

Predictors of Police Brutality in a Group of Methamphetamine Users Delft, in Cape

Town, South Africa

by

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Thesis submitted in partial fulfillment of  
the requirements for the degree of  
Master of Science in the Duke Global Health Institute  
in the Graduate School of Duke University

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ABSTRACT

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## **Abstract**

Introduction: Police brutality is a form of violence that negatively impacts health globally. Illegal drug use increases the likelihood that substance users will encounter the police. Methamphetamine use in South Africa has been increasing since the early 2000s. In this paper, a secondary data analysis was done to examine predictors of methamphetamine users experiencing police brutality. Methods: Respondent driven sampling was used to recruit 362 active methamphetamine users in Delft, Cape Town, South Africa. Clinical interviews and computerized interviews were used to capture participant demographics and historical information about drug use, experiences of police violence, gang involvement, and arrest records. Logistic regression models were used to determine the predictors of experiences of police brutality by sex. Results: The sample was composed of 202 males and 160 females. Lifetime experiences of police violence were 53% for males and 14% for females. Almost 65% of participants reported at least one prior arrest. Of those arrests, 13.8% were gang-related and 37.8% were drug-related. Police violence was more common for weapon-related arrests (OR 2.988, 95% CI=1.543-5.787) and drug-related arrests (OR 1.796; 95% CI=1.140-2.829). Discussion: The creation of policing policies based on research driven interventions need to be drafted and implemented to decrease the negative effects that abuses of police power have on public health.

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# 1. Introduction

The use of illicit substances has the potential to harm to an individual's life, a community's health, and the success of a society. According to the Global Burden of Disease 2010, there are two substances which are most responsible for substance dependence. Amphetamines and opioids are used by 17.2 million and 15.4 million people respectively. These figures roughly equate to 2% of the total global burden of disease (Degenhardt et al., 2014). The effects of illicit drug use include suicide and the acquisition of human immunodeficiency virus (HIV), hepatitis B and hepatitis C infections (Degenhardt et al., 2013). Illicit drug use is an important factor to consider when evaluating the public health of a given population.

## ***1.1 Global Violence, Gang Activity & Police Violence***

### **1.1.1 Violence**

The World Health Organization (WHO) defines violence as:

“Violence is the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation.”

A correlation between poor public health and high rates of violence has been well established; negative repercussions of violence affect macro level aspects (poverty and human rights violations), institutional factors (attitudes towards public institutions and public confidence in police), and has immediate and direct impacts on individuals (alcohol and drug addictions, weapons) (Ashton, 2001). Each of these factors affects

health at the community level. An approach taken by the Lancet subdivided violence into three categories: self-inflicted, interpersonal, and collective, all of which are present in a community (Krug, Mercy, Dahlberg, & Zwi, 2002). Violence harms more than the individuals who are targeted by the behaviors: everyone present in the environment is subject to direct or indirect effects.

### **1.1.2 Substance use and criminal behaviors**

A complex relationship exists between criminal behaviors and substance use. Many studies that focus on this relationship are conducted in the United States (US) or in other western countries. One such investigation examined the relationship between methamphetamine use and criminal behavior in a population of inmates in several Colorado jails. The results from this study indicated that in this sample of drug users methamphetamine users were more likely to have longer criminal records than inmates who reported using marijuana, alcohol, cocaine, or other substances (Gizzi & Gerkin, 2010). Further, a meta-analysis conducted by Bennett et al 2008 found that drug users were 2.8 to 3.8 times more likely to be criminal offenders than non-drug users. Bennett's analysis relied heavily on data from the United States, the United Kingdom, Finland, Spain, Greece, and Belgium. Results from those 30 studies indicated that substance use was related to criminal behavior (Bennett, Holloway, & Farrington, 2008).

While the data from low and middle income countries (LMICs) is sparse, a study in two northern Mexican cities, Tijuana and Ciudad Juarez, found that 66.7% and 80.8%

of participants who were known drug users reported a history of incarceration (Beletsky et al., 2012). These high estimates indicate that drug users are more likely to engage in criminal behaviors and to be incarcerated compared to the general population.

### **1.1.3 Gangs**

A universal definition of gang participation has yet to be agreed upon, so throughout this thesis I will use the definition from the UN Draft Convention for the Suppression of Transnational Organized Crime 2004:

“Group activities of three or more persons, with hierarchical links or personal relationships, which permit their leaders to earn profits or control territories or markets, internal or foreign, by means of violence, intimidation or corruption, both in the furtherance of criminal activity and to infiltrate the legitimate economy.” (Pinnock, 2016)

Groups that seek illegitimate procurement of capital create an illegitimate economy that positions its members in vulnerable situations, leading to increased incidences of victimization by other gangs and repeated contact with law enforcement (Peterson, Taylor, & Esbensen, 2004). While gangs differ depending on geographical location and are difficult to compare across disparate regions, the description above suggests that gang members in any country would be likely to experience contact with the criminal justice system. Based on extensive research many gang members do in fact spend time in prison or have been arrested (Tobin, 2008).

### **1.1.4 Police Violence**

While no formal definition of police violence exists, the use of force is agreed to be useful in the “amount of effort required by police to compel compliance by an unwilling subject (International Association of the Chiefs of Police, 2001)”. These forces include a gradient of levels for both verbal and physical means to subdue subjects, with lethal force being the highest level. The WHO formally acknowledged the use of excessive force by police against citizens as an influential societal factor on the rate of violence (World Health Organization, 2004). Through the normalization of the use of excessive force, societies are providing an avenue for the use of force to continue in conflicts between citizens and police.

A number of studies have investigated the impact of police violence on public health. In medical settings in Chile, Kenya, and South Africa, participants attributed injuries to the behaviors of police (Cooper, Moore, Gruskin, & Krieger, 2004) . Further, in groups of injection drug users (IDU) in Thailand (Hayashi et al., 2013) and along the US-Mexico border, nearly one-third of participants reported experiences of police beatings and many participants reported witnessing police beatings (Miller et al., 2008). A qualitative approach by researchers in three Russian cities, found that police violence was considered normal and not uncommon as a means of invoking fear and terror among individuals participating in illegal activities (Sarang, Rhodes, Sheon, & Page, 2010). In these studies, participants provided information that indicated that the violent

behaviors of police towards drug users as well as towards non-drug using citizens suggests that violent behavior by police towards criminals was normalized.

## ***1.2 Environmental Factors in South Africa***

### **1.2.1 Ethnicity**

South Africa has a long history of racial division, dating back to the 1600's Dutch colonization and continuing through the British Empire's rule which granted South Africa self-governing rights in 1934. In the early 1940's, South Africa adopted an apartheid regime that based justice on physical characteristics. Skin color was divided into four broad categories: Black South African, Coloured (people of more than one race and unique to South Africa), Indian, and White. These historical racial divisions are important factors to consider in the South African context (Pruitt, 2010). Most Black Africans were segregated into townships, called Bantustans, in South Africa during apartheid. The advent of a democratic government in 1994 did not bring about a sudden change in racial attitudes, and the persistent racial inequities make Cape Town one of the most segregated cities in the world to this day (Samara, 2011; Shaw, 1997). In most of South Africa, Black Africans make up 79% of the population (Small, 2008), yet the racial composition of Cape Town is unique in South Africa since the city's minority is Black African, accounting for approximately 35% of the population. As such, racial divides are still present in the country of 50 million people. There is a high unemployment rate for Black Africans which is approximately 5 times higher than that

of the white sector of the population (Tshabalala, 2016). Socioeconomic differences have increased poverty for the most destitute and have affected negatively the health outcomes of the poorest with increased rates of diseases such as HIV.

### **1.2.2 Violence**

In 2014, South Africa reported 33 intentional homicides per 100,000 individuals; only 5 countries had a higher rate (World Bank, 2016). Violence is present across the country, and it is particularly well documented that gender is a major factor in the likelihood of an individual experiencing violence. In 2007, South Africa had the highest reported intimate female homicide globally with 8.8 per 100,000 (World Health Organization, 2004).

The social inequalities have provided an opportunity for this culture of violence to grow. A lack of jobs leads to an illegitimate economy in which the gangs are prominent actors. The role that gangs play in the fabric of a violent society include criminal activities such as drug and arms trafficking. These activities increase the illicit trade of these commodities within communities, which may in turn increase violent behaviors.

### **1.2.3 Gang activity**

The occurrence of gangs in South Africa is largely the result of apartheid conditions, social inequality, and segregation (Pinnock, 2016). The end of apartheid did not decrease gang activity, which was contrary to governmental expectations. To combat

gang activities, the government issued the Prevention of Organized Crime Act (POCA) in 1998 (Jensen, 2014). The policy included measures to make gangs illegal by including provisions against organized crime, gang activities, and money laundering. POCA changed existing policies in several ways: the establishment of a Criminal Assets Recovery Account; adding amendments to the Drugs and Trafficking Act of 1992 and to the International Co-operation of Criminal Matters Act of 1996; the repeal of the Proceeds of Criminal Act of 1996; and the incorporation of certain provisions of that act into POCA (United Nations Office of Drugs and Crime, 1998). The policy change has not significantly altered the complex relationship between gangs, the community and the police or reduced the prevalence of gangs or police brutality (Kapp, 2008).

South African gangs are known to collude with South African Police Service (SAPS). While society at large believes that there is corruption within SAPS in relation to gangs, there is a belief that this corruption functions in a different capacity than SAPS does with drug dealers. The underlying belief is that the police are corrupt and work alongside gangs which has led to the institutionalization of violence in the townships (Jensen, 2014). The creation of an alternative culture that largely ignores political mandates has facilitated an atmosphere of violence in these urban settings that is difficult to stop via traditional policing.

There are three different types of gangs: street gangs, drug gangs, and prison gangs. These categories of gangs are not separate entities, but operate symbiotically with

much overlap in leadership and turf. Many law enforcement officers believe that the process of arresting and incarcerating gang members will help break the cycle of the gangs. However, mass incarceration of gang members also has the potential to strengthen gangs by providing a space away from the streets to develop a better functioning hierarchy and transform the way that the gang functions (Winston, 2014).

#### **1.2.4 Police Violence**

The social problem that violence presents in South Africa extends to the experience of police violence, which is a well-documented problem. A formal mechanism was created to combat these situations and is known as the Independent Complaints Directorate run by SAPS. Between 2013 and 2014 there were 5,754 complaints against police. Of those complaints, 72% were acts of violence, with 121 accusations of rape and 3,994 accusations of torture or assault (Pinnock, 2016)

The Independent Police Investigative Directorate (IPID) 2015 – 2016 Annual Report indicates that there were many formal cases against SAPS. There are four categories which involve physical violence within the IDIP document and their reported claims: rape by police officials (112), rape in police custody (23), torture (145), and assault (3,509). The highest reported category is assault, with a total of 3,509 cases raised against police officers in South Africa, and of those cases, 871 of them, the highest number reported, occurred in the Western Cape (Independent Police Investigative



Directorate, 2016). A high rate of violence towards civilians has normalized the behavior that is directed towards individuals who break the law.

### **1.3 Burden of drug use in South Africa**

#### **1.3.1 Drug trafficking through South Africa**

South Africa is geographically located in an area that provides a port for the influx of people and goods. Trade routes from Asia provide an avenue into South Africa for the import of ephedrine and pseudoephedrine, chemicals used in the manufacture of methamphetamine. South Africa imports these chemicals at rates that make it one of the world's largest importers (Pinnock, 2016). In addition to importing these precursor chemicals, methamphetamine has been identified as being supplied largely by West Africa (United Nations Office on Drugs and Crime, 2015). Its relative cheapness and easy availability makes methamphetamine a particularly popular drug in South Africa (Kapp, 2008).

#### **1.3.2 Methamphetamine**

The drug methamphetamine is a central nervous system stimulant. Methamphetamine is locally known as 'tik' in South Africa. *Tik* is highly addictive. When it is used, the brain releases high levels of dopamine which results in feelings of increased energy, heightened alertness, and increased pleasure (National Institute of Drug Abuse and University of Michigan, 2003). The effects from *tik* can last for up to 12 hours. The long acting nature of *tik* increases the likelihood that users will remain high

after leaving the site of use and return to other settings, such as school, work, and home (Lattimore, Trudeau, Riley, Leiter, & Edwards, 1997). The withdrawal effects from *tik* may range from anxiety, depression, paranoia, and aggression (Katsumata, Sato, & Kashiwade, 1993). These symptoms have the potential to interfere with daily life and may result in negative actions such as violent behavior or may have other effects such as memory loss, hallucinations, and confusion.

In Cape Town, *tik* was present but not known for widespread misuse in 2003. Yet by 2008 the drug had surpassed any other drug in misuse, including alcohol (United Nations Office of Drugs and Crime, 2008). *Tik* has imposed a considerable burden on the South African population. The use of *tik* is highest in the Western Cape province, (Peltzer, Ramlagan, Johnson, & Phaswana-Mafuya, 2010) and the number of people using *tik* in South Africa is high in the townships of Cape Town (Kapp, 2008). The townships, experience problems with overcrowding, sanitation, and alcohol misuse. The townships whose populations are largely Coloured, such as the Mitchells Plain, have experienced an increase in drug-related arrests. There were 621 drug-related arrests in 2002 and 3000 by 2006 (Kapp, 2008). Males who are young and Coloured have the highest use of *tik* in South Africa (Dada S et al., 2012; Wechsberg WM et al., 2008). The *tik* epidemic has increased since 2003, and today Cape Town has the designation of the place with the highest rate of methamphetamine addiction in the world.

### ***1.4 Aims of this study***

Given the relationship between drug use, criminal activity and police violence, it is critical to evaluate the factors that influence the intersection of these behaviors. To date little research has been conducted on the factors that contribute to police violence in South Africa. To our knowledge, there have been no other studies that have evaluated the predictors of police violence among methamphetamine users in South Africa. To address this evidence gap, the purpose of this secondary data analysis aimed to determine predictors of experiencing police violence in methamphetamine users in the township of Delft in Cape Town, South Africa. Police are a critical component of the maintenance of law and order in communities and should not contribute to violence through using excessive force against citizens. The study has the potential to improve police interactions with substance users in South Africa and in other LMIC settings.

## **2. Methods**

### **2.1 Setting**

The study was conducted in Delft, a township of Cape Town, South Africa. Delft is a peri-urban area of housing inhabited primarily by Black African and Coloured families. The township has around 152,000 residents, of which 52% identify as Coloured and 46.2% identify as Black African. Of the residents recorded in the census, 23.7% had completed grade 12.

### **2.2 Participants**

There were 362 participants who were eligible for the study. These criteria were  $\geq$  18 years of age, a positive methamphetamine urine test, and residence in Delft. Previous participation in the study or incapacitation due to acute intoxication, mental status, or inability to provide informed consent were exclusion criteria.

### **2.3 Procedures**

Participants were recruited between May and October 2014, using respondent driven sampling, a chain referral sampling method. Individuals were recruited by their peers and given a coupon, that directed them to a study office located at the Delft public library. Participants were enrolled after preliminary screening for eligibility and provided informed consent. A positive methamphetamine drug test allowed participants to proceed with the study.

Eligible participants completed an audio computer-assisted self-interview (ACASI) in the preferred language of their choice. Afterwards, participants completed a face-to-face interview. Participants were compensated for the approximately two-hour study visit with a grocery gift card equivalent to 70 South African Rand (ZAR, ~\$7USD). At the end of the visit, participants were provided with additional materials to recruit new study participants based on inclusion and exclusion criteria. Successful referrals resulted in an additional compensation of ZAR20 (~\$2USD) for participants who referred at most two subsequent study participants. This sampling method is discussed in further detail elsewhere (Kimani et al., 2014).

This study was approved by both Duke University Medical Center and Stellenbosch University Faculty of Medicine and Health Sciences Institutional Review Boards.

## **2.4 Measures**

### **2.4.1 Demographics**

During the ACASI, participants reported various demographic information such as age, gender, ethnicity, sexual orientation, and number of years lived in Delft. They also reported arrest and incarceration history, experiences of physical police violence, and gang involvement.

## 2.4.2 Arrest History

During the face-to-face interview, participants were questioned about prior arrests. All participants were asked to count the number of times they were arrested and charged as an adult for the following 14 categories: shoplifting/vandalism, parole/probation, drug charges, forgery, weapons offense, burglary/theft/breaking and entering, robbery, assault, arson, rape, homicide/manslaughter, prostitution/sex work, gang charges, and contempt of court. For analysis, the responses for each category were dichotomized into two categories (i.e., ever arrested for this reason, never arrested for this reason). Then the arrests were separated into six categories based on the South African Police Service (SAPS) crime statistics categorization. The categories are as follows:

- 1) contact crimes (crimes against the person): murder, sexual offences, attempted murder, assault with the intent to inflict grievous bodily harm, common assault, common robbery, and robbery with aggravating circumstances;
- 2) contact-related crimes: arson and malicious damage to property;
- 3) property-related crimes: burglary at non-residential premises, burglary at residential premises, theft of motor vehicle and motorcycle, theft out of or from motor vehicle, and stock-theft;

- 4) other serious crimes: all theft not mentioned elsewhere, commercial crime, and shoplifting;
- 5) incidental crimes (crime detected as a result of police action): illegal possession of firearms and ammunition, drug-related crime, driving under the influence of alcohol or drugs, and sexual offenses as result of police action;
- 6) subcategories of aggravated robbery/not-otherwise categorized: carjacking, truck hijacking, robbery of cash in transit, bank robbery, robbery at residential premises, robbery at non-residential premises.

### **2.4.3 Self-reported police violence**

The questions about police violence were not asked in relation to specific arrests.

Participants reported their lifetime experiences with the following interactions with

police: *Have you ever been physically assaulted by the police?* If assaulted, participants

responded to the following questions: *I feel I was wrongfully assaulted by the police* and *I*

*feel I was assaulted by the police because I am a tik user.* Item responses for questions were

yes (1) or no (0).

### **2.4.4 Self-reported gang involvement**

Participants reported gang involvement through one question: *Are you a member of a*

*gang?* Item responses for questions were yes (1) or no (0).

## **2.5 Analysis**

SPSS 24 was used for all quantitative analysis. Sample characteristics were described by race and gender; mean and frequencies were calculated as well as median and range. Frequencies of self-reported arrest records were compared first between male and female participants, and then between Black South African and Coloured males, both using Pearson's Chi-square test. Three logistic regression models were used to (1) evaluate the association between age, gender, and ethnicity in the experience of police violence; (2) test whether or not arrest histories were associated with experiencing police violence; and (3) to determine the association that drug-related and weapons-related arrests had on experiencing police violence. There were 30 face-to-face interviews that were qualitatively evaluated.



## **3. Results**

### ***3.1 Description of sample***

The demographics and sample characteristics are summarized in Table 1, which divided the sample first by gender and then by ethnicity. The participants were largely Coloured (73%, n=265), and the rest were Black South African (27%, n=95). The sample ranged in age from 18 to 66, with a median of 28, and were mostly heterosexual (88%). Participants reported that they had lived in Delft from 0 to 30 years, with a median of 13 years. More than half of the participants reported a prior arrest, with nearly 65% responding to having been arrested and charged at least once. Almost a third of the sample (36%) reported experiencing police violence in their lifetime, with differences in gender; 53.5% of males and 13.8% of females reported a history of police violence. Reports of gang involvement were restricted to participants who had experienced police violence. Nearly one-fifth of the sample (22%, n=29) reported gang involvement in their lifetime, with differences in gender; 25% of males and 9% of females reported a history of gang involvement. Gang involvement differed between Black African males (15.6%) and Coloured males (29%).

**Table 1: Sample demographics and characteristics *n* = 362**

	Total Population	Male (n = 202)			Female (n = 160)		
		Total	Black African n = 76 (37.6%)	Coloured n = 126 (62.4%)	Total	Black African n=21 (13.1%)	Coloured n=139 (86.9%)
Age median, [range]	28, [18 – 66]	28, [18-66]	23, [18-41]	30, [18-66]	28, [18 – 34]	23, [18 – 29]	28, [18 – 33]
Heterosexual n (%)	318 (87.8)	180 (68.6)	68 (89.5)	112 (89)	138 (86.25)	6 (76.2)	122 (87.8)
Years lived in Delft, median, [range]	13, [0 – 30]	2, [0-30]	8, [0-26]	17, [0-30]	15, [0-29]	0, [0-22]	15, [0-29]
Ever arrested n (%)	235 (64.9)	154 (76.2)	46 (60.5)	108 (85.7)	81 (50.6)	6 (28.6)	75 (54)
Self-Reported Police Violence n (%)	130 (36) ***	108	32 (42.1)	76 (60.3)	22	1 (4.8)	21 (15.1)
Gang Involvement n (%)	29 (22) ***	27	5 (15.6)	22 (29)	2	0	2 (2.3)

Pearson chi-square male vs. female:  $p < 0.05^*$ ;  $p < 0.01^{**}$ ;  $p < 0.001^{***}$

### **3.2 Arrest history**

Overall, around 65% of participants self-reported an arrest record. Among these, the types of crimes are shown in Table 2. The crimes were categorized per the SAPS reporting methods and were analyzed as a total population, stratified by sex, and finally stratified within sex by ethnicity.

From highest to lowest proportion, participants indicated that they had been arrested for the following crimes: incidental (42.3%; n=153), contact (24.3%; n=88), not otherwise categorized (22.4%; n=81), property-related (21.6%; n=78), other serious (13.3%; n=48), and contact-related crimes (2.2%; n=8). All self-reported arrest categories were significantly different between male and females.

More than 40% reported that they had experienced an incidental arrest, which was the highest proportion of reported arrests among the categories. Overall, more than half of males (53.5%; n=108) reported arrests due to police action; it was less common among Black South African men (32.9%; n=25) than Coloured men (65.9%; n=83). In contrast, less than one third of females (28.1%; n=45) reported incidental arrests; it was similarly less common among Black South African women (4.8%; n=1) than Coloured women (31.7%; n=44). Considering drug-related arrests separately revealed that 37.8% of self-reported offenders were arrested for this reason; males (47.5%; n=96) and females (25.6%; n=41). For both male and females, incidental arrests were higher in Coloured participants than in Black South African participants; rates were more than 2 times

higher in males and approximately 6 times higher in females. Drug-related arrests accounted for the largest proportion of arrests in this study.

Gang-related arrests were reported by one-seventh of the sample (13.8%; n=50). Male reports of gang-related arrests (22.5%; n=45) were much higher than in female participants (3.1%; n=5). There were no significant differences between gender or ethnicity.

**Table 2: Self-reported criminal records among those who reported previous arrests**

Crime Category	Total n = 362	Male n = 202	Female n = 160	p-value
Contact n (%)	88 (24.3)	70 (34.7)	18 (11.3)	0.000 ***
Contact-Related n (%)	8 (2.2)	7 (3.5)	1 (0.6)	0.068
Property-Related n (%)	78 (21.6)	58 (28.7)	20 (12.5)	0.000 ***
Other Serious n (%)	48 (13.3)	33 (16.3)	15 (9.4)	0.051
Incidental n (%)	153 (42.3)	108 (53.5)	45 (28.1)	0.000 ***
Not otherwise categorized n (%)	81 (22.4)	55 (27.2)	26 (16.3)	0.013 *
Drug-Related n (%)	137 (37.8)	96 (47.5)	41 (25.6)	0.000 ***
Gang-Related n (%)	50 (13.8)	45 (22.5)	5 (3.1)	0.000 ***
Weapons-Related n (%)	38 (10.5)	33 (16.3)	5 (3.1)	0.000 ***

Pearson chi-square male vs. female p<0.05\*; p<0.01\*\*, p<0.001\*\*\*

**Table 3: Self-reported criminal records among males who reported previous arrests by ethnicity**

Crime Category	Black South African n=76	Coloured n=126	p-value
Contact n (%)	22 (28.9)	48 (38.1)	0.186
Contact-Related n (%)	2 (2.6)	5 (4)	0.615
Property-Related n (%)	15 (19.7)	43 (34.1)	0.029 *
Other Serious n (%)	8 (10.5)	25 (19.8)	0.075
Incidental n (%)	25 (32.9)	83 (65.9)	0.000 ***
Not otherwise categorized n (%)	11 (14.5)	44 (34.9)	0.002 **
Drug-Related N (%)	21 (27.6)	75 (59.5)	0.000 ***
Gang- Related N (%)	7 (42.1)	38 (47.6)	0.001**
Weapons-Related n (%)	9 (11.8)	24 (19.1)	0.147

Pearson chi-square Black South African men vs. Coloured men p<0.05\*; p<0.01\*\*, p<0.001\*\*\*

### **3.3 Association between police violence and demographics**

Table 4 summarizes the results of a bivariate logistic regression model of the associations between select demographic characteristics and the experience of police violence. This analysis did not control for any other variables. Coloured participants were more likely to experience police violence (OR=2.17; 95% CI = 1.24 – 3.79) than were Black South African participants. Male participants were more likely to experience

police violence (OR=0.11; 95% 0.06 – 0.30) than were females. In summary, ethnicity and gender both were significant predictors of the experience of police violence.

**Table 4: Associations between police violence and demographic characteristics**

	Odds Ratio	95% Confidence Interval	p-value
Age (over 35)	0.941	0.488 – 1.812	0.855
Gender (female)	0.112	0.064 – 0.296	0.000***
Ethnicity (Coloured)	2.167	1.238 – 3.786	0.007**

Bivariate logistic regression compared to referent group: p<0.05\*, p<0.01\*\*, p<0.001\*\*\*

### ***3.4 Association between self-reported arrest records and experiences of police violence***

Table 5 summarizes the associations of the results of a bivariate logistic regression for the experience of police violence as it relates to self-reported arrest records and select demographics characteristics. Male participants (OR=0.13; 95% CI 0.071 – 0.24) and Coloured participants (OR=2.00; 95% CI 1.10 – 3.62) were more likely to experience police violence than female participants and Black African participants in a model that accounted for arrest records. While the arrest categories were not statistically significant at the 0.05 level, participants who reported incidental crimes were more likely to experience police violence (OR=1.11; 95% CI = 0.66 – 1.89) than participants who did not report arrests for incidental crimes.

**Table 5: Associations between self-reported arrests and experiences of police violence**

N = 362	Odds Ratio	95% CI	P Value
Contact Crimes	1.324	0.733 – 2.394	0.352
Contact-Related Crimes	2.779	0.459 – 16.831	0.266
Property-Related Crimes	0.982	0.529 – 1.824	0.954
Other Serious Crimes	0.978	0.472 – 2.027	0.952
Incidental Crimes	1.114	0.655 – 1.893	0.690
Crimes Not Otherwise Categorized	1.293	0.707 – 2.366	0.404
Gender	0.130	0.071 – 0.235	0.000 ***
Ethnicity	1.996	1.100 – 3.620	0.023 *
Sexual Orientation	0.987	0.626 – 1.556	0.954
Age	0.879	0.447 – 1.730	0.709

Bivariate logistic regression compared to referent group: p<0.05\*, p<0.01\*\*, p<0.001\*\*\*

### ***3.5 Association between experiences of police violence and weapons-related and drug-related arrests***

Table 6 summarizes the results of a bivariate logistic regression of a sub-sample of arrests that were within the category of incidental crimes (weapons-related and drug-related arrests), and excluded all other arrest records. Participants who reported weapons-related arrests were more likely to experience police violence (OR=2.99; 95% CI 1.54 – 5.79) than participants who did not. Participants who reported drug-related arrests were more likely to have experienced police violence (OR=1.80; 95% CI=1.14 – 2.83) than participants who did not report drug-related arrests.

**Table 6: Association between experiences of police violence and weapons-related and drug-related arrests**

	Odds Ratio	95% CI	P Value
Weapons-related arrests	2.988	1.543 – 5.787	0.001***
Drug-related arrests	1.796	1.140 – 2.829	0.012*

Bivariate logistic regression compared to referent group: p<.005\*, p<0.01\*\*, p<0.001\*\*\*

## **4. Discussion**

The main purpose of this analysis was to better understand predictors of police violence in a sample of methamphetamine users in a peri-urban township in Cape Town, South Africa. Lifetime experiences of police violence were reported in more than a third of the sample. The finding is consistent with settings in Thailand (Hayashi et al., 2013) and along the U.S.-Mexico border (Miller et al., 2008).

### **4.1 Criminal Arrests**

Participants reported arrest records for 6 categories of crimes: incidental (42.3%; n=153), contact (24.3%; n=88), not otherwise categorized (22.4%; n=81), property-related (21.6%; n=78), other serious (13.3%; n=48), and contact-related crimes (2.2%; n=8). These figures are more reliable than official records of arrests because records are only as reliable as the relationship between the police and the public (Louw, 1997). Since the relationship between police, drug dealers, and gangs is believed to be corrupt in South Africa, the reliability of the official records could be questionable. These factors may indicate that the drug users who reported arrests and police violence in this study are a more reliable source than the official police records.

Arrests according to SAPS official records crimes have increased in Delft since 2006. Drug-related crime has represented the largest proportion of arrests since 2010 in Delft. In the Western Cape, drug-related crimes moved from the second highest reported category of arrests to the largest arrest category during 2015-2016. Delft police station



reported that drug-related arrests were highest during the same time period (SAPS, 2017). The Western Cape represents the highest rates of drug-related crimes in South Africa (Pinnock, 2016).

Given that more than half (65%) of participants had been arrested at least once in their lifetime, methamphetamine users in Cape Town, South Africa are likely to be arrested. The high number of criminal records is consistent with previous findings that methamphetamine users have high rates of criminal involvement (Gizzi & Gerkin, 2010). The arrests in this study are concentrated largely within several arrest types: drug-related, weapon-related, and gang-related.

The present operating procedure for arresting drug-users has created misunderstandings about drug-use, which is shrouded in stigma. Globally, the focus on the criminalization of drug use has altered the acquisition of controlled medicines for legitimate use. For instance, the police station is the only place for patients to acquire opioid-based medications in Georgia (Reville & Foxwell, 2014). It is possible that if an individual has previous negative interactions with the police the likelihood of that individual retrieving medication from the pharmacy at the police station decreases. The negative public health impact of a police-centric moderation of drug use is a global problem.

While this study does not have any others to compare to at this time, gang members may be committing a fraction of the documented violent crime. Almost one-fifth (22%)

of the participants reported gang-involvement, yet only 13.8% of participants reported gang-related arrests. The arrests that occurred may have been directly related to gang-related activities, but since there is not a gang-related arrest category in the SAPS protocol, participants may have reported these gang-related arrests in other categories (i.e., drug-related arrests, weapons-related arrests, assault). For instance, the Western Cape High Court charged members of a Western Cape gang for crimes which included “murder, dealing methamphetamine and possession of unlicensed firearms and ammunition” (Petrus, 2015). Though the criminal justice system does not have a formal protocol for arrests that are directly gang-related, the other arrests that are being captured are tangentially related.

This study found that the rates of arrests by type were different in all of the sub-categories of arrest records that were arranged, when analyzed by sex. Overall, male participants were significantly more likely to be arrested than women. These rates are consistent with another study that concluded that female methamphetamine users are more likely to avoid arrest than males (Sorsdahl, Stein, & Myers, 2012). However, this study aimed to understand the negative attitudes towards substance users and used public opinion surveys to form their conclusion.

Coloured male participants were found to have reported higher rates of arrests in each of the six arrest categories. This was statistically different within the weapons-related and drug-related arrest categories. The findings of this study indicate that in this

population, Coloured male drug-users are more likely to be arrested by police than are Black South African males. The higher rates of methamphetamine use in young Coloured males (Dada S et al., 2012; Wechsberg WM et al., 2008) could account for this finding. Another possibility for this finding could be policing procedures that target certain groups. These findings are inconsistent with the UNODC report, which states that higher percentage of women than men are in prison due to drug charges. Yet, it is possible that our sample did not capture these findings due to females being imprisoned.

Greater than one third of all participants reported police violence. Incidental crimes, that comprised weapons-related and drug-related arrests in this study, were significantly associated with higher odds of experiencing police violence. The significance of this result suggests that individuals who have experienced police violence may also exhibit behaviors that draw attention from law enforcement that leads to incidental arrests occurring.

Gender and ethnicity were predictors for experiencing police violence, which would indicate that racial and gender profiling is a tactic used by SAPS. The cohort was made of methamphetamine users, which could be known in their communities by SAPS for being targets for police action regarding both for arrests and targets of violence. The odds were higher for experiencing police violence in both weapons-related and drug-related arrests compared to participants who did not report those types of arrests. There

is the potential that participants did not report police violence in an accurate manner due to recall bias or fear of repercussion. One ethnographic study, which followed SAPS officers in Durban and Cape Town, observed several situations where police were violent towards drug users physically as well as psychologically or verbally. The authors observed that in many cases the police officers did not arrest the drug users but would interrogate or promise compensation in exchange for payment for information (Marks & Howell, 2016).

#### ***4.2 Implications for policy and practice***

The results presented in this paper suggest that there must be a change in policy guiding the actions of law enforcement officers when interacting with substance users. Recent attention on the effect of police violence on health has increased the dialogue around these issues. While largely in the U.S., studies have reported that raids on known crack-houses and crack downs have the potential to increase drug-related violence as well as displace drug activity to other areas (Werb D et al., 2011). Further, the acts of violence by law enforcement towards drug users is a human rights violation. The result of these violations may be a lack of trust in law enforcement by citizens and a contribution to the risk environment of drug users (Lunze, Lunze, Raj, & Samet, 2015). In Eastern Europe, drug users are even seen as “a huge resource: resource of money, resource of statistics, resource of manipulating and getting information.” (Spicer et al., 2011)

To change these policies there must be a change in the culture. At the United Nations General Assembly 2016, a special resolution was adopted to address and counter the world drug problem. The resolution was future-focused and placed emphasis on the most prevalent, persistent, and new psychoactive substances and on the process of scheduling those drugs. In direct response to drug use disorders, the UN resolution pledges support for treatment of incarcerated individuals with substance use disorders as well as including the United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules), measures aimed at addressing prison violence. The resolution encourages sharing lessons learned by law enforcement agencies for best law enforcement practices through the Commission on Narcotic Drugs (United Nations General Assembly, 2016).

The contribution of the best or most effective practices from around the world could improve training of law enforcement in reacting to criminal behaviors in a non-violent way. The current uptake in harm reduction strategies has been effective in several other countries and cultural contexts. The gap between law enforcement and mental health services could be closed with the partnership of mental health professionals and law enforcement through these trainings guidelines. The harm-reduction strategy could be adapted to suit the environment in Cape Town so that drug users do not become victims of violence, but are instead guided to services that will be most helpful in treating their dependency, i.e., drug rehabilitation facilities.

### **4.3 Implications for further research**

The results from this study could be used to inform other studies that focus on violent encounters with law enforcement. A general understanding that methamphetamine users are likely to be arrested implies that there is some common thread that connects the criminal behaviors of these drug users to the criminal justice system. These results are based on a single question *Have you ever been assaulted by police?* This question is limited in scope. The question does not give the respondent an opportunity to reply if the assault was physical, sexual, psychological, or by way of neglect. Further, the study does not allow for participants to give a description of the environment in which the assault occurred. A future study could address these shortcomings by asking this question during the face-to-face interview or by including the four types of violence as responses to the question in an ACASI.

The study indicated that males are more likely to experience police violence than females. Further research could investigate these findings by developing studies that include male-only and female-only participants.

While the study results are not directly comparable to the official records, future research could improve this shortcoming by partnering with SAPS to compare self-reported arrests to the official records. Further, since this study focused on methamphetamine as a primary drug of use, and participants indicated multi-drug use,

other studies could determine whether other drugs of primary use are as likely to result in police violence as methamphetamine.

#### ***4.4 Study strengths and limitations***

The strengths of this study was in the mixed-methods study design. The survey method can capture valuable information but is limited in the scope of that information. The face-to-face interviews give a depth of information that is impossible to gather from survey questions. The respondent-driven sampling strategy was an extremely effective method of capturing active methamphetamine users, individuals who would otherwise have been difficult to identify in a general population due to lack of rapport with the research team.

The limitations of this study included the specific location that limits the generalizability of the results to other areas. It is possible that participants had recall bias in reporting arrests and police violence. Another limitation was in the design of the ACASI. An ACASI is built to skip questions that are not relevant to the participant. If participants recognized a pattern within the survey, they may have skipped questions that were relevant to them. Another problem with the ACASI are the inherent problems with the skip function working properly and skipping the correct questions. In the beginning portion of the study, participants were only asked about gang involvement if they had experienced police violence, and this limited the amount of information that was gathered about gang involvement.

The question *Have you ever been assaulted by police?* was limited to a yes or no response. The question did not provide any information about the type of assault that had occurred. This is a limitation in the data that was analyzed. The questions about arrests were dichotomized into yes and no responses. There was not a direct relation between police violence and specific arrests. The limitation in this instance is that the information about police violence and type of arrests is not directly related, and as such the conclusions that can be drawn are not strong. Lastly, a general feeling of mistrust that the information gathered by the researchers would be somehow shared with authorities or outside of the research staff may have limited the information that participants were comfortable with sharing.



## **5. Conclusion**

The presented analysis contributes to the research literature that evaluates public attitudes towards police, with a focus on the population of drug users as well as the predictors of experiencing police violence. For the human rights violations of drug users, police will serve as a main strategy of law enforcement and must react to the substance use disorder as a medical disorder and not a criminal one. Future interventions must be based on more directed and in-depth data for police violence as well as a larger and more generalizable sample to create a context-specific way of addressing the complex social and environmental issues that are included in interactions between police and drug users. These approaches, when coupled with other harm reduction techniques, have the potential to decrease the negative effects that stem from negative interactions with law enforcement.

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