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Suicide by Cop Among Officer-Involved Shooting Cases

ABSTRACT: The frequency and characteristics of suicide by cop cases (SBC) among a large (n = 707) nonrandom sample of North American officer-involved shootings (OIS) were investigated. "Suicide by cop" is when a subject engages in behavior which poses an apparent risk of serious injury or death, with the intent to precipitate the use of deadly force by law enforcement against the subject. Thirty-six percent of the OIS in this sample were found to be SBC with high interrater agreement (intraclass correlation coefficient = 0.93) for category classification. SBC cases were more likely to result in the death or injury of the subjects than regular OIS cases. Most SBC cases were spontaneous, but had clear verbal and behavioral indicators that occurred prior to, and during the event. Findings confirm the trend detected in earlier research that there was a growing incidence of SBC among OIS. SBC individuals had a high likelihood of possessing a weapon (80%), which was a firearm 60% of the time. Half of those with a firearm discharged it at the police during the encounter. Nineteen percent simulated weapon possession to accomplish their suicidal intent. Other findings highlight the histories and commonalities in this high risk group.

KEYWORDS: forensic science, suicide-by-cop, suicide, officer-involved shootings, police use of force, police deadly force encounters, police less lethal force encounters

Suicide by cop (SBC) is a method of suicide that occurs when a subject engages in threatening behavior in an attempt to be killed by law enforcement (1). California Peace Officer Standards and Training (POST, 2) identifies a SBC when a subject "engages in behavior which poses an apparent risk of serious injury or death, with the intent to precipitate the use of deadly force by law enforcement personnel towards that individual" (p. 7).

As a phenomenon, SBC falls within the arena of *victim precipitated homicide* where the decedent somehow contributes to his/her death at the hands of another (3,4). The authors prefer the updated and neutral *subject precipitated homicide* to the 1958 term *victim precipitated* because the word *victim* is specific and should be reserved for those who are truly victims, not those who play a significant role in their own demise (5).

Several studies have examined the frequency and dynamics of these incidents. The first scientific study of SBC was completed by Hutson et al. (6). The researchers examined all shooting cases (n = 437) handled by the LA County Sheriff's Department between 1987 and 1997, and determined that 13% of all fatal officer-involved shootings (OIS) and 11% of all OIS, fatal and nonfatal, were SBC. They also noted a trend in the last year of the sample: cases that could be categorized as SBC increased to 25% of all OIS and 27% of all fatal OIS in 1997, suggesting that the incidence was increasing. Furthermore, their rigorous inclusion criteria may have omitted up to a third additional cases. SBC as a method of suicide accounted for 2% of suicides in the geographical region of the study during 1997.

Kennedy et al. (7) reported their findings that same year in a review of 240 police shootings cases culled from 22 newspapers in an electronic library search between 1980 and 1995. They determined that 16% of the 240 incidents had probable or possible suicidal motivation. When they refined their analysis to 80 cases with sufficient detail to classify, they found that 46% contained some evidence of possible or probable suicidal motivation. They conducted a follow-up review in the same study of 33 cases taken from the *Detroit Free Press* between 1992 and 1993 and determined that 46% had possible suicidal motivation. They obtained a modest 74% interrater agreement on categorization. Sixty-nine percent of these cases resulted in the subject's death. These data, while not rigorously collected and subject to numerous reporting biases (not the least of which is a dependence upon unreliable news reporting sources) and other significant data collection problems, provided some initial evidence that suicidal motivation (although not specifically SBC) might occur at a rate of 16–46% of police shooting cases.

Homant et al. (8) examined another 123 completed or averted SBC cases that had been drawn from 10 separate sources: a prior master's thesis study of 28 cases, cases from prior studies by the authors and others, expert witness consultations by the authors, the Internet, a SBC segment on the ABC TV show 20/20, the Federal Appellate Court case *Palmquist v. Selvick*, a Lexis-Nexis database search, and a local police department. This study is also limited by significant data collection concerns stemming from questionable or secondary data sources. They focused on the dangerousness of SBC incidents and found that 56% of the incidents posed a serious threat to police or bystanders. Fifty percent of the time the subject confronted the police with a loaded firearm. In 22% of the cases, the threat appeared to be less severe, and in another 22% of the cases, the subject bluffed the threat (had no weapon but simulated being armed through gestures or possessed a replica weapon). In 22% of the cases, the suicide was successfully averted. They found that the use of deadly force was correlated with *perceived* danger, not actual or real danger. They also reported that the presence of other people placed in potential danger by the subject increased risk of police using deadly force. They astutely observed that "the fact that the subject is suicidal is not relevant until the person is safely contained" (p. 50). Homant et al. (8) noted that "suicide by cop situations are usually dangerous

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and that police are generally unable to distinguish the less dangerous incidents from the dangerous ones until after the fact" (p. 50). They further observed that "many individuals, bent on suicide by cop, are dangerous…suicide by cop situations are unpredictably dangerous and require at least the same level of caution as any other type of police intervention with potentially violent persons" (p. 50).

Homant and Kennedy (9) conducted a follow-up to their earlier 2000 study, in which they added 20 additional incidents to their original sample of 123 cases for a total of 143 SBC events. They also included 29 cases that were not SBC as a methodological technique allowing the assessment of how well an independent judge could reliably exclude the cases. They obtained 96.5% agreement in their classification, yielding a reliability coefficient of 0.87. This study also introduced a typology of SBC cases: (i) *Direct Confrontations*, in which suicidal subjects initiated attacks on police; (ii) *Disturbed Interventions*, where potentially suicidal subjects took advantage of police intervention to attempt a SBC; and (iii) *Criminal Interventions*, in which subjects facing arrest preferred death to submission. In the Criminal Interventions category, they found the cases equally distributed between those facing arrest for serious and minor crimes, suggesting that perception of seriousness, shame, and aversion to arrest and incarceration are the sole perspective of the subject. They divided these three categories further into nine subtypes. Thirty percent of the cases were found to be Direct Confrontations, 57% Disturbed Interventions, and 12% Criminal Interventions. Homant and Kennedy (9) found 78% interrater agreement for placement into their three main categories, yielding a reliability coefficient of 0.74; but only 60% agreement for placement into their nine subtypes, yielding a coefficient of 0.58. Examining their findings from another perspective, only 30% of the events were preplanned, while the majority, nearly 70%, represented SBC events that spontaneously emerged during the police intervention situation.

Lord (10) researched 64 SBC cases derived from 32 North Carolina law enforcement agencies between the years 1991 and 1998. No comparison group was used. Lord found that 16 were killed by police, five subjects committed suicide, and 43 survived the attempt, making these attempts lethal 33% of the time.

Our current study examines frequency and other variables pertaining to SBC in a large nonrandom North American sample of OIS cases. The purpose of this study was to test the validity of previous findings, and to identify historical, demographic, incident, and behavioral characteristics that would significantly differentiate between SBC and OIS cases, if any could be found.

Methodology

Over an 11-month time period between March 2006 and January 2007, three trained researchers (a primary researcher and two assistants) reviewed the OIS files of participating police and criminal justice agencies. Eight invited sources representing more than 90 North American police departments in the United States and Canada provided access to their OIS files. OIS files consisted of every single deadly force and less lethal incident investigated as an OIS by the participating agency from 1998 to 2006. All data were archival; therefore, subject permission for inclusion in the study was not required. Seven hundred and seven cases were included in the final sample. Cases were excluded if officers did not discharge their weapons (lethal or less lethal), if officers only fired at animals, or when the officer had an accidental discharge of his firearm.

Data reviewed included primary investigative material in the OIS investigative files. These materials were usually extensive and included police reports, witness statements, criminal histories on subjects, photographs, videotapes, and external review reports. Additional support material was sought as needed, and included interviews with investigating detectives, and occasionally direct contact with involved officers. This occurred in *c.* 10% of the SBC cases.

Data for each of the included cases were recorded on a six page, 110-variable codebook developed by the authors which covered the following areas: (i) *Incident Characteristics* included the type of shooting (deadly force and/or less lethal), fatalities, number of responding officers, number of rounds fired by officers, use of alternatives to deadly force including verbal strategies and their reported effects, call type, setting and location of incident, whether the event was spontaneous or deliberate, and type of crime (major or minor); (ii) *Subject Data* included demographics and behavioral information about the subject such as communication of suicidal ideation (any communications with suicidal content, including statements of intent or plans) 2 months or less preceding incident, suicide notes, weapon possession and simulation, weapon status, violence against others during the incident, threats, escape behavior, resistance, known psychological history such as prior suicidal ideation (more than 2 months preceding incident) or attempts, mental health diagnoses and treatment, the presence of psychosis, substance use and prior treatment, intoxication, health problems, recent relationship problems, criminal history, and current criminal justice status (on parole or probation); and (iii) *Outcomes,* most notably whether injury or death occurred to anyone involved in the incident—subject, law enforcement, or others—as well as category of overall tactics deployed by law enforcement during the incident. A short narrative overview of each case was recorded in the codebook, along with any spontaneous statements made by surviving subjects after the incident. A variable was coded as "unknown" if data for the particular case variable were unavailable. (The codebook is available from the senior author KM).

Cases were categorized as SBC when the subject engaged in actual or apparent risk to others with the intent to precipitate the use of deadly force by law enforcement personnel. An initial determination of SBC status was made by the primary researcher; however, narrative summaries were independently reviewed by the senior author (KM) to verify each determination. The first and second (KM and JRM) author blindly and independently scored a representative 8% ($n = 53$) of the overall sample to formally assess the reliability of these determinations of OIS or SBC. An intraclass correlation coefficient (ICC) was calculated.

Because three researchers were employed to code the overall data, and to assess the accuracy of data recording, an interrater reliability correlation coefficient was calculated on a representative 10% ($n = 73$) of the overall sample for all coding categories. Inferential statistical comparisons within the study utilized a chi-square, independent *t*-test, or one-way analysis of variance test (ANOVA). Generally, only those results considered statistically significant at $p < 0.01$ are reported, except where a relevant inferential point is made concerning a null hypothesis finding, e.g., the finding that there was no difference in suicide occurrence rate in high speed pursuit situations, or that there was no difference in frequency of suspect weapon possession between OIS and SBC cases. The null hypothesis of no differences in these types of situations clarifies that certain variables sometimes assumed to differ between SBC and OIS subjects are, in fact, the same.

Results

Reliability

Coefficient alpha for interrater reliability on overall variables was 0.88. Eighty-eight percent of the time, the two coders agreed on all the variables in each case from the entire code sheet (except

for those excluded from analysis). Certain variables were excluded in this analysis: shooting distance, where rounds hit, other call for service, date of birth (age was used instead), number of children, recency of job loss, length of gun ownership, manner of weapon acquisition, survivor statements, and case narrative. The ICC for assignment to SBC or OIS groups was 0.93.

General Sample Characteristics

Ninety-two percent (n = 650) of the incidents in the overall sample involved the deployment of deadly force (handgun, shotgun, rifle, and MP5) by responding law enforcement personnel, 31% (n = 218) less lethal force (hands-on, baton, taser, K-9, bean bag shotgun, Arwen, pepper spray, and vehicle), and 24% (n = 170) a combination of less lethal and deadly force. Seven percent (n = 48) involved less lethal only, and 68% (n = 480) exclusively deadly force during the incident. One percent (n = 9) involved no use of force by officers.

Two hundred and ninety-one of the subjects (41%) were killed by the police during the incident, and an additional 26 committed suicide by their own hands, yielding an overall fatality rate to subjects of 46% (n = 317). Bystanders and other nonlaw enforcement persons were killed during 3% (n = 21) of the events, and police personnel were killed in 1% (n = 7) of the incidents (1%). This latter finding is reported across incidents, as opposed to subjects, because all cases involved only one subject, but in any given incident, there were multiple other parties—law enforcement personnel and people other than the subject—who could potentially be injured or killed. Across all 707 cases, there were five cases where a person other than a police officer was killed and at least one police officer was injured, three cases in which a person was injured and a police officer killed, and 20 cases where at least one person and one police officer were injured. Three hundred and eleven (44%) of the subjects, 82 (12%) bystanders or other nonlaw enforcement persons, and 124 (18%) law enforcement personnel were injured during the incidents. Casualty rates (injury or death) were 85% for subjects, 15% for nonlaw enforcement victims, and 19% for police personnel.

SBC Statistics

Thirty-six percent (n = 256) of the 707 cases in the sample were categorized as SBC (attempt or completed). An additional 35 subjects (5%) were categorized as a completed suicide or suicide attempt during the police encounter (without there being a known SBC motivation or attempt). Therefore, 41% (n = 291) of the OIS subjects in the overall sample evidenced suicidality: intending, attempting, or actually committing suicide during the encounter.

Demographics

The mean age of all SBC subjects was 35 (SD = 10 years), with a range of 16–76. Ninety-five percent (n = 243) of the SBC subjects were male. Forty-one percent (n = 106) of the SBC subjects were Caucasian, 26% (n = 66) were Hispanic, 16% (n = 42) were African American, 2% (n = 6) were Asian Pacific Islander, 2% (n = 6) were Native American, 1% (n = 3) were other, and 11% (n = 27) were unknown. Thirty-seven percent (n = 95) were single, 10% (n = 25) separated, 6% (n = 15) divorced, 14% (n = 35) cohabiting, 13% (n = 37) married, and 19% (n = 49) were of unknown marital status. Seventy-seven percent (n = 196) were determined to be heterosexual, 2% (n = 5) homosexual, and 21% (n = 54) were of unknown sexual orientation.

Twenty-nine percent (n = 73) of the subjects had children, 36% (n = 92) did not, and this factor was unknown in 30% (n = 76) of the cases. In 18% (n = 46) of the subjects with children it was determined that issues pertaining to the children (custody and child support frustrations, etc.) were related to the situation.

Twenty-four percent (n = 61) of the subjects were employed at the time of their SBC event, 54% (n = 137) were not, and this issue was unknown in 23% (n = 58) of the cases. Eighteen percent (n = 45) had what could be described as a stable employment history, 37% (n = 95) erratic, 14% (n = 36) were unemployed, and this variable was unknown in 31% (n = 80) of the subjects. Fourteen percent (n = 35) had experienced a job loss within the past 6 months of the incident, while 53% (n = 135) had not (unknown in 34%, n = 86). Twenty-nine percent (n = 75) of the subjects did not have housing at the time of the incident, 64% (n = 164) did, and this variable was unknown in 7% (n = 17) of the subjects.

Mental Health Histories

Sixty-two percent (n = 158) of the SBC subjects had a confirmed or probable mental health history; however, in 32% (n = 83) of incidents, this information about the subject was unknown. Forty-eight percent (n = 76) of the confirmed mental health subjects were clinically judged by the researchers to be suffering from depression or some form of mood disorder, 17% (n = 26) from a substance abuse disorder, 15% (n = 23) a thought disorder, and 3% (n = 5) from a personality disorder.

Sixteen percent (n = 40) of the SBC subjects had a prior known suicide attempt, while 25% (n = 63) did not, and 60% (n = 153) were unknown. Four percent (n = 10) had attempted SBC on a prior occasion. Twenty-one percent (n = 53) had a prior reported psychiatric hospitalization, 36% (n = 93) did not, and this was unknown in 43% (n = 110). Twenty percent (n = 51) of the subjects were described as psychotic (delusional and/or hallucinating) at the time of the event (unknown in 3%, n = 8), 21% (n = 54) were apparently under current mental health care (unknown in 29%, n = 74), and 29% (n = 73) had prescribed psychotropic medications (unknown in 32%, n = 82). There was no way to determine whether those on medications were compliant, nor whether they were being prescribed the proper medication for their particular condition.

Duration and Location

Most incidents (72%, n = 176) were over in 1 h or less, 62% (n = 151) within 30 min, 41% (n = 99) in 15 min or less, and 29% (n = 70) within 10 min. Duration was calculated on 95% (n = 243) of the cases; duration data was unknown in 4% (n = 11) of the cases, while 1% (n = 2) of the cases were omitted as outliers because they represented unusual events that often lasted a day or more (protracted sieges or barricades). Forty-six percent (n = 118) of the incidents occurred at a residence, 38% (n = 97) in a public or open air environment, and 11% (n = 27) occurred at a business.

Weapon Possession and Use by Subjects

SBC subjects were armed with weapons during 80% (n = 205) of the incidents, while 19% (n = 48) feigned or simulated weapon possession. Of those who were armed (n = 205), 60% (n = 122) possessed a firearm, which was loaded and operational 86% (n = 105) of the time, unloaded 7% (n = 8) of the time, and inoperable 4% (n = 5) of the time. Forty-eight percent (n = 59) of those

who possessed a firearm (n = 122) actually fired their weapon at the police.

Other weaponry possessed by subjects included knives only (26%, n = 67), blunt force objects only (2%, n = 5), other weapons such as the police officer's weapons (2%, n = 4), knife and blunt force object combined (3%, n = 7), firearm and knife combined (4%, n = 11), 3% (n = 8) of the subjects used a car as a weapon, and knife and an explosive device combined (<1%, n = 1).

Of the 19% (n = 48) who were not armed but feigning or simulating weapon possession, 46% (n = 22) did so by reaching or placing their hands in their waistbands, while 54% (n = 26) used a replica type weapon (BB gun, flare gun, etc.). There were five SBC subjects who were armed (with a firearm) and engaged in reaching behavior, and six unarmed SBC subjects who reached. This comparison was not statistically significant. There were 12 armed OIS subjects who reached and 19 unarmed OIS subjects who reached. This comparison also was not statistically significant. A third comparison was conducted of armed SBC subjects (n = 5) to armed OIS subjects (n = 12) engaging in reaching behavior—this was not significant. An additional comparison of unarmed SBC subjects who reached (n = 6) versus OIS subjects who reached (n = 19) was not significant.

Casualties

Fifty-one percent (n = 131) of the subjects were killed during the SBC encounter, 40% (n = 101) were injured, 7% (n = 17) committed suicide themselves, and 3% (n = 7) of the subjects were unharmed. Overall, there was a 97% chance of injury or death to the subjects who precipitated these incidents, with a slight majority dying as a result of their encounters with the police.

Nine (4% of incidents) nonlaw enforcement bystanders or others were killed, 30 (12%) were injured, but such bystanders were unharmed in 217 (85%) of the incidents. Two police officers were killed (1%), 40 were wounded (16%), and no officers were harmed in 214 (87%) of the incidents. Combining law enforcement and nonlaw enforcement injuries and deaths yielded a 32% chance of injury or death to persons other than the subject during the SBC incident. In all SBC cases, there was one subject in each incident, but multiple bystanders and police.

Forty-three percent (n = 46) of the SBC subjects who survived the incident (n = 108) were arrested, 25% (n = 27) were arrested and convicted of a crime, 7% (n = 7) ended up in the mental health system, and the ultimate resolution was unknown or not reported in 26% (n = 28) of the subjects. One percent (n = 3) of all the SBC cases (n = 256) had known litigation in the aftermath.

Incident Context

Eighty-one percent (n = 206) of the incidents were apparently unplanned and spontaneous (subject did not apparently choose to initiate the incident that day but rather became acutely suicidal in response to intervention and circumstances), 17% (n = 43) were planned, and 3% (n = 7) were unknown. Cases were further categorized using a modified version of Homant and Kennedy's (7) typology that split the criminal category into three subtypes. Thirty-five percent (n = 90) of the subjects were involved in Criminal Intervention Major Crime, 20% (n = 51) were Disturbed Intervention, 17% (n = 44) were Criminal Intervention Domestic Violence, 16% (n = 41) were Direct Confrontation, and 12% (n = 31) were Criminal Intervention Minor Crime.

Police Service Call Type

Police service calls in SBC cases were domestic violence or a family disturbance in 15% (n = 38), an observed event 14% (n = 36), person with a gun 11% (n = 28), suicidal subject 8% (n = 21), search warrant/surveillance 8% (n = 21), robbery 6% (n = 15), traffic stop 5% (n = 13), disturbance 5% (n = 13), assault with a deadly weapon 5% (n = 13), mentally ill subject 4% (n = 9), person with a knife 4% (n = 11), assault 2% (n = 6), and other miscellaneous types 13% (n = 34).

Suicidal Communications

Suicidal communications by the subject at any point prior to or during the incident occurred in 87% (n = 222) of the cases, while no suicidal communication was documented in 13% (n = 34). For those who communicated a suicidal wish or intent prior (2 months or less) to the incident (n = 141), 27% (n = 38) did so in the minutes prior to the event, 24% (n = 34) sometime during the same day, 22% (n = 31) within a week, 18% (n = 25) within a month, 2% (n = 3) within 2 months prior, and 7% (n = 10) at numerous time periods prior to the event. Forty-five percent (n = 115) did not communicate their suicidal ideation prior to the event to anyone. Those who did communicate prior (n = 141) told their significant other 36% (n = 50) of the time, a family member 30% (n = 42), friends 23% (n = 32), and the police 2% (n = 3) of the time. These communications referenced the SBC method 38% (n = 53) of the time—62% (n = 88) of the prior suicide communicators did not talk specifically about SBC to anyone.

Sixty-one percent (n = 157) of the SBC subjects talked about their suicidal ideation during the incident while 39% (n = 99) did not. Of these communications (n = 157), 79% (n = 124) of them did refer to SBC specifically while 21% (n = 33) did not. Eighty percent (n = 126) communicated their suicidal ideation to police officers, 6% (n = 9) to family members, 5% (n = 8) to significant others, 4% (n = 6) to friends, and it was unknown in 5% (n = 8) of the cases. Among subjects who survived the incident (n = 108), 15% (n = 39) admitted afterwards that they were suicidal during the incident. In six cases (6%), the postincident suicidal admission by the survivor was the only verbal evidence of suicide present in the incident (n = 108).

Suicide notes were reported in 14% (n = 37) of the cases—86% (n = 219) of the subjects apparently left no note. Only four of the subjects (2%) left a note articulating that they would be committing SBC, the other 13% (n = 33) left what could be characterized as a generic suicide note.

Behavior of the Subject

Ninety-five percent (n = 243) of the subjects were noncompliant with law enforcement, 90% (n = 230) aggressed against the police, 49% (n = 125) harmed or attempted to harm civilians in the combined interval just prior to police arrival and during the incident, 34% (n = 86) fled the police, 27% (n = 68) actively resisted, 18% (n = 46) were apparently inconsistent in their escape behavior, and 14% (n = 35) involved themselves in a high speed vehicle pursuit.

Ninety-eight percent (n = 252) demonstrated a behavioral threat (pointing or gesturing with a weapon at another person, attempting to shoot someone) to anyone at any point during the incident, while 70% (n = 179) verbalized a threat toward someone during any time interval. Suicidal behavior (other than the SBC) by the subject was observed in 32% (n = 82) of the subjects. This behavior included pointing a weapon at, or using a weapon towards themselves, slashing their wrists, stabbing or shooting themselves.

Observed Emotional State

An attempt was made to categorize the subject's observed emotional state or demeanor at or around the time of the SBC encounter. This coding was based upon observations made by witnesses at the scene and comments made by the subject during the incident. Twenty-four percent ($n = 61$) were described as angry, 16% ($n = 40$) as resolute, 16% ($n = 41$) desperate, 15% ($n = 39$) as agitated, and 10% ($n = 26$) defiant. In contrast, those who were involved in regular OIS situations ($n = 416$) were reported to be panicked (36%, $n = 150$), angry (13%, $n = 55$), defiant (12%, $n = 50$), startled (11%, $n = 46$), agitated (10%, $n = 42$), and confused (10%, $n = 42$).

Intoxication and Use of Substances

Thirty-six percent ($n = 92$) of the subjects were under the influence of alcohol at the time of the incident, compared with 26% ($n = 110$) alcohol intoxication in those involved in regular OIS. Of those under the influence of alcohol ($n = 92$), 77% ($n = 71$) were above 0.08 blood alcohol level, with a range of 0.02–0.33, average of 0.16, and mode of 0.19. Sixteen percent of the subjects ($n = 40$) were under the influence of methamphetamine during the incident, compared with 10% ($n = 42$) of those subjects deemed regular OIS.

Subject's Status at the Time of the Incident

At the time of the incident, 82% ($n = 209$) of the subjects reportedly experienced recent behavioral changes, 72% ($n = 184$) relationship problems, 65% ($n = 166$) were struggling with spiritual issues/conflicts, 43% ($n = 110$) were divorced or separated (this percentage differs from the lower numbers captured in the demographics discussion and is a more inclusive category, capturing investigative material about the dynamics of what was occurring in the relationships at the time of the incident, as well as subjects' prior history of divorce), 38% ($n = 97$) were on parole or probation, 35% ($n = 89$) had prior parole or probation violations, 22% ($n = 56$) were embroiled in child custody issues, and 8% ($n = 20$) had civil problems.

SBC to Regular OIS Group Comparisons

Demographics

SBC subjects tended to be older than regular OIS subjects, $t = 7.465$, $p < 0.001$ (mean: 34.5 compared to 28.5 years old). The age range of subjects was 16–76 years old.

Police Response

Less lethal force was more likely to be deployed in the SBC than regular OIS cases, $\chi^2 = 17.715$, $p < 0.001$ (39–24%). More deadly force rounds were fired in SBC cases, $t = 3.293$, $p = 0.001$ (mean: 15–8 rounds) when deadly force was utilized.

Weapon Possession and Use

SBC were more likely than OIS subjects to possess a knife, $F = 10.369$ $p = 0.001$ (34–15%). There were no apparent differences in gun possession between the groups (SBC = 48% while OIS = 45%), nor with respect to the firearm being loaded and operational. However, it appeared that OIS subjects were more likely to be unarmed during the encounter, $F = 10.369$, $p = 0.001$ (36–20%). SBC subjects were more likely to fire their weapon at officers than OIS subjects, $\chi^2 = 7.281$, $p < 0.01$ (48–32%).

Suicidal Communications and Suicidality

There were more likely to be reported suicidal communications—prior to or during the incident—by SBC than OIS subjects, $\chi^2 = 529.869$, $p < 0.001$ (87–1%). There were more likely to be prior (2 months or less) suicidal communications in SBC cases, $F = 321.254$, $p < 0.001$ (55–2%), and these prior communications were more likely to include SBC content, $\chi^2 = 93.499$, $p < 0.001$ (21–0%). Suicidal communication during the incident only occurred in SBC subjects, $\chi^2 = 332.901$, $p < 0.001$ (61–0%). Suicide notes were only reported in SBC cases, $F = 63.402$, $p < 0.001$ (15–0%). Past suicidal ideation (more than 2 months prior) was more likely in the SBC subjects, $\chi^2 = 23.968$, $p < 0.001$ (86–38%), as were prior suicide attempts, $\chi^2 = 13.535$, $p < 0.001$ (39–6%).

Behavior of the Subject

SBC subjects were less likely to flee the police during the incident, $\chi^2 = 64.789$, $p < 0.001$ (33–66%); however, there was no difference between groups in high speed pursuits (both were 14%). SBC subjects were more likely to exhibit inconsistent escape behavior, $\chi^2 = 26.618$, $p < 0.001$ (18–6%). They tended to exhibit more aggression towards the police, $\chi^2 = 6.128$, $p < 0.05$ (90–82%) and be noncompliant with police, $\chi^2 = 5.736$, $p < 0.05$ (95–90%), although these differences were less than our established cutoff significance level. No differences were detected in existing health, criminal, and financial problems, nor were there any differences between groups in criminal, violence, and domestic violence histories.

Threats to Others

Verbal and behavioral threats to harm others were more likely to occur in SBC cases, $F = 31.017$, $p < 0.001$ (70–38%). They were also more likely to harm civilians in the combined interval just prior to police arrival and during the incident, $\chi^2 = 39.505$, $p < 0.001$ (49–26%).

Mental Health Histories and Symptoms

SBC subjects were more likely to be psychotic at the time of the incident, $\chi^2 = 7.189$, $p < 0.01$ (21–13%); on medication, $\chi^2 = 11.845$, $p = 0.001$ (42–24%); and under current psychological care, $\chi^2 = 14.685$, $p < 0.001$ (30–13%).

The SBC subjects more often had a known or probable mental health diagnosis, $F = 78.468$, $p < 0.001$ (62–22%), were more likely to have a mood disorder, $F = 102.815$, $p < 0.001$ (48–21%), and more likely to have two or more disorders, $F = 10.369$, $p = 0.001$ (17–10%); while OIS subjects were more likely to have a thought disorder, $F = 10.369$, $p = 0.001$ (33–15%) or substance use disorder, $F = 10.369$, $p = 0.001$ (30–17%). SBC subjects were more likely to be under the influence of alcohol at the time of the event, $F = 9.9923$, $p < 0.005$ (24–6%).

Subject's Status at the Time of the Incident

SBC subjects were more likely to evidence recent behavioral changes, $\chi^2 = 40.578$, $p < 0.001$ (82–54%); experience relationship problems, $\chi^2 = 10.917$, $p = 0.001$, (72–56%); have apparent spiritual issues, $\chi^2 = 8.068$, $p = 0.005$ (65–30%); and be divorced or separated, $\chi^2 = 23.706$, $p < 0.001$ (43–20%). They were less likely to be known gang members, $\chi^2 = 24.933$, $p < 0.001$ (33–13%); less likely to be on parole or probation, $\chi^2 = 9.324$, $p < 0.005$

(38–51%); and less likely to have had a prior parole or probation violation, $\chi^2 = 10.552$, $p = 0.001$ (35–51%).

Outcomes

SBC subjects were more likely to die during the incident than those involved in OIS, $F = 25.458$, $p < 0.001$ (51–36%). OIS subjects were more likely to be injured, $F = 25.458$, $p < 0.001$ (47–40%), or to emerge from the deadly force encounter physically unscathed, $F = 25.458$, $p < 0.001$ (14–3%). It is noted that 6% of those classified as OIS subjects and 3% of those classified as SBC subjects actually committed suicide by their own hand during the event. There was no significant difference in injury or death to others during the incident.

Table 1 summarizes these findings for operational application by law enforcement. The table lists only variables that were significantly different between the SBC and OIS groups, and the frequency of the variable within the SBC group.

Discussion

This research confirms the trend that earlier researchers (7) anticipated: SBC occurs at a significant rate among OIS cases. The fact that 36% of all shootings in this large nonrandom North American sample could be reliably categorized as SBC, and an additional 5% of subjects were suicidal during the encounter, underscores the significance of suicidal impulses among those who become involved in shootings and other uses of force with police officers. Our findings are also very consistent with earlier work by Kennedy et al. (6) who found an overall 46% suicidal motivation among OIS cases. It appears that there is a high degree of desperation, hopelessness, impulsivity, self-destructiveness, and acting out among subjects encountered by the police in such events. This study identifies a subset of individuals whose suicidality crosses over into danger or threat to others, primarily police officers. It verifies that suicidal individuals can in fact threaten, injure, and kill others in their quest to commit suicide. These individuals are quite lethal to themselves with a 97% likelihood of being injured or killed—slightly more than half died during the encounter. There was also a moderately high risk of injury or death to others, including law enforcement, with a *one in three chance* of others being harmed during the incident. Most SBC subjects were armed, many with a loaded and operational firearm, and nearly half of those with a firearm actually discharged it at the police during the incident. This study continues a long line of empirical evidence that disabuses the widely held, but false belief, that there is a negative correlation between suicidal risk and homicidal risk. In fact, the opposite appears to be true: a suicidal individual poses a greater risk of homicide or at least violence toward others, than a nonsuicidal individual. Law enforcement apprehension of an armed, suicidal individual requires a high degree of vigilance for the safety of all civilians and officers at the scene of the incident.

TABLE 1—*Empirical indicators of SBC incidents (n = 256) which are significantly different from other officer-involved shootings, including frequency of occurrence.*

Demographic and Historical Indicators
Older male, mid 30s
Reported suicidal communications (87%)
Past suicidal ideation (86%)
Recent behavioral changes (82%)
Relationship problems (72%)
Spiritual issues (65%)
Mental health diagnosis (62%)
Prior suicidal communications (55%)
With SBC content (21%)
Mood disorder (48%) (of those with known or suspected issues)
Divorced or separated (43%)
On psychiatric medications (42%)
Prior suicide attempt (39%)
Less likely to be on parole or probation (38%)
Less likely to have a probation or parole violation (35%)
Under psychological care (30%)
Incident Indicators
Behavioral threats to harm others (98%)
Verbal threats to harm others (70%)
Suicidal communication during the incident (61%) (of these, 79% mention SBC specifically)
Likely to die (51%)
Harms civilians (49%)
Shoots at police (48%) based upon those who had a gun ($n = 122$)
Less likely to flee (33%)
Possesses a knife (26%)
Under influence of alcohol (24%)
Psychotic (21%)
Inconsistent escape behavior (18%)
Suicidal note written (15%)
Police Indicators
Less lethal force initially deployed (39%)
More rounds fired if deadly force used (mean = 15)

SBC, suicide by cop.

Significance difference $p < 0.001$ except for alcohol intoxication, $p < 0.005$ and spiritual issues, $p = 0.005$. All percentages significantly greater than other officer-involved shootings unless noted as significantly less.

The fact that most subjects are males in their fourth decade of life with disrupted relationships and unsteady employment is consistent with other special populations of offenders, such as mass murderers (11,12), stalkers (13), and certain violent true believers (14). The high rate of mental problems in this population is likely an underestimate because the information was unknown in 32% of the SBC cases. The problem of missing mental health history information is common in criminal justice samples. Even in those cases where it is available, it is often not specific or thorough enough. For example, the authors' professional field experience supports a much higher level of Cluster B personality disorders (narcissistic, histrionic, borderline, and antisocial) in this population, likely much higher than the 3% reported in the archival data gathered for this study.

The available evidence from this study indicates that SBC subjects are much more likely than regular OIS subjects to be deliberate, willful, and resolved in their actions that provoke and draw fire from law enforcement, but four out of five did not plan their suicide for that day, but instead became acutely suicidal in response to circumstances or police intervention. This suggests a much more *affective mode* of violence (15) which is intensely emotional and reactive, rather than the planned and purposeful (*predatory*) violence of the mass murderer, despite the suicidal outcome and high prevalence of mental disorder in both groups. The paradox among SBC cases appears to be that unplanned, acute suicidality becomes, within moments, a resolute intentionality to be killed by the police once the engagement begins. The findings that they are more likely to shoot at officers and harm civilians during the time preceding and after police arrival (during the overall event), draw more fire from officers, are more likely to die, appear to be more threatening to others, and are more likely to be armed than regular OIS subjects support this conclusion. The finding that officers fire less rounds at subjects found not to be suicidal suggests that a "normal" subject involved in a shooting gives up his agenda—likely escape—or reacts with fear and surprise once rounds are fired at him. He realizes it is futile to fight, has a will to live, and usually

surrenders. The SBC subject, on the other hand, appears to continue his threatening or provocative behavior once firing has begun by the police, perhaps consciously realizing that his desire to die at the hands of the police is momentarily within his grasp.

SBC subjects also appear to have more spiritual issues, indicating that the subject's religious conflicts and delusions are an arena for inquiry in police shooting cases. Subjects that had these issues sometimes expressed strong Catholic beliefs about sin and suicide, stating, e.g., that "I'll get the cops to shoot me so I can still go to heaven." On other occasions, there was religious perseveration of delusional proportions revolving around God, the devil, and demonic possession. Inquiry into police shooting cases might include an assessment of religious ideas that justify or mandate suicide, or make it necessary to be harmed by another (punishment, avoiding religious barriers to the afterlife if death is by one's own hand, spiritual cleansing, etc.). Most monotheistic religions do not approve of suicide, although for centuries the most prevalent religious belief systems (Christianity and Islam) have, at various historical periods, approved of intentional death at the hands of another, and called it martyrdom with requisite rewards in the afterlife.

The high prevalence of prior suicidal ideation in the SBC population is expected; what is surprising is that a substantial number (38%) of regular OIS subjects had such histories, supporting that analysis of a given incident at the time must not solely rely upon prior suicidality in determining SBC. In the majority of SBC cases, prior suicidal ideation occurs within 2 months of the event, and 39% do not make any suicidal statements during the event. This presents a dilemma for officers: the subject has involved them in their suicide attempt without the officer necessarily being aware of the agenda.

While this is the largest known sample of OIS cases, this study does have certain methodological weaknesses. It includes cases where deadly force shootings usually occurred, and secondarily some cases where only less lethal force was deployed. The high loading of deadly force cases is suggestive of some degree of sampling bias towards those individuals who may have been more desperate, more intentional, and less ambivalent in their suicidal impulses. Those cases that were negotiated, resolved, or otherwise successfully intervened upon (without injury, loss of life, or deployment of deadly force) may represent another population of individuals or a different severity or kind of psychopathology. Nonetheless, a strength of this study is the access to many actual OIS investigative files that enabled the accumulation of data not available in other studies. The study also evidences a high degree of generalizability because of the multiple jurisdictions from which data were gathered.

Another weakness of this study is the likely underreporting of, and lack of specificity about, mental health issues (including personality disorders, especially DSM-IV-TR Cluster B) and history among this population. This problem is typical in research using criminal justice samples, and the mental health data in this study should be viewed as a very conservative estimate. This may be indicative of confirmatory bias wherein the original historians of the event (first responders, field officers, supervisors) had no incentive to investigate the mental health aspect of these cases because such data could lead to further scrutiny of the officers' behaviors and criticism by both formal and informal civilian oversight.

Future data analyses and research should investigate more specific research questions such as gender differences, Axis I and Axis II psychiatric diagnoses, interventions, and the efficacy of verbal strategies where employed in SBC cases, and the use of objective measures (16) to detect SBC cases in the sample. It is clear from our research that SBC is a common occurrence among OIS and must be considered as an issue during postevent investigations.

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