The application and use of TASERs by a Midwestern police agency[1]

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Abstract

Of the some 18,000 law enforcement agencies in the United States, TASERs have been adopted by approximately 7,000 departments. Following on the call of White and Ready (2007) for more research on TASER use by police, this paper investigates the use of TASERs by a medium sized, Midwestern police agency. All TASER deployments by police officers in this Midwestern city are examined for a three-and-a-half-year time period (January 2004–August 2007). Findings indicate that the TASER was used primarily against physically resistant white male suspects with a history of police contact. The majority of the incidents took place at a private residence or apartment as opposed to a public place of business. The TASER was overwhelmingly effective and, as for officer safety, on the few occasions that an officer was injured, the injury was not related to the TASER.

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INTRODUCTION

White and Ready (2007) point out that there is little empirical research on the use of TASERs[2] by police departments, and to help address this issue they conducted a descriptive study of a large metropolitan police agency. TASERs' use and their effectiveness are indeed important questions that need to be addressed in view of their growing ubiquity. However, although 'TASERs are becoming commonplace in law enforcement' (White and Ready, p. 170), the fact that most police departments are not as large as in that study means that the published results may not show a complete picture of TASER use by the wide variety of agencies which utilise them. This paper, therefore, examines police use of TASERs in a medium sized, Midwestern city. Specifically, the examination covers the application and use of TASERs by police officers in the Lincoln Nebraska Police Department. This paper examines the application of TASER use to determine at what types of incidents police are likely to deploy TASERs. This paper will also examine who the TASER is most likely to be deployed against. This involves examining official police records to determine if there are any characteristics that make an individual more or less likely to be tased. It will also examine where the department places the TASER on its use of force continuum.

The current study examines all TASER incidents by the Lincoln, NE police department over a three-and-a-half-year time period (January 2004–August 2007). Each of the incidents comes directly from official police officers' reports. This paper seeks to examine a number of areas of concern: the situation surrounding TASER use, the offender demographic characteristics, offender behaviour, injury to offender, officer behaviour/action, injury to officer, the number of officers involved in the situation and the location of the incident. Due to data limitations it is not possible for the current study to assess TASER use in relation to health and physiological effects on suspects. The current study provides descriptive information regarding TASER use by a single agency. It is also important to note that one year (2004) of information for other police agencies in Nebraska will be discussed briefly. However, that information does not contain the same level of detail as the current study.

Internal factors (eg, department policies and practices, training, organisation culture and individual officer characteristics) are proposed here as having a direct effect on TASER use. External factors (eg, offender and community-level characteristics) are, therefore, thought to have an indirect effect. The components of the community-level characteristic include items such as the arrest rate for violent crimes, the homicide rate, the population level, attempts to control the general use of force, city ordinances, state laws and court rulings.

USE OF FORCE

The use of force by police officers constitutes a significant area of research within criminal justice (Geller & Toch, 1996; Jacobs & O'Brien, 1998; Skolnick & Fyfe, 1993, 1995; Smith, 1994; Terrill, 2005). The use of force is important as the growth in technological advancements has provided the police practitioner with access to a growing body of less-lethal weapons. Currently, much of what we know about use of force with TASERs comes from media accounts, which are informative but potentially biased and possibly out of proportion to actual use (Gaines, Kaune, & Miller, 2001; Hallett, 2007; Lovell, 2003; Ready, White, & Fisher, 2008). As pointed out by others (McLaughlin, 1992), the use of force is rare, especially when the simple use of handcuffs is eliminated from the count (Terrill, 2001; Terrill & Mastrofski, 2002). Being fairly new, however, at least on a widespread basis, TASERs provide the potential for an expanded use of force by police.

Jacobs and Britt (1979) and Sorensen, Marquart, and Brock (1993) suggest a 'conflict model' for understanding TASER use which states that the use of force by police is typically against individuals whom police describe as being outside the community norms. This model is situated to include members of minority groups as being outside the norm. Conflict theory also is interpreted to include economic inequality (Chambliss & Seidman, 1980). As a result, one could expect that force is most likely against a minority group member or someone suffering from an economic disadvantage. While the race of the suspects in the current research is known, the economic standing of the suspects was not available in the official data. While the home addresses of the suspects may be somewhat informative when linked to neighbourhood census information, not all of the incidents in the current study occurred at the suspects' residences.

Another important consideration when discussing the use of force is the force continuum. Generally speaking, the force continuum is a directive policy tool that is widely used by police departments. A force continuum serves as a standard for judging the behaviour of police in a use of force encounter. Force continuum guidelines provide guidance to police officers in when and how to exercise this form of police discretion. The face-to-face or officer-to-suspect situations that police encounter vary both by time and place. Continuums guide officers as to how to respond to a variety of situations. It should be noted, however, that continuums are incremental in nature and are limited in categories (Terrill, 2005). Of importance here is where the TASER is located on the use of force continuum. The department in the current study, the Lincoln, NE police department, places the TASER as an 'intermediate' weapon.

There is a wide variation in the TASER use policies that have been adopted. Departments have classified TASER use as warranted in situations ranging from passive physical resistance, active physical resistance, aggressive physical resistance, to deadly force (Government Accountability Office [GAO], 2005; Hougland, Mesloh, & Henych, 2005). Of the five levels of force outlined by the Federal Law Enforcement Training Centre (FLETC), these four levels represent all but the lowest level, cooperative controls, which are to be used when suspects are compliant (GAO). According to this information, although the FLETC advises officers to use only the amount of force necessary to maintain/gain physical control, TASERs may be used in some departments on suspects who are simply not compliant with an officer's verbal commands. As a result, researchers have questioned whether or not the TASER is an appropriate response to situations of simple non-compliance (Hougland et al.).

TASERS

Some have questioned whether or not the TASER is an appropriate response to situations of simple non-compliance, and its use in these situations certainly opens the door to potential lawsuits for law enforcement agencies (Hougland et al., 2005). Although considered 'less lethal' than traditional firearms, weapons such as the TASER, bean-bag projectiles, pepper-balls and super-socks can still be lethal (Hubbs & Klinger, 2004). The use of 'less-lethal' munitions and TASERs can escalate a situation that is already aggressive into one of lethal proportions, and their use can occasionally result in lethal injuries to the suspect which were not intended by the officers (Hubbs & Klinger).

What are they and where do they come from?

The use of force is important as the growth in technological advancements has provided the police practitioner with access to a growing body of less-lethal weapons. TASERs were developed by John Cover in the 1960s in response to a government report authorised by President Johnson that called for technology to subdue violent suspects with non-lethal means (Angelosanto, 2003). The term 'TASER' is actually an acronym for the fictional 'Thomas A. Swift Electrical Rifle' which Cover remembered from the Tom Swift children's fantasy stories he knew as a child (Angelosanto). The TASER was patented in 1974 and was described in the initial patent as a weapon that delivers 'short-duration, high-voltage, electrical pulses' (Santa Clara County, 2005). Today, TASERs are manufactured by TASER International in Scottsdale, Arizona (GAO, 2005; TASER, 2008).

Approximately 7,000 of the nation's approximately 18,000 law enforcement agencies have implemented the use of TASERs; the most common type of TASER models are the M-26 and the X-26

(GAO, 2005). TASERs are not classified by the Bureau of Alcohol, Tobacco, Firearms, and Explosives as firearms, but many states and jurisdictions have restricted their ownership and/or possession in the same manner as handguns, which TASERs visually resemble (GAO). TASERs can dispense an electrical charge of 50,000 volts through two metal barbs at a rate of 19 pulses per second. However, the typical electrical charge is approximately 1,200 volts (Kroll, 2008). TASERs can be fired up to 35 feet from the suspect and as long as the barbs remain attached to the suspect the TASER can be repeatedly deployed (GAO; Kroll; TASER, 2008; TASER International, 2007).

The TASER does not need direct skin contact to be effectively deployed, although some law enforcement agencies have reported TASER failure due to a suspect's thick clothing such as a dense coat (Mesloh, Henych, & Wolf, 2008; TASER International, 2007). Contact with normal amounts of clothing such as jeans, a jacket, a light coat etc, is generally sufficient for effective TASER deployment (GAO, 2005; Kroll, 2008). TASER use has also been reported to fail as a result of one or both of the metal barbs not reaching the suspect (Mesloh et al.).

Stun guns and TASERs differ in that stun guns require direct skin contact with the device whereas TASERs can be fired from a distance; these conveniences obviously make TASER the more flexible choice for law enforcement officers (GAO, 2005). The TASER was once classified as a firearm by the Bureau of Alcohol, Tobacco, Firearms, and Explosives as, in its original form, it utilised gunpowder to discharge the projectiles (TASER, 2008). Through various modifications since the early 1990s, the TASER is now an electronic device which runs on batteries (TASER, 2008). Both newer and older TASER models have data ports that allow departments to download the details of each TASER's use, such as the date, time, number and duration of each deployment (GAO; TASER International, 2007; TASER, 2008).

What we know about their use

Currently, much of what we know about TASER use comes from media accounts which are informative but potentially biased (Barton, 2005). Cities, both locally and across the nation, have come under scrutiny for the manner in which officers have utilised TASERs. Amnesty International (2006) recently analysed the TASER-related deaths of over 150 individuals in the US. The deaths occurred in instances where the suspect was unarmed, suffered from either a mental or physical impairment, was under the influence of alcohol or drugs, and/or the TASER was deployed multiple times. At least 31 of the deaths were described on autopsy reports as deaths from 'excited delirium', 'agitated delirium', or 'cocaine-associated excited delirium', all of which have vague medical explanations.

Early medical research about TASERs is limited and mostly suspect due to ties with TASER International, Inc., the producer of TASERs. Much of the early research was conducted on animals that were either drugged or intoxicated (Lakkireddy et al., 2006; McDaniel, Stratbucker, Nerheim, & Brewer, 2005). These studies have severe limitations; for example, the presence of existing heart conditions or abnormalities in humans, not seen in animals, could negate positive findings (Lakkireddy et al.). However, more recent peer-reviewed literature includes several non-TASER-funded studies with results favourable to TASER usage (Dawes et al., 2008; Kroll, Calkins, Luceri, Graham, & Heegaard, 2008). Moreover, these newer studies were human studies as opposed to animal studies. Still, others (Link & Estes, 2008; O'Brien, McKenna, & Simpson, 2007) suggest caution when using TASERs. Among other things, they warn of the possible adverse effects of TASERs on individuals with mental health disorders.

Law enforcement agencies, however, generally laud the implementation of TASERs as a tool that increases both officer and citizen safety by decreasing the use of deadly force. For example, in Madison, Wisconsin the police department concluded 'there is no question that both the number and severity of injuries would have been far higher but for the TASER' (Madison Police Department, n.d.). Likewise, the Green Bay Police Department concluded that TASERs are effective in controlling aggressive suspects and that the use of TASERs 'prevented at least seven potentially deadly force situations' during the period of their evaluation (Knetzger and Knetzger, 2006).

Significantly for the current study, there is little research that details the race, age, gender etc, of suspects shot with TASERs. The Seattle Police Department reports that TASERs are used on whites in 49 per cent of deployments, 42 per cent of deployments are on blacks, 6 per cent are on Asian or Pacific Islanders, and 4 per cent are on other racial groups (Seattle Police Department, 2002). The Madison, Wisconsin Police Department reports that TASERs are used on whites in 51 per cent of deployments, 41 per cent of deployments are on blacks, and the remaining 7 per cent are on other racial groups (Madison Police Department, n.d.). The Green Bay Police Department reports that TASERs are used on whites in 42 per cent of deployments, 26 per cent are on blacks, 23 per cent are on Indians (not described as Native Americans but this might be assumed), and the remaining 9 per cent of deployments are on other racial groups (Knetzger and Knetzger, 2006). The majority of TASER deployments are on men under the age of 40. There are, however, documented instances of individuals being shot with TASERs who were merely non-compliant or perhaps verbally abusive to officers. Reports also document TASERs being used on pregnant women, the elderly and on children. With that being said, we are still left with a void in our knowledge about TASERs and the current study is therefore warranted.

METHOD

Study site

The study location for the current research is Lincoln, Nebraska, a city of approximately 250,000 residents. The population is predominately white (approximately 89 per cent). Hispanics account for fewer than 4 per cent of the population, African Americans account for roughly 3 per cent of the population and Native Americans account for approximately 1 per cent. The median household income is about $41,000. Persons living below the poverty level are a little more than 10 per cent and roughly 90 per cent of the population has a high school diploma or higher.

The Lincoln Police Department (LPD) has approximately 300 sworn officers and 100 civilian employees. LPD has what it refers to as a 'long history of diversity', beginning in 1895 when the first African American officer was hired. Currently, roughly 17 per cent of the sworn officers are female. While the reality of being successfully hired is somewhat different, LPD only requires that new officers have a high school diploma or have passed the General Educational Development (GED) tests. For the year 2007, LPD recorded just over 13,000 part 1 index crimes.[3] The violent crime rate was 522 per 100,000. As discussed by Walker and Katz (2005), the police population ratio is a 'standard measure for the level of police protection in a community' (p. 65) and is usually expressed as 'the number of sworn officers per thousand population' (p. 65). The police population ratio in Lincoln is 1.2 per 1,000. With respect to TASERs, the department first began using them in 2002 (Lincoln Police Department, 2003). Only trained officers are allowed to carry TASERs, and they must be carried in an approved holster. Department policy mandates that a TASER (an 'intermediate' weapon on the use of force continuum) can only be used if the suspect is displaying signs of active aggression and the situation is one in which an officer can use either a firearm or a baton (Lincoln Police Department, 2007). Policy further dictates that TASERs must not be used on small children or pregnant women, or when a suspect is in handcuffs.

Design and data

The primary data of concern for the current study come from official LPD reports. The time period covered is approximately three-and-a-half years (January 2004–August 2007). The mandatory reports contain a variety of information. Information for the current study includes demographic variables such as suspect gender, race/ethnicity, and age. Whether or not the suspect is known to the police; is physically or verbally resistant; is armed, disabled, pregnant, alone, intoxicated, or under the influence of narcotics are variables of concern. With respect to the officers, areas of interest and importance include age, race, and gender; whether or not there are verbal commands by the officer(s); a verbal warning that the TASER will be used if the suspect did not comply; and whether or not other methods of control are attempted prior to TASER use. Finally, in reference to the situation, it is important to know how many times the suspect is tased; where on the body the suspect was tased; the number of officers present at the scene; whether or not the subject was tased while in custody; and whether or not the subject was handcuffed. Additionally, it is necessary to know what type of call initiated the incident; whether or not the suspect was taken to hospital; whether the officer was injured; whether any other officers were injured; whether any additional subjects were injured; and whether any bystanders were injured.

The information was placed in SPSS for analysis purposes. A total of 27 different variables were created. For the study period, the initial total number of cases was 31. That number, however, was decreased for analysis purposes. One of the initially included cases was, in the end, discovered not to be a case involving a TASER. Data for one case were not complete. One case was processed with two distinct case numbers but in the end was determined to be the same case. And, finally, two cases were excluded from the analysis because although a report was made as per policy, they were in fact accidental discharges that took place within police headquarters. The resultant number of cases for analysis purposes dropped to 26.

Analysis

The current analysis is a descriptive study of the 26 TASER cases for the LPD. The small number of cases makes any meaningful statistical analysis (multiple regression, logit etc) inappropriate if not impossible. Similar to White and Ready's (2007) study, this study is an attempt to further build the body of knowledge about TASER use by police officers. It too seeks to answer basic questions about TASER usage. Unlike White and Ready's study, officer satisfaction is not included in this analysis. It does, however, speak to the issue of effectiveness in whether or not the suspect is incapacitated long enough to effect an arrest.

Limitations

The current study does have a number of limitations that need to be addressed. To begin with, there are a small number of cases, only 26 in the current study. The small number of cases do not lend themselves to in-depth quantitative analysis. However, the police department provided all relevant requested information. The small number of cases may be reflective of the size of the police department and the size of the city. Until further research is conducted, however, that will remain unknown. And again, from the often sensationalised media accounts one might intuitively assume that TASER use is more common than it actually is. In fact, the one year (2004) results for Omaha, a much larger city of approximately 425,000, are indeed higher (170 incidents or 4 per 10,000 citizens). However, in Hastings, a much smaller city of approximately 25,000, the one year (2004) total was 54 or 21.6 per 10,000 citizens and this is with only six TASERs. So, it is difficult to get an accurate picture of what TASER use looks like without studies such as the current one.

The incident data for the current study come from police reports. Media accounts are not included. Important questions here are when and under what circumstance the TASER is used. And, as will be shown later, in almost every TASER event in the current study, more than one officer is present. Finally, the current study does not contain long-term detailed health information on the subjects. For some (Munetz, Fitzgerald, & Woody, 2006; Strote & Hutson, 2007), the health impact of TASER use is still uncertain, and unfortunately the current study is unable to help clarify the issue. It should be pointed out, however, that, LPD policy now requires that whenever a TASER is used, the suspect is transported to the nearest hospital for observation. Since this is a historical analysis of the circumstances involving TASER use by officers, that medical information is not available for the current research. The majority of the medical information that is available about TASER use in general is provided by TASER International, and those shortcomings have previously been discussed.

TASER DEPLOYMENT CIRCUMSTANCES FOR LPD OFFICERS

Suspects

An examination of the data set reveals much information about the situations in which officers utilised TASERs. The first area to be discussed deals with the suspects in each of the LPD cases (Table 1). The items in reference to the suspects include the following: demographics, behaviour, actions, intoxication, narcotics, armed/unarmed, hospitalised and previous police contact.

Demographics

Suspects in the current study are overwhelmingly male, 23 or 88.5 per cent, and white, 22 or 84.6 per cent. African Americans account for only one (3.8 per cent) of the cases in the three-and-a-half-year time frame of the study. As noted previously, African Americans make up only 3 per cent of the population for the city. The suspects ranged in age from 18 to 52. The average age is approximately 31 and the most common age is 41. None of the suspects is disabled or pregnant.

Behaviour

Behaviour is a simple, one-item variable that examines whether or not the suspect is verbally abusive to the officer(s) or other persons present on the scene. As the table indicates, just over half, 53.8 per cent, of the suspects are verbally abusive during the incident.

Actions

Similar to the behaviour category, actions look at whether or not the suspect is physically resistant. As the public has seen from

Table 1: Suspect and officer information, LPD TASER cases, January 2004–August 2007

Suspect information	*n*	*%*	*Officer information*	*n*	*%*
Race/ethnicity			*Alternative methods*		
White	22	84.6	Yes	16	61.5
African American	1	3.8	No	10	38.5
Hispanic	2	7.7			
American Indian	1	3.8			
Gender			*Verbal commands*		
Male	23	88.5	Yes	24	92.3
Female	3	11.5	No	2	7.7
Behaviour/verbally abusive			*TASER warning*		
Yes	14	53.8	Yes	7	26.9
No	12	46.2	No	19	73.1
Actions/physically resistant			*Officer injury*		
Yes	17	65.4	Yes	4	15.4
No	9	34.6	No	22	84.6
Intoxication					
Yes	15	57.7			
No	11	42.3			
Influence of narcotics					
Yes	8	30.8			
No	18	69.2			
Armed					
Yes	13	50.0			
No	13	50.0			
Hospitalised					
Yes	16	61.5			
No	10	38.5			
Previous police contact					
Yes	24	92.3			
No	2	7.7			
Alone					
Yes	15	57.7			
No	11	42.3			
Disabled	0	0.0			
Pregnant	0	0.0			

widely available media accounts, suspect resistance, or at least suspect resistance as perceived by the officers, can play a determining factor in the use of a TASER. The majority of the cases reveal that suspects were resistant in 65.4 per cent of the cases.

Intoxication

15 of the suspects show signs of intoxication according to the officer reports.

Narcotics

As with intoxication, the officer reports indicate narcotics use by suspects in only 8 of the 26 cases.

Armed/not armed

The armed/not armed variable simply indicates whether or not the suspect is armed with some form of a weapon. Whereas in the previous study by White and Ready (2007) which showed that suspects are armed with a weapon in 40 per cent of the cases, the results for the current research reveal that suspects are armed in exactly half of the cases. It is necessary to point out that type of weapon was not distinguished for purposes of the current study.

Hospitalised

The hospitalisation variable indicates whether or not the suspect was transported to hospital for treatment after the incident. The results show that 61.5 per cent of the suspects are taken to hospital. It is important to note that no hospital information is available for the present study. Also, and very importantly, LPD's TASER policy now dictates that, whenever an individual is tased, they be transported to hospital for observation. As a result, in the later years of the study hospitalisation was mandatory. In addition to hospitalisation, suspect injury is noted in three cases. In two of the cases injury occurred prior to police arrival. In one incident the suspect suffered a fractured skull resulting from a fall after being tased.

Previous police contact

This variable indicates whether or not the suspect is known to the police or if he or she had a criminal record prior to the TASER incident. Although in some respects the criminal history portion is an after-the-fact acknowledgement, it still provides at least some detail about the suspect. The results show that the overwhelming majority of the suspects are known to the police in some fashion. An interesting point should be noted here. One of the suspects is tased in two separate incidents included in the current study.

Officers

The officers in the current study are overwhelmingly white males. There is one Hispanic male and two African American male officers, the remaining officers are white males. The average age for the officers involved in the TASER incidents is 38. The other information that is available and, due to the small number of cases for the department, which may be even more important, are variables that show officer actions (Table 1). Also, the research reveals whether or not the officer was injured during the TASER incident.

Alternative methods

The alternative methods variable indicates whether or not other methods are used first in order to control and arrest the suspect. This item is important as it relates directly to the concerns about the use of force continuum. It helps partially to answer the question of whether or not officers are immediately relying on the TASER or if they are employing methods lower down on the continuum. The results show that in well over half (16) of the cases officers first attempted alternative arrest methods. Although coded as a 'Yes No' response, the alternative methods, being lower on the continuum, would include verbal direction, soft empty hand and hard empty hand techniques (LPD, 2007).

Verbal commands

Related to the alternative methods variable, the verbal commands variable asks whether or not the officer issues any instruction to the suspect before utilising the TASER. Results indicate that officers issued verbal commands in 24 of the 26 cases.

TASER warning

The TASER warning variable indicates whether or not the officer gives the suspects any verbal warning that if they do not comply they will be tased. This again relates to the force continuum. The results show that officers give TASER warnings to suspects in seven of the cases. Specific warning of TASER use, however, is not required.

Officer injury

The officer injury variable goes to the issue of officer safety during the use of a TASER. Any type of officer injury is counted, whether it be from the TASER or physical altercation with the suspect.

Incidents

The particulars of the TASER use incidents are important for a variety of reasons (Table 2). From this information one can determine, in part, where the majority of the incidents occurred. One can see if the incidents took place at a private residence or at a public place of business. The number of times the suspect is tased can be determined. Exactly where on the body the suspect is tased (chest, back, legs, or arms) can be learned. How many officers are present on the scene can be known. Whether or not the subject is in police custody at the time they were tased and whether or not the subject is in handcuffs when tased is observable. Very importantly, this data set reveals what type of call initiated the police contact with the suspect. Additionally, incident examination can tell us whether or not any other officers present on the scene are injured. And finally, the incident view tells us if any additional suspects or bystanders who were present at the incident are injured.

Table 2: LPD TASER incident characteristics

Incident	*n*	*%*
Location		
Private residence/apartment	19	73.1
Public business	7	26.9
Number of times tased		
1	20	76.9
2–3	6	23.1
Body contact point(s)		
no shock	1	3.8
head/neck	0	0.0
upper torso/front	4	15.4
lower torso/front	6	23.1
upper torso/rear	6	23.1
lower torso/rear	1	3.8
arms/front	2	7.7
legs/front	5	19.2
crotch/buttocks	1	3.8
Number of officers present		
1–3	14	53.8
4–5	5	19.2
6+	7	27.0
Suspect in custody		
Yes	2	7.7
No	24	92.3
Suspect in handcuffs		
Yes	2	7.7
No	24	92.3
Initial call		
Part 1 index crime	6	23.1
Emotionally disturbed person (EDP)	8	30.8
Traffic stop	1	3.8
Search/arrest warrants	2	7.7
Simple assault	3	11.5
Other	6	23.1
Injury to other officers		
Yes	3	11.5
No	23	88.5
Injury to other suspects		
Yes	1	3.8
No	25	96.2
Injury to bystanders		
Yes	3	11.5
No	23	88.5

Type of neighbourhood/location of use

A closer look at the locations in which the TASER is deployed reveals that the vast majority (73.1 per cent) of the incidents occur at a private residence (house or apartment). The remaining cases took place in a variety of public places including a bar, a hospital emergency room and a mental health facility.

Number of times tased

This variable simply tells us how many times the suspect is tased by the officer. The vast majority of the cases (76.9 per cent) reveal that suspects are tased only once by the officer. No suspects are tased more than three times by officers.

TASER contact point

The contact point(s) variable is used to indicate on what part of the body the subject was tased. It is not uncommon for TASER projectiles to contact different parts of the body based in part on the distance between an officer and suspect. Some research points out that TASER effectiveness is increased when the probes are further apart on the body (Fish & Geddes, 2001). It should also be noted that the TASER is capable of delivering a shock either by firing and discharging the projectiles or by utilising what is referred to as the 'drive-stun' mode. The 'drive-stun' mode allows the delivery of a shock by placing the TASER directly on the subject, similar to what is referred to as a stun-gun. Also, when only a single probe makes contact, 'drive-stun' mode can be used to complete the circuit (TASER International, 2007). While it was initially allowable in the first year of the current study (2004), the LPD no longer authorises the 'drive-stun' mode. Three of the cases in 2004 were 'drive-stun' cases. One could argue that the 'drive-stun' mode is an impairment to officer safety, as it requires that the officer be in extremely close physical contact with the subject. Table 2 displays the results of contact point location. One can see that no contact points are in the head/neck area which has been shown to be problematic in other less lethal devices (Klinger, 2007).

Number of officers present

This variable shows the number of officers on the scene at the time that the TASER is deployed. For the majority of the cases, one to three officers are present. There are two incidents with only one officer present, four with two officers, and eight with three officers. There are two incidents in which more than 20 officers are present. One of these cases involved a high profile murder case in which several officers were called out to assist in the arrest of the suspect and one in which a call-out of the special weapons and tactics (SWAT) team was made.

In custody/handcuffed

These two variables show whether or not the suspects are already in police custody when they are tased and whether or not they are in handcuffs. The results show that in two cases the suspects are in custody. The number of cases with suspects in handcuffs is also two and both later deemed justified. It should be noted that in late 2008, after the data for the current study had been collected, a suspect who was tased died. Although the suspect died in police custody, at the time the TASER was deployed the suspect was neither handcuffed nor in custody. The officer was later cleared of any wrongdoing.

Initial call

The type of call that leads to the TASER incident lets us know why the police are on the scene to begin with. With this information we can determine if the police are responding to a part 1 index crime or if they are responding to something less serious. The study reveals that 6 of the 26 initial incidents are part 1 offences. Those cases include one murder, three stabbings, one burglary, and one bar fight. One involves a traffic stop and two involve search/arrest warrants. Eight cases are what White and Ready (2007) refer to as emotionally disturbed persons (EDP) cases. The cases involve either attempted suicides, fleeing a mental health facility, or protective custody related matters. Three cases are simple assaults. The remaining six cases involve a variety of cases including disturbances, obstructing government operations and an injury accident.

Injury to others

Included here are three categories: other officer injury, other suspect injury and bystander injury. The results show that in three of the TASER incidents other officers are injured. What is important to note is that the reported other officer injury is not due to TASER use. The injuries were obtained during an altercation with the suspect. In only one situation is another suspect injured. Again, this other suspect injury was not caused by TASER use. In three cases bystanders were injured, again, not by the TASER use itself, but by the actions of the suspect during the TASER incident.

CONCLUSIONS

Police use of force, at least with respect to the TASER, does not appear to be a problem for this particular department. As can be seen earlier, from the discussion of the study demographics, the community is markedly different from other more ethnically diverse communities. While the data are sparse, there does not appear to be any disproportionate targeting of minorities in the city. Questions remain, however, as to whether or not the low level of TASER use is due to internal factors or external factors. Due to the limited use for this department that question may be hard to answer. What is also clear is that more studies such as the current one need to be conducted. To avoid aggregation bias more studies of large metropolitan agencies, as well as studies of smaller agencies, are needed. As noted earlier, one nearby larger community (Omaha) had 170 TASER incidents, or 4 per 10,000 residents, in one year alone. However, another nearby city (Hastings), that is much smaller than the study city, also had a larger number of incidents in one year (21.6 per 10,000), compared with the low number of events for the study city in the same time period (0.4 per 10,000). It should also be pointed out that the yearly totals for the study city decreased each year. In Lincoln, for the one comparable year, 2004, there were 11 cases, 8 in 2005, 4 in 2006, and 3 for partial year 2007 for an overall rate of 0.3 per 10,000 annually.

Internal factors (eg, department policies and practices, training, organisation culture and individual officer characteristics) were initially proposed as having a direct effect on TASER use. However, because of the limited amount of data, that question cannot be resolved. Departmental policies such as those dealing with the use of force continuum and basic officer characteristics are present, but the lack of data makes determining impact or effectiveness problematic. The indirect external factors, such as offender characteristics, while informative for the current study, are too few in number. The apparent small number yearly of TASER cases for the city call for long-term analysis that is currently not possible due to the short amount of time that the department has been utilising TASERs.

In addressing the question of TASER effectiveness, the current study finds concurrence with previous studies (White & Ready, 2007; Mesloh et al., 2008). In all but one of the cases the TASER incapacitated the suspect long enough for the officer(s) to gain control and make an arrest. For the one case when the TASER was not effective, one of the projectiles did not make contact with the suspect and the second projectile only partially connected to the suspect. This study, however, does not allow for insightful comments on the issue of the effects on suspects' health, as that information is not available. In reference to suspects' injury, there appears to be only one case in the current study where the injury occurred after the suspect is tased. With respect to officer safety, of the 26 cases, only 4 officers were injured. There are only three incidents in which other officers are injured. Neither officer injury nor other officer injury are caused by the TASER and are the result of hands-on techniques. Smith, Kaminski, Rojek, Alpert, and Mathis (2007) find that hands-on techniques increase the likelihood of officer injury. As the 'drive-stun' TASER mode discussed earlier essentially becomes a hands-on technique, this may give insight into why the LPD discontinued its use.

So, in the end what are needed are more studies of all types and sizes of departments. Further study can help to reveal how and if TASER use is impacted by internal and external control factors. Additional research can also help to determine the impact which TASER use has on a suspect's health. While this study seems to support the idea that TASERs are effective, more needs to be done to discover why use appears to be high in some departments, regardless of size, and why it appears to be low in other departments, regardless of size.

Notes

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(2) A TASER® is a handheld weapon similar in shape and size to a handgun which when fired delivers an electrical shock that disrupts neuromuscular capacity.

(3) Each year the Federal Bureau of Investigation (FBI) compiles a list of reported crimes which is used in part to construct the Uniform Crime Report (UCR) index. The list includes Part I and Part II index crimes. Part I index crimes are serious crimes that occur with some frequency and include murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, motor vehicle theft, and arson. Part II index crimes include less frequently occurring felonies and misdemeanors.

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