128) = 11.68$, $p<.001$). Baron & Kenney (1986) suggest comparison of the absolute size of the force regression coefficient in the presence of multicollinearity to ensure that the force variable coefficient was reduced when controlling for resistance in testing the relationship between injuries and force. Given the high correlation between resistance and force ($r=.56$, $p<.001$), the absolute size of the force regression coefficients were compared with results showing a reduced regression coefficient for force in the third equation (See Table 7).

Discussion

Our findings suggest that injuries are rare in police encounters with people with mental illness, which is similar to their rate of occurrence in police encounters with members of the general population. When injuries do occur, these data suggest that the type of injuries mirror those experienced in the general population. Our hypotheses concerning the predictors of injury received mixed support. A situational variable, namely suspect physical resistance, predicted injuries in encounters with people with mental illness as with members of the general population. Our data suggest that this relationship is complex. While force had no direct effect on the likelihood of injury, further analyses exploring this surprising finding revealed that an indirect relationship does exist. Force affected subjects' level of resistance, and higher resistance is what ultimately increased the likelihood of physical harm.

As a notable exception, subject impairment did not appear to influence the use of force. Perhaps this study did not capture enough variation in impairment. When studying violence against the police, scholars tend to lump people with mental illness with all people who are impaired by drugs and alcohol (Alpert et al., 2004). By using a classification of general impairment, it is unclear whether mental illness or drug use was responsible for violence in police encounters. Arguably, a person who has a mental illness is most likely to come in contact with the police when they are symptomatic. Often there are co-occurring disorders and the alcohol or drug problem might become secondary. Symptoms of drug/alcohol intoxication can be attributed to the mental illness, and officers might not be concerned with differentiating between the two disorders. Perhaps the effects of the drugs and alcohol are not considered as noteworthy in these encounters.

Interestingly, CIT training appears to have no effect on injuries in police encounters with people with mental illness. We hypothesized that CIT training would reduce the likelihood of injury consistent with the programmatic goals of the intervention. We were somewhat perplexed with what might explain this disconnect. Injuries are so rare that possibly any effect a CIT officer would have might have been lost without a larger sample size. Physical harm to officers or subjects is most likely to occur when physical contact between the parties is present. If escalated force and resistance are present, the situation is likely beyond the point of de-escalation, a key skill of CIT officers. In our prior work, we found that once an individual's demeanor has become hostile and resistant, CIT training no longer reduces the likelihood of force (Morabito et al., 2010). The current study suggests that at higher levels of resistance, when CIT training is no longer helpful in reducing force, the likelihood of injury increases. Therefore, it may be that CIT does not reduce injuries because they occur during encounters in which the police have limited options.

One limitation that should be considered in interpreting the findings of our study is the use of officer self-reports. Although subject injury that required transport to a medical facility would be apparent to the officers, milder injuries could go undetected. Given this potential for under-reporting, future research should interview all parties of the encounter in order to provide the most accurate picture and a different perspective on the interpretation of resistance and use of force.

A second limitation is that mediational analysis assumes a causal relationship between resistance and force. However, because we did not capture the sequence of the events in the current study, we are unable to parse out the potential mutually causal effect of the variables that might limit the interpretation of the mediation. Force might be more likely to cause resistance in situations with individuals with mental illness than in the general population. This would be especially true if the individual was in a state of crisis. In CIT training,

officers are taught to utilize de-escalation techniques in crisis situations, in part, because force could be interpreted differently than in other situations. If this is the case, then an officer who deems force necessary could find that it causes an increase in subject resistance. Similarly an officer who avoids force could find that it causes less resistance. Although beyond the scope of the current research, future studies would be improved by detailing the sequencing of force and resistance to better understand the causation (See Alpert, Dunham, MacDonald, 2004).

Ultimately, our study shows that the media's coverage highlights the rare and extreme cases in which injury occurs, not the common experience of most of those involved in these encounters. As with police encounters generally, injuries are rare, and predicted by situational variables. Instead of finding that officer force directly causes the injuries, we found that it is the reaction of the individual with mental illness that is most likely to influence injury. A larger sample with more detailed sequencing of these events could allow researchers to closely examine the potential of CIT to reduce the likelihood of officer and citizen injuries. Additional research to study the interpretation of force, resistance and injury by all parties, expanded beyond the sample of districts in Chicago, would be beneficial to the understanding physical harm in policing encounters with person with mental illness.

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Table 1

District Demographics

	District			
	A	B	C	D
Disadvantage Variables				
Average proportion of single mother headed households	0.306	0.088	0.226	0.067
Average proportion of households on public assistance	0.193	0.040	0.106	0.021
Average proportion of households below the poverty line	0.365	0.159	0.194	0.096

Table 2

Sample Demographics

	A	B	C	D
	Count	Count	Count	Count
Number of Participants	61	51	58	46
Race/Ethnicity				
White	18	29	17	32
Black	28	5	34	2
Hispanic	12	10	6	9
Other	3	7	1	0
Gender				
Male	46	39	45	40
Female	15	12	13	6
CIT Training	34	32	11	14
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Years on Police Force	9.65 (6.00)	12.62 (8.03)	10.54 (8.75)	13.83 (6.73)
Age	39.82 (9.25)	42.92 (8.80)	39.50 (9.63)	43.09 (8.14)

Table 3
Calls with Injury occurring during the course of the encounter in the Past Month

	Died	Medical care that required overnight hospital calls	Medical care but no overnight hospital stay	Mildly injured but did not require medical care	NOT injured
Officer	-	0	1	24	840
Other Officer	-	0	13	33	803
Subject	0	3	22	26	817

Table 4
Average number of calls for each highest level of force in the past month

	Mean(SD)	N
Use of Firearm	0(0)	0
Use of Other Weapon	.092(.49)	12
Physical Control	1.90 (7.83)	249
Verbal Warnings/Commands/Persuasion	3.21(4.88)	420
Mere Presence	1.42(2.99)	186

Table 5
Average number of calls for each level of resistance in the past month

	Mean(SD)	N
Assailant	.34 (1.32)	44
Active Resister	1.65 (6.42)	216
Passive Resister	1.60 (3.33)	210
Cooperative	3.02(4.11)	395

Table 6

Regression Results

	b	SE	B	CI Lower	CI Upper
Force Index	0.055	0.041	0.14	0.18	-0.026
Resistance Index	0.083*	0.034	0.25	0.016	0.016
Resistant Demeanor	0.072	0.13	0.052	0.58	-0.18
Subject Under the Influence	0.068	0.051	0.12	0.18	-0.033
Crisis Intervention Team Training	0.008	0.037	0.018	0.83	-0.065

* p<.05

Table 7
Mediational Hypothesis Analyses

Dependent Variables	Equation 1:	Equation 2:	Equation 3:	
	Resistance	Injuries	Injuries	
Predictor Variables	Force	Force	Force	Resistance
b(SE)	0.67(0.086)***	.13(0.033)***	.065(.039)	.093(0.033)**
B	0.56	0.32	0.16	0.28

p<.001,

**
p<.01