Journal of Qualitative Criminal Justice and Criminology

JQCJC

Journal of Qualitative Criminal Justice & Criminology (JQCJC)

The Life Course of Female Homicide Offenders: The Context of Turning Points

Alesa Liles
Georgia College and State University

Abstract

Although research on female offending has grown in the past few decades, the criminal justice system has remained inadequate in addressing the needs of women. Available research shows some experiences play a significant role in the lives of women that differ from men. To elaborate, this study sought to incorporate life course perspective and the individual's perspective to show that context is fundamental to life course research. This study identified life events and turning points specific to female homicide offenders and validated the necessary incorporation of perception and attribution to future research with life course perspective.

Keywords: female homicide offenders, life course perspective, life histories

INTRODUCTION

Criminological research has historically given low priority to the role of gender as a source of criminality (Belknap & Holsinger, 2006). Although research on female offenders has grown in the past few decades, the criminal justice system has remained inadequate in addressing and responding to the needs of women (Holsinger, 2000). With most research in criminology focused on males, female offenders have been historically disregarded or treated as a footnote in crime research (Klein, 1973; Sondheimer 2001). These gender-blind strategies fail "to capture the full nature of delinquency in America; and, more to the point, are woefully inadequate when it comes to explaining female misbehavior and official reactions" to female offending (Chesney-Lind 1989, p. 6).

Traditionally, female criminal behavior was viewed as immoral or indecent, committed by women who were evil or "wicked" (Lombroso & Ferrero, 1920, p.125). These women were perceived as conniving and depicted as deliberately committing offenses because they lacked the social controls of "normal" women (Lombroso & Ferrero, 1920, p.125). These assumptions attributed female criminal behavior to an "inherent nature" and disregarded any other explanation (Klein, 1973, p.4). As criminological research progressed, social and environmental factors began to emerge as influencing factors (Bonger, 1916; Gleuck & Gleuck, 1934). Bonger (1916) argued that women committed fewer crimes because they were often protected from lives of crime due to a limited role in society; however, when Glueck and Glueck (1934) analyzed the lives of women, they found that the women's backgrounds were significantly related to their criminal behavior. Even though women commit fewer crimes, their environment has produced situations amenable to criminality. This led some to predict that the changing social climate between the 1940s and the 1960s would have a profound effect on the nature of female offending (Pollak, 1961; Adler & Simon, 1979).

As criminologists studied the types of crimes in which women were involved, and the life circumstances of women, their offending patterns did not simply mimic those of male offenders (Shover et al., 1979). They began to examine the life histories of women to better understand the extent to which the issues and characteristics of being female contribute to patterns of female offending (Simpson, 1989; Daly, 1992; Simpson, Yahner & Dugan, 2008). These works have continued to build a body of research focused on the specific life circumstances of women. Additionally, many of the early theories of female criminality have been abandoned in favor of more comprehensive theories that are not based on males as the base measure, but instead elaborate on the female condition (Broidy & Cauffman, 2006; Simpson et al., 2008).

With the rise in female incarceration over the last several decades, criminology and the criminal justice system must give attention to the precursors of female criminality to address and respond with proficiency (Carson & Golinelli, 2013). Building on previous life course research, this study examined the life events in women's lives that led to homicide (Daly, 1992; Sampson & Laub, 1993; Humphrey & Palmer, 1986; Broidy & Cauffman, 2006; Simpson et al. 2008; Teruya & Hser, 2010). It added to a gap in the literature of life course perspective that has failed to address the perception of life events and how these may shape the telling of life histories. For this study, each life history incorporated the individual's perspective to show that life events become turning points due to the context of each person's perspective. Through qualitative examination, although many of the women experienced similar life events, not all life events were turning points for those with the same experiences. Other factors, particularly whether or not the homicide was attributed as a result of their behavior or someone else's, also influenced how the event was perceived.

PREVIOUS RESEARCH

The limited research that is available on the life histories of female offenders, particularly female homicide offenders, shows some specific events and experiences play a significant role in the lives of these women (Humphrey & Palmer, 1986). Daly (1992) and Gilfus (2002) examined the biographies and life histories of women convicted of various crimes. The studies revealed many of the women grew up in negative family environments characterized by divorce, death, or desertion of a parent. Belknap and Holsinger (2006) later stated that higher rates of desertion and parental conflict might suggest the parenting of daughters is somewhat less important or less of a responsibility than parenting sons.

Additionally, many of the offender's parents had legal or drug problems, while many of the women had drug and alcohol problems of their own (Daly, 1992; Gilfus, 2002; Rossegger et al., 2009). As part of their violent family environments, abuse was found to be a significant predictor of female offending, particularly sexual abuse (Daly, 1992; Gilfus, 2002; Proctor, 2004). Belknap and Holsinger (2006) found nearly three-fifths of incarcerated girls report sexual victimization with almost two-fifths perpetrated by a family member. Proctor (2004) supposed that criminality might help some women cope with victimizations because committing a crime may give them a sense of power.

Furthermore, abuse in childhood and adolescence followed some women into adulthood. In their studies of female offenders, a majority reported involvement in an abusive relationship with a significant other (Daly, 1992; Gilfus, 2002). As stated by Broidy and Agnew (1997) women more frequently experience multiple forms of abuse, excessive familial demands, and

harmful conditions in the home and community. The experiences of young girls and women at different ages lead to different pathways toward criminality; yet, little is known about which experiences and pathways may lead to violent offenses, such as homicide (Simpson, Yahner, & Dugan, 2008).

Female Homicide Offenders

In a study of violent female offenses, Ward, Jackson, and Ward (1969) found that when a woman commits a homicide, she may play one of four roles: the conspirator, the accessory, the partner, or the sole perpetrator. The conspirator instigates the crime but does not participate in the offense. The accessory usually plays a minor secondary role, such as driving the car or carrying weapons. The partner is an accessory of sorts; however, she participates fully in the commission of the offense. The sole perpetrator is a woman who wholly commits the offense herself. They found that women who committed a homicide typically acted as a sole perpetrator and offended against a husband or lover 51% of the time and a friend or acquaintance 49% of the time (see also Weisheit, 1984; Mann, 1996). Furthermore, Mann (1996) stated when a woman kills a stranger, usually for economic gain, she does so with an accomplice rather than as the sole perpetrator.

In the context of the homicide, the offense tends to be the result of a relational conflict and against a family member, intimate partner, or friend (Ward, Jackson & Ward, 1969; Wilbanks, 1983; Weisheit 1984; Jurik & Winn, 1990; Mann 1996; Sondheimer, 2001). Additionally, many of the victims were incapacitated or precipitated the offense in some way. In Ward et al. (1969, p.852), 61% of the victims were either drunk, ill, asleep, caught off-guard, or a "helpless" child. Wilbanks (1983) and Mann (1996) corroborated these findings.

Ward et al. (1969) found the weapon of choice in 35% of the cases was a knife or household item, and in 34% of the cases, a gun was used. Over the years, guns have accounted for the majority of homicides committed by females (Wilbanks, 1983.) Weisheit (1984) found 44% of the homicide offenses were committed with a gun and 40% were committed with a knife. This finding was similar to Mann's (1996) findings that 46.6% used a gun and 37.8% used a knife. Though women are more likely to use a knife than a male to commit a homicide offense, guns are, however, used more often (Weisheit, 1984; Jurik & Winn, 1990).

The majority of female homicide offenders tend to be black with the majority of victims being of the same race as the offender (Weisheit, 1984; Mann, 1996). Victims also tend to be older than the offenders. Offenders range in age from their late twenties to early thirties in most studies, yet the victims are slightly older, usually early thirties to late thirties (Weisheit, 1984; Hanke 1995; Mann, 1996).

Humphrey and Palmer (1986) stated, "female homicide offenders experience higher levels of stress earlier in life than do male murderers or nonviolent offenders of either sex" (p. 304). These women have had similar experiences to those described for the general female offending population; yet, possibly to a greater extent as noted by Humphrey and Palmer (1986). They also stated female homicide offenders are more likely to have experienced greater losses throughout their lives, including the death of parents, separation from parents by divorce, abandonment, or institutionalization, employment difficulties, residence changes, and marital discord. Family structure factors such as these have been found to elevate homicidal behavior among women (Schwartz, 2006).

From the limited research that is available on the life histories of female homicide offenders, it appears that certain events and experiences play a significant role in the lives of these women. As stated previously, the traditional theories of crime and delinquency have not sufficiently explained female crime and delinquency, particularly homicide (Holsinger & Holsinger 2005). Some researchers posit that criminology should provide different theories for women, while others have suggested incorporating gender-specific experiences with life course models to further what is known about the lives of female offenders (Proctor, 2004; Katz, 2000; Belknap & Holsinger, 2006; Moult, 2008).

LIFE COURSE PERSPECTIVE

Life course perspective investigates the nature of the life course and its transitions as it relates to individual criminality (Sampson & Laub, 1993). Some events in a life course may modify the life trajectory of an individual. These events are known as turning points because the event was so important that it turned the path of the individual, either positively or negatively. Turning points can be a specific event, experience, or even awareness that results in a change in the life course of an individual. By understanding what life events occur and how they occur, valuable insight on the gender-specific causes and correlates of crime can be attained.

Additionally, past research using life course perspective has emphasized human agency but has failed to address how the individual's perception and subsequent actions as a result of the life event affect whether or not it is considered a turning point that led to criminality. As stated by Elder (1985, p.35), the "adaptations to life events is crucial because the same event or transition followed by different adaptations can lead to different trajectories." This is particularly crucial in stating a life event acted as a turning point. For one person it may have; however, another individual may have adapted to the situation differently, leading to a different trajectory in her life course.

Prior research has yet to fully consider how giving context to the telling of an individual's life history may clarify why events constitute turning points. "We are continually locating and relocating ourselves, defining and redefining ourselves and our worlds: telling a story about a personal experience is merely another example of a process" (Schiffrin, 1996, p. 200). This process is necessary for defining and refining the concept of turning points.

Furthermore, when an individual tells her life history, she usually attributes blame for situations either externally or internally based on her perception of another person or event (Heider, 2013). Attribution theory states the person will see the action as a result of something she did (internal), or the result of someone or something else (external) (Kelley & Michela, 1980; Heider, 2013). The person is attempting to interpret the causes of behaviors by attributing blame which may reduce anxiety and feelings of remorse after an adverse event or crime. Thus, the life history, and its events and turning points, constructed by an individual are subject to the woman's current frame of reference, how she identifies herself, and how she attributes the events in her life (Riessman, 2000). She is the expert in her own life, and only she can give that insight.

Because prior research has not considered this element, the true nature of the effects of life events and turning points, from the offender's point of view, is still unknown. This leads to the primary research question of this study: Which life events are perceived as turning points for women convicted of homicide and why? To answer this question, a qualitative analysis of life histories of 38 women incarcerated for homicide was conducted to determine the life events and

turning points in each woman's life. Understanding the commonalities and differences they all share is key understanding how a life event may or may not be perceived as a turning point affecting each woman and her pathway to crime. This information will not only advance criminological theory, particularly life course perspective, but also inform best practices regarding trauma and adverse experiences of the female offender population.

METHODOLOGY AND DATA

To conduct this study, both quantitative and qualitative data were collected. Quantitative data were collected from electronic and archival sources. Then the individuals were interviewed in a semi-structured, narrative, life history format.

Population and Sample

The participants for this study were all females incarcerated for a homicide conviction prior to 2011 in a southern state. The search was narrowed to intentional homicides (i.e., Capital Murder, First Degree Murder, or Second Degree Murder) and 153 initially qualified for the study based on this variable. The Department of Correction (DOC) permitted 60 consent forms to be made available to the 153 potential interviewees. Of those, 41 women agreed to participate in a face-to-face interview about their life history and the homicide. Once the interviews began, one woman was removed from the study by the facility due to her placement in punitive segregation and two others voluntarily withdrew consent. Thus, 38 (24.52% of the population) women ultimately participated.

Data Collection

Offender, offense, and victim information was gathered from police reports, court records, prosecuting attorney files, the state court database, and news reports before the face-to-face interviews. Once the data were collected, this information was used for descriptive analysis of the entire population of the state, 153, as well as the interview sample, which consisted of 38 participants. Descriptive statistics were conducted on variables such as age, race, the role of the offender, conviction, context of the offense, and type of weapon. The data collected were modeled after previous research (Ward, et al., 1969; Wilbanks, 1983; Mann 1996; Field et al., 2017). Then 38 semi-structured, narrative, face to face, life history interviews were conducted lasting roughly an hour and a half.

The life history interview process developed by Thomas and Znaniecki (1918) was used to conduct the interviews, and this information was augmented with other documents and official records. No standard methodology exists for life history interviews; however, there are "several well-tested ways of collecting [and] analyzing" the data (Bertaux & Kohli, 1984, p.215). The life history method allows respondents to narrate, account for and interpret the events and people in their lives over time (Bertaux & Kohli, 1984; Musson, 2004). The process begins with the interviewee narrating her life history while the interviewer limits interjections only to keep the interview going. Once the interviewee is finished, questions are asked to elaborate on events discussed by the interviewee or to introduce additional topics (Bertaux & Kohli, 1984).

The life history method prioritizes the individual's perceptions and meanings of the events in her life. The validity of the process involves the interviewee and the researcher working together to construct the accounts collaboratively as described above (Musson, 2004). The data obtained from life histories can then be used for "basic exploration to theory evaluation" and can

be triangulated with other sources, such as legal documentation, to improve validity and reliability (Frazier, 1978, p. 124).

Data Analysis

Narrative analysis was conducted to investigate the story of each woman's life (Riessman, 1993). Narrative analysis can then be divided into four approaches: thematic, structural, interactional, and performative (Riessman, 1993). Thematic analysis places emphasis on the content of the story. Since this study sought to understand how a life event becomes a turning point, this procedure was chosen for the data, as the content of the life history was the focus.

Data were thematically analyzed in two phases. Phase one consisted of coding for life events, and phase two consisted of coding for turning points. To develop a good thematic code that encompasses the quality of the phenomenon, there should be five elements: a label, a definition, a description of when it occurs, a description of qualifications or exclusions, and examples (Boyatzis, 1998). Following this outline, the conceptualization of the life events came before the thematic coding. This is similar to using theory-driven coding, in which themes are generated by prior literature and research involving the theory at hand (Boyatzis, 1998; Braun & Clarke, 2006).

Previous research concerning female offenders were incorporated with life course perspective to conceptualize the following concepts as life events and possible turning points: victimizations, illness, drug use, family instability, criminal history, and economic marginality (Humphrey & Palmer, 1986; Proctor, 2004; Katz, 2000; Belknap & Holsinger, 2006; Moult, 2008). Though not all of these events have been incorporated into life course perspective, they are known events that often precede criminal behavior in the lives of women (Simpson, Yahner, & Dugan, 2008). The events were then placed in the time period - childhood, adolescence, and/or adulthood - in which they occurred throughout the life course. Prior research suggests that the pathways to crime are age-graded, thus resulting in differing effects (Sampson & Laub, 1993; Simpson, Yahner & Dugan, 2008.). Following thematic analysis procedures, the existing themes, or concepts, were then reviewed and modified.

For phase one of data coding, as life events were found in the transcripts, they were coded with a theme name. For example, if a woman stated she began abusing drugs, the data was coded with the theme name of "drug use." Other details of the life event were added to describe the quality and timing of the life event, such as if the event occurred during childhood and continued throughout adulthood and how the event affected the individual. For phase two, if the woman stated the life event was a turning point, the theme was coded with an asterisk.

Once complete, themes were compared across life histories to identify life events and turning points. The interviews were then divided into those who accepted responsibility for the offense and those who did not. The division was used to show the difference in perception of life events and how a life event may be a turning point to one woman and not to another, as well as a comparison between those who did and did not accept responsibility for the homicide.

OFFENDERS, VICTIMS, AND OFFENSES

Table 1 displays the offender and offense characteristics. For the interview sample, the mean age of offenders was slightly younger than the overall population of offenders in the sample at 28.74 years, with a standard deviation of 9.32 years. The range also differed slightly, with the youngest offender being 16 at the time of the offense, and the oldest offender aged 51 at the time of the offense. The age of offenders in this data is similar to past research in stating female homicide offenders were typically in their late 20s to early 30s (Weisheit, 1984; Hanke, 1995; Mann, 1996; Field et al. 2017).

Table 1. Offender and Offense Characteristics

	Population (N=153)	Interview Sample (n=38)
Age		
Mean	30.17	28.74
Range	16-71	16-71
SD	10.16	9.32
Race		
Black	70 (45.75%)	19 (50.00%)
White	80 (52.29%)	18 (47.37%)
Native Am.	1 (0.65%)	1 (2.63%)
Hispanic	1 (0.65%)	0
Asian	1 (0.65%)	0
Conviction		
Murder 1	86 (56.21%)	25 (65.79%)
Murder 2	37 (24.18%)	6 (15.79%)
Capital Murder	30 (19.61%)	7 (18.42%)
Role		
Sole		20 (52.63%)
Multiple		18 (47.37%)
Weapon		
Gun		23 (60.53%)
Knife		10 (26.32%)
Blunt Force		2 (5.26%)
Other		3 (7.89%)
Context of Offense (per victim n = 43)		13 (30.23%)
Argument		9 (20.93%)
Robbery		5 (11.63%)
Domestic Abuse		5 (11.63%)
Affair		4 (9.30%)
Retaliation		3 (6.97%)
Drug Sale		3 (6.97%)
Under the Influence		1 (2.33%)

As for race in the population of offenders, roughly 46% were Black, 52% were White, with the remainder identifying as Hispanic, Asian, and Native American. This composition was similar to the interview sample, with the majority Black (19), 18 White, and one Native American. This corroborates Weisheit's (1984) findings. Additionally, Mann (1996) had similar findings and suggested a higher portion of homicides committed by black women may be attributable to the southern region of the United States, where this particular study took place. Furthermore, for the population and interview sample, the majority, 56% and 66% were convicted of first-degree murder, while 24% and 16% were convicted of second-degree murder and 19% and 18% were convicted of capital murder, respectively.

Complete data for the remaining three variables, the role of the offender, weapon, and context of the offense, were only available for the interview sample. The majority of offenses were committed by a sole offender; however, 47% of the cases involved multiple offenders. These descriptives, again, corroborate prior research findings (Ward et al., 1969; Wilbanks, 1983; Weisheit, 1984; Mann, 1996). In a majority of the offenses, a gun was used to commit the homicide, 60.5%, followed by a knife in 26% of the cases. Despite the historical belief that women predominately killed with knives and poison, the past few decades have shown a gun to be the weapon of choice (Wilbanks, 1983; Mann, 1996; Shipley & Arrigo, 2004). These findings coincide with the increasing trend of gun usage in the commission of female perpetrated homicides. In the remaining cases, 5% used an object, such as a hammer and motor vehicle, to cause blunt force trauma. While the other category, roughly 7%, contained offenses committed with random objects such as an electrical cord, sports bra, or ax.

The final variable, the context of the offense, describes the specific context or motive of the homicide. The majority of homicides were the result of an argument (30%), not related to domestic abuse. One example was an argument between two women over a boyfriend that resulted in a stabbing death. Another argument occurred when a woman accused a man of stealing money from her, resulting in the shooting death of the male victim. The second most common event was a death following the robbery (21%) of the victim. There were several instances where the women lured a male victim so her male accomplice could rob him.

Prior research has shown a significant portion of female perpetrated homicides are often the result of domestic violence with the victim frequently precipitating the event (Field et al. 2017). This occurred in 11% of the cases. Additionally, an extramarital affair on the part of the offender occurred in 11% of the cases as well. The remaining offenses were committed in the context of criminal retaliation (4; ex. shooting of a rival gang member), drug sales (3; ex. shooting during a drug sale), offender under the influence (3; ex. arson while intoxicated), and an unwanted pregnancy (1; ex. strangulation of a newborn). Previous research has noted similar situations; yet, this data has fewer homicides resulting in the death of a child which is often attributed to female homicide offenders (Shipley & Arrigo, 2004)

Table 2. Victim Characteristics

	Interview Sample (n=43)
Race	
Black	20 (46.51%)
White	23 (53.49%)
Sex	
Male	30 (69.77%)
Female	13 (30.23%)
Relationship	
None	9 (20.93%)
Friend/Family	34 (79.07%)
Friend/Acquaint.	18(51.43/47.37%)
Other (Uncle)	1 (2.86/2.63%)
Child	2 (5.71/5.26%)
Parent	2 (5.71/5.26%)
Husband/BF	11 (31.43/28.95%)

The victim characteristics are presented in Table 2. In the interview sample, there were 38 offenders with 43 victims. These differences were due to some offenders having multiple victims. The racial composition of the victims was 20 Black and 23 White, which demonstrates some of the homicides were interracial. This was a slight variation to the expected intraracial makeup of most homicides, particularly female perpetrated homicides (Weisheit, 1984; Mann, 1996; Field et al., 2017).

The majority of victims, 69.77%, were male. According to previous literature, this is typical of female perpetrated homicide (Field et al., 2017). Moreover, the majority of victims were either a friend or family member. Eighteen of the victims were a friend or acquaintance, 11 were either a current or past husband or boyfriend, and the remaining 5 were parents, children, and an uncle. On the other hand, nine victims had no known relationship with the offender. These findings support the notion that women tend to kill intimates and other acquaintances (Shipley & Arrigo, 2004; Field et al., 2017).

QUALITATIVE FINDINGS

The next section entails the results of the qualitative data collected from the interview sample of 38 women, identified by pseudonyms. For the qualitative findings, the life events are presented thematically by group. If the event was identified as a turning point, it is presented in italics. In total, the women identified 328 negative life events (Table 3). Life events in a woman's family of origin, adult families, and experiences of victimizations were found to have significant and lasting effects that possibly may culminate in a homicide.

Table 3. Negative Life Events

	F/R Instability	Victim.	Illness	Criminal History	Drug Use	Econ.	**Total**
Childhood	43	27	8	5	5	8	**96**
Adolescence	28	18	7	20	15	22	**110**
Adulthood	46	15	13	20	13	15	**122**
Total	**117**	**60**	**28**	**45**	**33**	**45**	**328**

Family and Relationship Instability

For these women, their childhoods began with family and relationship instability that continued throughout their lives. Family and relationship instability occurred in childhood for 34 of the 38 women (89%), with some experiencing more than one event. Eleven women (29%) were born to single mothers, an additional five (13%) experienced the separation and divorce of their parents before the age of seven, and ten (26%) experienced divorce before age twelve. Furthermore, ten (26%) had a father with a criminal history or drug use problem, and another twelve (32%) experienced a mother with a criminal history or drug use problem leading to further instability. Three women (8%) experienced a death of a family member in childhood, two brothers and one father. As a result of the instability, nine (24%) were reared by other relatives, such as an older sibling, aunt, or grandparent, at some point in their childhoods, and one was permanently placed in foster care.

Alexandra stated, "When my mom was strung out, she kept me around to take care of them." Kara added "It seemed like I helped raise the kids she had" referring to her mother. All of these factors led several of the women to have poor relationships with at least one of their parents, particularly with their mothers. Additionally, fourteen (37%) stated that they did not have a relationship or had a minimal relationship with their fathers and one stated she had no relationship with either parent. Amee stated

> *My mom raised us all, me and my sister. When my mom wasn't on drugs, she sold them. She wasn't around a lot. My dad…I knew of him, but we didn't have a relationship at all. The lowlife brought me into this life. I call him my sperm donor. He was like a drug lord. He would come and go. I always wondered what's wrong with me? All I ever wanted was to go to school on daddy-daughter day and take my daddy.*

Elizabeth's biological father was abusive to his women.

> He laid down fake grass. He wasn't in my life a whole lot. He got hit by a Greyhound bus. Split him wide open. *My mom has a crack addiction. My mom was gone a lot. She done the best she could. I hated my mom for a long time cause I didn't understand. I thought my mom didn't love me.*

It appears from these events that many of the women experienced chaotic and unstable home lives in childhood leading to high responsibility at a young age and a sense of being unloved by one or both parents. Furthermore, the women characterized their households as strict with little love and affection. Kathy said "*I was born to a woman out of wedlock. She tried twice*

to abort me. She was never very loving. She treated me different than my older sister. She used to tell me she wished I'd never been born." Mariah said her parents were not emotional.

> *They didn't teach us how to deal with emotions. I realize now that I am a very emotional person. If I could have come home and cried when the girls wouldn't play with me at recess, I would have been a very different person.*

Nineteen women (50%) experienced a continuation of family and relationship instability in adolescence, while two just began experiencing these issues. During this time, two women experienced the divorce of their parents before the age of fifteen. Three (8%) experienced a death of a family member, one was forced to move back in with a grandparent, one left foster care, another was placed in foster care, and two moved out on their own.

As they aged, many women began "to look for love in all the wrong places" as Amee stated. "I didn't know what it was like to have a man's attention. You think it's all good." She became pregnant at 15 years old. Accordingly, eight women (21%) married when they were less than seventeen years old, and nine (24%) had children or became pregnant between the ages of 15 and 17. Many of the women attributed their relationships and pregnancies to their family experiences. Kathy stated "*I got married to get out of that house. I wanted to get out of that house to get away from my mother.*"

This seemed to radiate across the life histories. Many of the women felt the absence of a relationship with their mothers and several women who lacked a relationship with a father in childhood were the same women who stated they "developed fast" and were "promiscuous," often becoming pregnant in adolescence. Then in adulthood twenty (53%) experienced further family and relationship instability including multiple marriages and children. There were eighteen (47%) new marriages and sixteen (42%) divorces. Seven women (18%) became pregnant resulting in a total of fifteen children among the women. Additionally, three women (8%) had their children taken by DHS (Department of Human Services), and another left her children with her husband after they separated. In total, 32 women had 63 children from 47 relationships. Six women (16%) had no children, but five (13%) were pregnant at one time in their life. Kara said,

> *Marrying him was the biggest mistake of my life. He wasn't abusive, but he had a thing for my sister. He ended up sexually assaulting her. She was 14 at the time. I knew about it and didn't do anything about it. I should have. He got into this swinging singles thing. I wouldn't trade with him, but I started messing around on him.*

They were married for five years, and when they separated, she left the children with him. "*I always felt real bad about that. About not raising my kids. I think it kind of made me crazy.*"

The women characterized their marriages and relationships as "affairs" full of infidelity often with much older men. They also admitted to having relationships with unsavory and sometimes violent men with drug use and criminal histories. Jessica met a man who was 27 years older than she. She said,

> *He wasn't like anyone I had met, so that was appealing to me. I believed everything he said. When I married him, I had to give up my family. It was against my parent's*

wishes. I would call them just to hear them, and I never did say anything. I don't even think they knew it was me.

Caroline stated, "We were like Bonnie and Clyde. He said he visioned [sic] me. We both share the same pain. He had me thinking he was a good guy." She found out he had been in prison for murder before. "He would say, 'quit listening to what people say. He sold dope, and he would rob people too. Little old me not knowing this stuff."

Caroline also attempted to reconnect with her mother in adulthood. She was the only one to do so. Her problems with her mother's incarceration when she was little and being placed in foster care were exacerbated by the fact that she found out none of her other siblings were placed in foster care. She stated,

I always kept in mind that she was a murderer. And when I found out I was the only child she gave up out of five children, I thought why didn't you love me? You see what I'm saying. I struggle with that today. I wish I had a mother like I posed to [sic] and my life probably wouldn't turned out like it did.

It appears that the absence of love from mothers and fathers may lead to the yearning for love in unhealthy forms, resulting in negative and numerous intimate relationships further resulting in multiple children.

For all of the life events discussed, family and relationship instability was the most common, producing 43 in childhood, 28 in adolescence, and 46 in adulthood. Of the 117 life events in this category, 34 were deemed to be turning points by the women (see Table 4). This accounted for 44% of the turning points identified. Every single one described at least one event relating to family and relationship instability.

Victimizations

In childhood, many of the women were victims of physical, verbal, and sexual abuse. Twenty women (53%) experienced one or more victimizations in childhood. Fourteen women (37%) were sexually abused, molested, or raped before the age of twelve. All of them knew the offenders as a family member, friend, or other acquaintance. Alexandra said her mom was very abusive.

I thought she hated me…and she did. She's very sick. I see that now, but I didn't see that then. I finally see my mother as she is. The things that are in my head the most are the abuse. Nobody teaches you how to deal with things. They just act like they don't exist. I hated myself.

Additionally, Ashley detailed a rape that occurred at the age of 12.

My favorite cousin was on drugs. I went to visit her, and she set me up. Her boyfriend and about sixteen of his friend's gang raped me. That point in my life changed me forever. It shaped the way my relationships became. I stopped developing relationships with people.

In contrast, Mariah described sexual interactions that occurred with her brother when she was a child in a different light. "You could say sexual abuse, but I wouldn't classify it like that. Emotional Pressure. He wasn't holding me down forcing me. I did feel guilt and shame." She

reported the incident to her parents, and they did not *"react the way I wanted them to."* They *"swept it under a rug."* Her brother was never punished or even scolded. Mariah stated she felt more victimized by her parent's reaction than by the abuse itself.

Furthermore, in adolescence, ten women (26%) were victimized or re-victimized. This included eight rapes, one was physically abused by a parent, and three began experiencing domestic violence at the hands of their husbands. By adulthood, nine women (24%) experienced domestic violence, one woman was raped, and one woman was robbed at gunpoint twice during drug deals. Moreover, it was found that ten women (26%) who were victimized in adolescence later described relationships involving domestic violence by the time they were adults. Melinda stated *"It was soul crushing. Why didn't he leave me? Why is the burden always on the woman? Nothing I ever did was right."* As for Brooke, when she tried to leave her abusive husband, she said, *"I was gone two months before he found me. I fell asleep on the couch. I woke up, and he was standing over me with a pistol to my forehead."*

Victimizations reported as life events constituted the second highest category of life events, totaling 60 (18%) events. Additionally, the women attributed 27 of these events as turning points in their lives. Similar to family and relationship instability, more than half of the women had experience with victimization.

Economic Marginalization

Eight women (21%) experienced economic marginalization in their childhood in the form of homelessness and financial instability. Two women experienced homelessness before the age of thirteen. Alexandra and her mother were homeless for almost four years. Alexandra stated, "I recall other people's parents saying 'don't you have a home to go to' and I was like really?" Similarly, Amee said,

> There was times we didn't have a place to stay. We didn't have a lot of money. My mom was on drugs. We moved around a lot. She made sure we had something to eat. So we never got took or nothing.

Additionally, Kara, Ashley, Nickie, and Kristen all experienced struggling financially, which was characterized by early employment, utilities being "cut off," and statements like "we had it hard." As they progressed through life, the concept of economic marginalization followed them into adolescence and adulthood. Twenty-one women (55%) dropped out of high school. As a result, their employment in adolescence and adulthood was minimal and at times illegal. Eleven (29%) stated they had some part-time work, even if it was only for a day. Six (16%) stated they never worked. Another six stated they used illegal means, such as prostitution and drug dealing, to sustain financially.

Karissa referred to herself as a "skid row bum" because she had dropped out of school at 13 and was a homeless alcoholic until her arrest for the homicide. Nickie also dropped out of school in the 12th grade. "I loved school. I went to alternative school most of my junior year and high school. I gave up, man. The streets were calling me." When asked if she worked after dropping out, she replied "I only ever had two jobs. My homegirl was manager and would clock me in and out. That's how I got the job. I just got it to show my probation officer a pay stub."

Although almost all of the women experienced economic marginalization in various forms by identifying 45 life events in this category, none of them acknowledged any of the

events as a turning point. For many, it appears their marginalization was so normalized they did not see it as a negative experience. Facing economic marginalization was just a part of their "normal" lives.

Illness

Eleven women (29%) experienced significant events with illness in childhood. Five (13%) more identified an illness occurring in adolescence. Some of the illnesses were directly experienced, while others were observed in a family member. The two observed experiences consisted of one woman watching her sister go "crazy" and "try to kill herself," and the other was of a woman whose younger sister was ill as a child and received a lot of attention leading to resentment. Arlene stated,

> I always wanted to die. I can't remember a time when I wanted to live. It wasn't until I came to prison that I knew it wasn't natural to feel that way. I heard voices and saw things that weren't there. My mom experienced the same things as a child. It was a family secret. A lot of things can mess with a child's mind. I tried to kill myself several times. I hated my life.

Similarly, Mariah experienced depression and attempted suicide in the 10th grade. Her brother had touched her sexually for three years. She stated,

> *I felt a lot of guilt and shame for what happened with my brother. I couldn't talk to anybody. I didn't know how to. I never really had a lot of friends. I didn't know how to handle any of it or talk about it. I didn't want to go to school because nobody liked me, nobody wanted to talk to me. By the time the crime happened, I was on five different medications.*

In adolescence, Amy was suicidal after the death of her mother.

> *I went to wake her up one morning, and she would not get up. I was angry with HIM for…ever. Mentally I was screwed up, but I had a child. I literally went crazy. I didn't accept she was gone. I became a cutter. One pain takes away another.*

Illness continued to play a factor for eight women (21%) in adulthood. Five (13%) reported the illness was of someone else, while three (8%) experienced it herself. Three endured the death of significant individuals, before the homicide. Those included two children and a father. Arlene's father was diagnosed with cancer when she was 30 years old. She said,

> *I took care of my dad. It was harder than I thought and my fucking brothers didn't help me at all. When I found out he wasn't gonna live, it did something to me. That was a blow I wasn't ready for. I thought my dad would live forever. My dad was Superman. It went downhill very quickly. He was six feet and dropped down to 80 pounds. You could see every bone, every rib. You could see his heart beat. I didn't understand…I love my dad. That was my knight in shining armor. He didn't want to leave me. I don't think I mourned my daddy's death. I took so many pills. I even took my own drugs.*

Similarly, Jessica's father developed Alzheimer's when she was a young adult. *"My mom wasn't the caretaker type. She wasn't wired for that. He died while I was in Florida. He died, and nobody told me. They had a funeral, and I never knew. I could never get over that."*

Of those who experienced the illness herself, one was admitted to a psychiatric facility for an act of violence. Another sought treatment for depression after rape and was diagnosed with depression and "paranoid schizophren[ia]." Furthermore, one attempted suicide and received multiple diagnoses including "mental retardation, manic-depressive, bipolar, anti-social, and depression."

Overall, experiences with illnesses were the least reported life event; however, it was the third highest turning point identified with 12 out of the 28 events being perceived as a turning point. Though these events may not be as frequent as others, they tend to have a higher likelihood of being identified as a turning point. This could be due to the depth of trauma that occurs with the death of a loved one, or the continuous trauma a mental health issue may bring.

Drug Use

Three women (8%) reported drug use before the age of thirteen, one as young as four years old. The drugs included alcohol, methamphetamine, and marijuana use. All three women who reported drug use in childhood continued to use drugs throughout adolescence and adulthood, and some added the use of acid, prescription pills, crack cocaine, heroin, and ecstasy. An additional thirteen women (34%) began drug use in adolescence.

When Alexandra was four years old, she was given alcohol by an uncle. A year later she consumed a white powdery substance that belonged to her mother. "I ate the whole thing of it off my mom's dresser. She wanted to wring my neck." She said this lead to her usage of acid and methamphetamine by the time she was a teenager. "My drug habit got so bad I was trying to kill myself." Similarly, Karissa stated she was an alcoholic by the age of 16. "*I could not function. Wound up in a hospital many times to have my stomach pumped. That was my breakfast, lunch, and dinner.*"

Eleven other women (29%) initiated drug use in adulthood, six (16%) of whom were well into their thirties when this occurred. The drugs consisted of marijuana, cocaine, prescription pills, methamphetamine, crack cocaine, heroin, and alcohol. Caroline stated she got into drugs when,

> I was 18. I got down there [Miami], and I got on powder. He [her boyfriend] got me on crack cocaine. I likeded [sic] the feeling. I started hiding it from my family. It made me have evil thoughts. I'm a big plotter.

Jessica was 23 when she began drinking alcohol. "I started drinking. I couldn't really deal with anything without a drink. I was trying to drown the marriage with alcohol. It was every day, two or three a night."

In total, the women reported 33 life events about drug use, yet, only three were perceived as turning points. Though some described their drug use as "just a phase" or "experimenting," several described the drug use as coinciding with an unstable relationship. It was a form of escape or due to pressure from a significant other. This may be why the actual drug use was less likely to be perceived as a turning point, but rather the relationship in which the drug use occurred was the actual turning point.

Criminal History

For four women (11%), delinquent and criminal behavior began in early childhood from the ages of seven to twelve years old. They were taken into custody for hitchhiking, running away, stealing, bringing a knife to school, and fighting. One reported she began selling marijuana as well. Only two served time in juvenile detention. Three of these women (8%) continued their criminal behavior into adolescence. They were arrested for aggravated assault, motor vehicle theft, truancy, and drug-related offenses. Only one stated she served time in a facility for her offense. Additionally, one woman self-reported prostitution but stated she was never arrested.

An additional 14 (37%) initiated criminal behavior in adolescence. They were taken into custody or arrested for driving a stolen vehicle, public intoxication, stealing, threatening a teacher, selling drugs, stealing a car, smoking marijuana, truancy, arson, and assault. These women also self-reported burglarizing a house, assisting in drug deals, running away, and robbery. Arlene stated:

> *My teenage years was like what a guy's life would be: drug selling, fights…It was all a part of God's plan. It went from having to fight every day to toting pistols. I had to adapt to my surroundings. It was considered to be a man's world. I was forced into it by my dad. He came and got me in the 6th grade and said he was gonna show me how to get money, so I didn't have to be a whore. I went from the 6th grade to selling drugs full time, dog. I never had a life. It totally went against what I was trying to do in life. He would give me the world, but damn he would take it back.*

She stated she sold crack cocaine and marijuana. As a result, she was arrested once and received a sentence of probation.

Nickie, who acknowledged participating in criminal behavior as an adolescent, continued her criminal behavior into adulthood. At eighteen years old, she was charged with fleeing an officer, theft, and breaking and entering. She received probation for all of the charges. After that is when she started robbing people. "That shit is an addiction. Selling drugs and robbery was my way of living. I didn't rob people that worked hard. I robbed the robbers. I took from the takers." Additionally, she worked as a drug dealer selling crack cocaine, powder cocaine, prescription pills, PCP, and marijuana.

It was not until adulthood that ten women (26%) began exhibiting criminal behavior. These women were arrested for shoplifting, food stamp fraud, DWI, public intoxication, drug-related offenses, battery, possession of a weapon, robbery, fleeing an officer, theft, and breaking and entering. Two additional women self-reported being involved in criminal activity but never being arrested.

Forty-five life events were reported by 28 women relating to criminal behavior. Surprisingly, only one woman stated her involvement in criminal behavior as an adolescent was a turning point in her life. In fact, 25 (66%) did not report a criminal history. Of the life events, past criminal behavior had the least likelihood of being perceived as a turning point.

Accepting Responsibility

According to Table 4, the women identified turning points in five of the six life event concepts. They were family/relationship instability, victimizations, illness, criminal history, and drug use. None of the women believed they experienced a turning point due to a life event from economic marginalization. In total, there were 77 turning points identified. Overall, the most turning points in the lives of these women were related to family/relationship instability (34/117) and victimizations (27/60), with victimizations (45%) and illness (43%) being the most likely events to be perceived as turning points throughout the life course preceding the homicide.

Table 4. Identified Turning Points

	F/R Instability	Victimizations	Illness	Criminal History	Drug Use	Total
Childhood	13	13	2	--	1	**29**
Adolescence	6	4	3	1	1	**15**
Adulthood	15	10	7	--	1	**33**
Total	**34**	**27**	**12**	**1**	**3**	**77**

Researchers have shown offenders may construct identities in accordance with how they wish to be viewed by others and it is subject to their current frame of reference (Riessman, 2000; Langellier, 2001; Presser, 2004). As Heider (2013) stated, individuals usually place blame externally or internally. They either see the action as a result of something they did, internal, or the action was a result of someone or something else, external. Peersen, Gudjonsson, and Sigurdsson (2000) added that perception is another element crucial to blame and accountability. They suggested that blame may reduce anxiety and feelings of remorse after a negative event or crime. To address this further, the context of the turning points were analyzed.

The qualitative data were divided into two groups to show who took responsibility for their involvement in the offense and who did not. To ascertain whether or not the offender believed they were responsible for their involvement in the offense, the offender was asked "Looking back, how do you feel about the crime now? and "Do you think it could have turned out differently?" In most cases, individuals who identified as responsible for the offense also took responsibility for other situations in their lives and were also able to reflect on the past with more insight.

When speaking about the crime, Alexandra stated "I know I'm wrong for what I did. Nothing I do can ever fix that." Alexandra became involved with illegal activity, prostitution and drug use, at a very young age. Her mother contributed to this through her drug use, as well as abuse and neglect of Alexandra as a child. By her early 20s, Alexandra was overseeing several prostitutes and extended her drug use to drug distribution. It was at that time when the homicide occurred. "That's what I had been doing my whole life. That's all I know." She ended up killing a client for non-payment of services while she was under the influence of several illegal substances. She accepted responsibility for the offense and associated the early experiences with her mother as a turning point into the lifestyle she was leading before the offense. Alexandra stated, "Because I had no regard for myself growing up, I had none for anyone else either."

On the other hand, Caroline's reflection on her experiences with her mother and her involvement in the homicide were different. Caroline stated her boyfriend is the reason she is

incarcerated today. He said he had been robbed and that she needed to prove her love for him by getting revenge on the man who robbed him. They "plotted to kill dude and that's what we did." She went with her boyfriend to the man's house, and she shot him in the back and chest five times. Her boyfriend shot him once. She said,

> He (the victim) did something to make him (her boyfriend) that mad. Do I have a conscience about this? No. There wudn't [sic] nothing I could do differently. I didn't think a man would have me that gone to where I'd do something like that.

She was a willing participant, yet she did not take ownership of the choice to participate in the offense. Similarly, Caroline's perception of her early experiences did not reveal any depth or insight beyond the surface level. She continued to blame how her life turned out on external factors. On her relationship with her mother, she said, "I thought why didn't you love me. You see what I'm saying. I struggle with that today. I wish I had a mother like I posed [sic] to and my life probably wouldn't have turned out like it did." To Caroline, had it not been but for these other people, her life would have taken a different path, or so she says.

Both Alexandra and Caroline admitted to willingly taking the life of another person, yet they both perceived their actions and life events in an opposing manner. Alexandra, who claimed ten life events and two turning points, showed an ability to self-examine, while Caroline, who claimed 20 life events and four turning points, did not. Caroline saw all of the events in her life as the external actions of others. They were all done to her. By doing so, Caroline was able to place the blame on others which in turn reduced any internal negative feelings, including remorse.

Kathy, who shot her husband, was a victim of sexual and physical abuse throughout her life. Later she lost her children to DHS because of abuse. She said,

> I lost everything, so I stayed with him. Mom said if you're gonna marry, marry for money. And I did. I didn't know any better. I don't feel like I belong here or anywhere. Why was I even born to end up in a place like this?

Similarly, Arlene experienced infidelity and drug use from her boyfriend, nearly identical to the experience she had with her father growing up. She said, "I didn't know how to give up on him." After an argument about his drug use, Arlene ran him over with a truck. "I see him, but I don't see him and the next thing I know, he was hit by the truck." In stating, "he was hit by the truck" Arlene removed herself from the action. Often, women who stay in abusive relationships develop distorted perceptions, feel helpless, and lose their sense of individual autonomy (Browne, 1993). Both Kathy, who claimed nine life events and two turning points, and Arlene, who claimed 11 life events and two turning points, appear to be caught in the cycle of violence from early childhood victimizations to abusive adult relationships which may distort or diminish their sense of individual autonomy, resulting in external attributions of their own behaviors and experiences.

Additionally, some women attributed their behavior to a "higher power" which released them of blame or responsibility. Arlene stated her drug dealing was "all a part of God's plan." Similarly, Brittany claimed seven life events and one turning point. She killed two men about three years apart and buried them in her backyard. She stated, "Neither one of those guys deserved to die, but I think God was tired of them. I think God directed that bullet." These

statements allow her to construct a narrative that removes responsibility from her actions. It was God's plan for them to die, not her pulling the trigger.

Originally, Christine had similar thoughts but has since gained insight into her behavior and accepted responsibility for her actions rather than attributing them to "God." Christine claimed eight life events and two turning points. She stated:

> I felt like god punished me [when she first got to prison]. That was my faulty thinking that I didn't do nothing, but I did. I didn't prevent it. I was there, and I helped rob that woman of her life.

Remarkably, some made deliberate, unabashed statements regarding their responsibility. Jamie, who claimed 11 life events and two turning points, shot her abusive boyfriend. When asked how she felt about the crime, she stated: "I wish I could dig him up and kill him again." Others appeared to have reconciled their actions during their time in prison to accept responsibility. Jessica, claimed six life events and one turning points, stated "My first two years I spent saying if there wasn't any co-defendant there wouldn't be any crime. I didn't have any peace. I don't live there anymore."

Overall, only 8 of the 38 women (21%) accepted full responsibility for their role in the homicide. There was no clear delineation based on responsibility and crime context. Meaning, there were homicides involving strangers, acquaintances, family members, and abusers for both women who took responsibility and those who did not. However, there were no homicides of children for the group accepting responsibility. Two women were solely convicted of killing their children and neither accepted responsibility for the offense. This may be due to the shame and stigma associated with being a mother who kills her child (Mann, 1996).

The most substantial differences occurred between the two group's identification of life events and turning points. Those who identified themselves as responsible for the homicide identified 74 life events and 25 turning points, while those who did not take responsibility identified 254 life events and 52 turning points. Those who did not take responsibility for the offense identified more than double the life events and turning points during their interviews.

It may be that those who identified fewer turning points had reflected over their life events, individual choices, actions of others, and had thus gained an insight or awareness of the events without trying to place blame on an external source. It may also be that the women who did not take responsibility were so entrenched in the multitude of events in their lives, they cannot separate their actions from the trauma they experienced. However, women who took responsibility for the offense were also more likely to place blame internally on their actions, rather than externally on the actions of others. This could be the result of an actual lack of experiences to discuss, or it could be the result of the amount of time spent reflecting in prison, but that cannot be discerned from the data.

For most of the individuals who did not accept responsibility, they had no remorse, did not want to be seen negatively, or blamed someone or something else. The women who did not take responsibility had almost double the victimization and illness life events perceived as turning points. This could be an explanation for their tendency to attribute blame externally. In those situations, they were the victim and had little to no control. Prior research has shown the

longer a woman is subject to traumatic experiences, such as abuse, the more likely she is to feel helpless and lose her sense of autonomy (Browne, 1993; Field et al., 2017).

DISCUSSION AND CONCLUSION

When conducting a life course analysis of life histories with the criminal population, valuable information can be gained about turning points by learning the context of the event and how the offender perceived the event. Past research has rarely asked why or how an event became a turning point in the eyes of the offender. By adding this component of perception, this study demonstrated that each individual and their life history are unique. Though many of the women experienced similar life events and turning points, not all life events were turning points for those with the same experiences. Furthermore, how the woman attributes blame or takes accountability may affect the telling of her life history.

Many of these accounts support prior literature in that female homicide offenders often experience family and relationship instability characterized by parental conflict and desertion, excessive familial demands, and negative home conditions (Humphrey & Palmer, 1986; Schwartz, 2006; Broidy & Cauffman, 2006). Women's experiences in their family of origin, adult families, and experiences of victimizations can have significant and lasting effects throughout the life course. Notably, when those events occurred in childhood, they appeared to have continual lasting effects throughout the life course, even for those without an early criminal history. These findings support past literature concluding female homicide offenders, experience significant rates of victimizations, particularly early childhood sexual violence and domestic abuse by intimate partners leading the female killing her abuser (Mann, 1996; Field et al., 2017).

Mann (1996) and Shipley and Arrigo (2004) suggested economic marginalization creates an environment of elevated stress contributing to the increased likelihood of the commission of a homicide on the part of a woman. From the perspective of these women, though, there was no emphasis placed on the experience of economic marginalization. It was a normalized part of their reality; thus, to them, it did not represent a turning point in their lives.

Despite, the themes present in the life events and turning points, there was limited distinction based on the context of the crime between those who accepted responsibility and those who did not. Of the 30 women who did not accept full responsibility for their participation in the homicide, there were homicides involving strangers, abusive significant others, and children. This was true for the eight women who took full responsibility for their offense, except for the homicides of children. Out of the 43 victims, two were children of the offenders and neither mother, both convicted as sole offenders, took responsibility for the death of the child. Because it is a small sample, this demarcation cannot necessarily be a distinguishing factor, but future research could explore the possibility for this specific type of homicide.

Due to the limitations of the data, there are limits to generalizability beyond the women in this study. Additionally, the participants volunteered so that may have left out women who were afraid or ashamed to tell their stories, possibly limiting the variation in the data. The selection of women was not based on a randomized selection criterion, which may have also eliminated some variation in the sample of those who were interviewed. Additional limitations include the quantitative data used for descriptive statistics. The data were acquired through official and unofficial records, so it contained some missing data and lacked some details, particularly victim information. Furthermore, as with any qualitative interviewing, there is the

risk for the researcher's own biases to skew the information provided; however, I, as the researcher, attempted to control for this by reviewing the information given with each offender at the end of the interview process.

Further limitations of the qualitative data include the individual's perception and account of their life history as well as the retrospective nature of the interviews. Some individuals may not have discussed all the events that occurred in their lives, or they may have been boastful or attempted to minimize events due to how they thought the researcher might have perceived them. Each woman chose the life events she shared and decided which ones were turning points. For many of these women, this was the first time openly discussing their lives. The interview process itself was cathartic and reflective because it allowed the women to verbalize some things for the first time.

In the future, research should seek to replicate the life events and turning points identified by female offenders in this study. It should expand on the life events and turning points identified in this study as specific to the lives of women. It should also broaden the scope of criminal behavior beyond homicide offenses to see if there may be different turning points that occur depending on the offense. In addition, future research with life course perspective should include the offender's perception, identity, and accountability when identifying and describing turning points.

Additionally, the life history interviews brought about a new question for inquiry. Several women said their feelings about the crime had changed since coming to prison. Over the years, they had accepted responsibility. Is there a point at which this change occurs? Future research should examine at what point an individual may be more likely to change their perception, identity, and accountability and how that would affect the telling of their life history and turning points. This may also have an effect on the success of the types of services and treatments offered at a given time period.

Understanding why and how these events shape the life course of these women and others are crucial to the implementation of services and policies for treatment, recidivism, and the prevention of future incarceration of others affected, such as the children of these women. This is particularly in reference to stating a life event acted as a turning point. To understand the underlying processes that operate as turning points at the individual level, the context and meaning of a turning point for an individual must be understood. For one person an event may have been a turning point, however, for another individual, a similar event may not have been a turning point, demonstrating that context and perception are vital to understanding turning points. Just because two women experienced sexual abuse or family disruption or mental illness, does not mean that they share the same turning points or reactions to those events. As a result, they would need different services and treatment.

Despite the media hype, most available measures of women's violence have failed to show an increase, yet the arrest and incarceration rate for violent offenses has increased, therefore amplifying the need for evidence-based treatment and services focused on each individual's life experiences (Chesney-Lind & Irwin, 2008). As stated previously, some of these women have a chance of gaining release from the correctional system at some point in their lives. It is evident from the life events gathered by this study that these women will need a multitude of services to re-enter society positively. Many reported drug use histories, victimizations, mental illness, and a lack of occupational, educational, and financial means. As

stated by Richie (2001), comprehensive wrap-around services including substance abuse treatment, mental health treatment, individual therapy for past trauma and victimizations, family therapy, and occupational and educational services are all necessary for the individual, family, and the criminal justice system to successfully reintegrate these women back into society.

REFERENCES

Adler, F., & Simon, R. J. (1979). *The criminology of deviant women*. Boston: Houghton Mifflin.

Belknap, J., & Holsinger, K. (2006). The gendered nature of risk factors for delinquency. *Feminist Criminology*, *1*(1), 48-71.

Bertaux, D., & Kohli, M. (1984). The life story approach: A continental view. .*Annual Review of Sociology*, *10,* 215-237.

Bonger, W. A. (1916). Criminality and economic conditions. Boston: Little, Brown.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology qualitative research in psychology, *ISI, 3*, 77-101.

Broidy, L., & Agnew, R. (1997). Gender and crime: A general strain theory perspective. *Journal of Research in Crime and Delinquency*, *34*(3), 275-306.

Broidy, L. & Cauffman, L. (2006). *Understanding the female offender*. Washington, DC: U.S. Department of Justice. Retrieved from https://www.ncjrs.gov/pdffiles1/nij/grants/216615.pdf

Browne, A. (1993). Violence against women by male partners: Prevalence, outcomes, and policy implications. *American Psychologist*, *48*, 1077–1087.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.

Carson, E. A., & Golinelli, D. (2013). Prisoners in 2012: Trends in admissions and releases, 1991–2012. *Washington, DC: Bureau of Justice Statistics*. Retrieved from https://www.bjs.gov/content/pub/pdf/p12tar9112.pdf

Chesney-Lind, M. (1989). Girls' crime and woman's place: Toward a feminist model of female delinquency. *Crime & Delinquency*, *35*(1), 5-29.

Chesney-Lind, M & Irwin, K. (2008). *Beyond bad girls: Gender, violence, and hype*. New York: Routledge.

Daly, K. (1992). Women's pathways to felony court: Feminist theories of lawbreaking and problems of representation. *S. Cal. Rev. L. & Women's Stud.*, *2*, 11-52.

Elder Jr, G. H. (1985). *Life course dynamics: trajectories and transitions 1968-1980*. New York: Cornell University Press.

Field, C., Cherukuri, S., Kimuna, S., & Berg, Dee. (2017). Women accused of homicide: The impact of race, relationship to victim, and prior physical abuse. *Advances in Applied Sociology*, 7, 281-304.

Frazier, C. E. (1978). The use of life-histories in testing theories of criminal behavior: Toward reviving a method. *Qualitative Sociology*, *1*(1), 122-142.

Gilfus, M. E. (2002). *Women's experiences of abuse as a risk factor for incarceration*. Harrisburg, PA: Pennsylvania Coalition Against Domestic Violence.

Glueck, S., & Glueck, E. T. (1934). *Five hundred delinquent women*. Oxford, England: Knopf.

Heider, F. (2013). *The psychology of interpersonal relations*. New York: Wiley.

Holsinger, K. (2000). Feminist perspectives on female offending: Examining real girls' lives. *Women and Criminal Justice*, *12*(1), 23-52.

Holsinger, K., & Holsinger, A. M. (2005). Differential pathways to violence and self-injurious behavior: African American and white girls in the juvenile justice system. *Journal of Research in Crime and Delinquency*, *42*(2), 211-242.

Humphrey, J. A., & Palmer, S. (1986). Stressful life events and criminal homicide. *OMEGA--Journal of Death and Dying*, *17*(4), 299-308.

Jurik, N. C., & Winn, R. (1990). Gender and homicide: A comparison of men and women who kill. *Violence and Victims*, 5, 227-242.

Katz, R. S. (2000). Explaining Girls' and Women's Crime and Desistance in the Context of Their Victimization Experiences A Developmental Test of Revised Strain Theory and the Life Course Perspective. *Violence Against Women*, *6*(6), 633-660.

Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual Review of Psychology*, *31*(1), 457-501.

Klein, D. (1973). The etiology of female crime: A review of the literature. *Issues in Criminology*, *8(2),* 3-30.

Langellier, K. (2001). "You're Marked": Breast Cancer, Tattoo and the Narrative Performance of Identity. In J. Brockmeier & D. Carbaugh (Eds), *Narrative and Identity: Studies in Autobiography, Self, and Culture* (145–84). Amsterdam and Philadelphia, PA: John Benjamins.

Lombroso, C., & Ferrero, G. (1920). *The female offender* (Vol. 1). New York: D. Appleton and Company.

Mann, C.R. (1996). *When women kill*. New York: SUNY Press.

Moult, K. (2008). Gender and the life course theory of crime: developing a model to explain women's desistance from delinquency. *The Public Purpose, 6(1),* 7-37.

Musson, G. (2004). Life histories. In C. Cassell & G.Symon (Eds.), *Essential guide to qualitative methods in organizational research* (34-44). Thousand Oaks, CA: SAGE.

Peersen, M., Gudjonsson, G. H., & Sigurdsson, J. F. (2000). The relationship between general and specific attribution of blame for a" serious" act and the role of personality. *Nordic Journal of Psychiatry*, *54(1),* 25-30.

Pollak, O. (1961). *The criminality of women*. New York: AS Barnes.

Presser, L. (2004). Violent offenders, moral selves: Constructing identities and accounts in the research interview. *Social Problems*, *51*(1), 82-101.

Proctor, J. (2004). Understanding the range of female criminality: A prison-based test of three traditional theories. *Women's Studies Quarterly*, *32* (3/4), 61-85.

Richie, B. E. (2001). Challenges incarcerated women face as they return to their communities: Findings from life history interviews. *Crime & Delinquency*, *47*(3), 368-389.

Riessman, C. K. (1993). *Narrative analysis*. California: Sage.

Riessman, C.K. (2000). Analysis of personal narrative. In J.F. Gubrium & J.A. Holstein (Eds.), *Handbook of Interviewing*. California: Sage.

Rossegger, A., Wetli, N., Urbaniok, F., Elbert, T., Cortoni, F., & Endrass, J. (2009). Women convicted for violent offenses: Adverse childhood experiences, low level of education and poor mental health. *BMC Psychiatry*, *9*(1), 81-88.

Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life*. Harvard University Press.

Schiffrin, D. (1996). Narrative as self-portrait: Sociolinguistic constructions of identity. *Language in society*, *25*(2), 167-203.

Schwartz, J. (2006). Family structure as a source of female and male homicide in the United States. *Homicide Studies, 10*(4), 253-277.

Shipley, S, & Arrigo, B. (2004). *The female homicide offender*. New Jersey: Pearson.

Shover, N., Norland, S., James, J., & Thornton, W. E. (1979). Gender roles and delinquency. *Social Forces*, *58*(1), 162-175.

Simpson, S. S. (1989). Feminist theory, crime, and justice. *Criminology*, *27*(4), 605-632.

Simpson, S. S., Yahner, J. L., & Dugan, L. (2008). Understanding women's pathways to jail: Analysing the lives of incarcerated women. *Australian & New Zealand Journal of Criminology*, *41*(1), 84-108.

Sondheimer, D. L. (2001). Young female offenders: Increasingly visible yet poorly understood. *Gender Issues*, *19*(1), 79-90.

Teruya, C., & Hser, Y. I. (2010). Turning points in the life course: current findings and future directions in drug use research. *Current Drug Abuse Reviews*, *3*(3), 189.

Thomas, W. I., & Znaniecki, F. (1918). The Polish peasant in Europe and America: Monograph of an immigrant group (Vol. 2). University of Chicago Press.

Ward, D. A., Jackson, M., & Ward, R. E. (1969). Crimes of violence by women. *Crimes of Violence*, *13*, 843-909.

Weisheit, R. A. (1984). Female homicide offenders: Trends over time in an institutionalized population. *Justice Quarterly*, *1*(4), 471-489.

Wilbanks, W. (1983). Female Homicide Offender in Dade County, Florida, The.*Crim. Just. Rev.*, *8 (2)*, 9-14.

Alesa R. Liles is an assistant professor at Georgia College and State University. She teaches classes on women and crime, social justice, and legal issues. Her research interests include race, gender, juvenile justice, and mental health relating to policy issues in the criminal justice system. She has published various book chapters, articles in *Youth Justice*, *Journal of At-Risk Issues,* and *ACJS Today*.

Culture, Socialization, and Firearms Violence in the United States

Jennifer L. Lanterman[1]
Department of Criminal Justice, University of Nevada, Reno

Sarah J. Blithe
Department of Communication Studies, University of Nevada, Reno

Abstract

Firearm violence persists in the United States despite innumerable social, political, and economic changes throughout the 20th and early 21st centuries. Collaborative Event Ethnography was used at seven gun shows in three regions of the United States to explore childhood socialization into firearm culture via intergenerational communication of values and views regarding violence, safety, and the use of firearms. Children were observed at all gun shows engaged in activities ranging from standard play to potentially dangerous activity in an environment characterized by bias and controversy. The findings support social learning theory and provide some insight into the role of culture in the development of firearm-related views and elucidate one possible explanation for the etiology of firearm violence committed by some white males.

Keywords: social learning theory, collaborative event ethnography, firearms, culture, violence

INTRODUCTION

"'[I was also struck by] just seeing people in the big cavernous hall—eyeing the goods, pointing these guns into mid-air…You couldn't not be aware of the racial demographics, which was basically white guys…people [who would] articulate a kind of atavistic, primal notion of what America was about. It wouldn't just be about guns; it would be about their version of America… [Their] vision of America doesn't really include everybody.'"—Uri Friedman (2016)

Firearm violence persists in the United States (U.S.) despite innumerable social, political, and economic changes throughout the 20th and early 21st centuries. The causes of these violence trends, which are disproportionately high relative to similar counties, have been difficult to study for several reasons. Firearms discourse has been highly politicized since the 1970s (Duerringer & Justus, 2016; Hogan & Rood, 2015). Additionally, federal research support for firearms research has been poor since Kellerman and colleagues' (1993) article indicating that the presence of a firearm in the home increases the risk of non-stranger assaults and homicides (see also Kellerman, 1993). Further, the Centers for Disease Control and Prevention's (CDC) fiscal year

---

1997 budget included restrictions on firearms research, which set off a cascade of events resulting in no federal agency funding this research area (Jamieson, 2013). The extant research in this area tends to focus on anti-gang programs and urban youth, and, generally, research on firearms violence committed by white males focuses on suicide or mental health while ignoring other fertile areas of research, such as broader examinations of firearm culture and socialization. It is critical to address the limitations and gaps in the research related to this extraordinarily expensive public health crisis (Weinberger et al., 2015). The costs associated with firearms violence reach hundreds of billions of dollars annually to cover medical expenses, mental health counseling for victims and families (when accessible), and the investigation, prosecution, and incarceration of perpetrators (Cook & Ludwig, 2000; Corso, Mercy, Simon, Finkelstein, & Miller, 2007; Follman, Lurie, Lee, & West, 2015). This study is intended to address a gap in the literature regarding the origins of firearm views and firearm violence committed by white males, by studying one type of venue where firearm culture thrives. We argue that understanding firearm culture and the origins of firearm views can ultimately help reduce firearm violence.

Violence in the United States

H. Rap Brown, Director of the Student Nonviolent Coordinating Committee, explained that "Violence is as American as cherry pie" (Ikenberry & Gold, 1967, p. A1). He astutely highlighted the fact that violence is, and has always been, endemic in the U.S. Firearm violence, in particular, is a pernicious problem and most firearm research is focused on violence.

Rates of Violence. The U.S. has a violent past, but, in historical terms, the U.S. is in a comparatively safe period. The violent crime rate has decreased by approximately 50% since the early 1990s (Federal Bureau of Investigation [FBI], 2016b; Roeder, Eisen, & Bowling, 2015). In 2012, the U.S. had its lowest violent crime rate since 1970, and, in 2011 and 2012, reported the lowest murder and non-negligent manslaughter rates since 1963 (FBI, 2016b). Data indicate that violent crime increased from 2014 to 2015, but remained lower than the 2011 rate (FBI, 2016a). Preliminary data indicate that violent crime increased by 5.3% from January through June 2015 to January through June 2016 (FBI, 2017).

There are a few violence trends that stand out despite the general decrease in violent crime. First, the U.S maintains higher rates of firearm violence than other western, democratic, developed, and high-income countries (Miller, Azrael, & Hemenway, 2013; Richardson & Hemenway, 2011; Zimring & Hawkins, 1999). Second, suicides have increased since 2000 (American Foundation for Suicide Prevention [AFSP], 2016). White males accounted for approximately 70% of completed suicides in 2014 (AFSP, 2016). Females are more likely to attempt suicide, but males are 3.5 times more likely to die by suicide than females (AFSP, 2016). This disparity is likely attributable to the fact that firearms are used in approximately half of completed suicides (AFSP, 2016), and males are more likely to use firearms in suicide attempts than females (CDC, 2016c). White males are also significantly more likely than males of other racial and ethnic groups to use a firearm in a suicide attempt (CDC, 2016c).

Mass shootings are the third violence trend that stands apart from the trend of decreasing violence. These events strike the public as occurring more frequently now than in the past, but experts disagree on whether mass shooting events are occurring with a higher frequency. These differences may be attributable to varying definitions of what constitutes a mass shooting. The Stanford Geospatial Center and the Stanford Libraries developed the Stanford Mass Shootings in

America (MSA) dataset to facilitate research on this type of firearm violence.[2] The MSA identified 308 mass shootings from August 1966 through April 2016 (Stanford Geospatial Center, 2016). Sixty-one percent of these shootings have occurred since January 2011, despite the aforementioned dramatic decreases in total violent crimes and rates of murder and manslaughter. A majority of these offenses are committed by males (89.9%; Stanford Geospatial Center, 2016). Forty-six percent of the mass shootings in this dataset were committed by white actors, followed by shootings committed by African Americans (25.3%), Asians (5.8%), and Native Americans (0.9%); 21.7% of these shootings were committed by perpetrators whose race or ethnicity could not be identified or people who were classified as "some other race" (Stanford Geospatial Center, 2016). These results are supported by Lemieux (2014) who, using data from Duwe (2007) and Kessler (2013), found that the 73 mass shootings that occurred in the U.S. between 1983 and 2013 were overwhelming committed by males (99%) and Caucasians (66%).

Firearm Violence. Firearms are disproportionately used in fatal and serious, non-fatal violence incidents compared to other weapons. According to the CDC (2016a), firearms were used in 10.24 deaths per 100,000 (both sexes) and 17.98 male deaths per 100,000 in 2014.[3] Despite the 49% decrease in the rate of homicide from 1992 to 2011, the percentage of homicides committed with firearms remained stable at 67% and 79% of homicides with multiple victims were carried out with firearms (Smith & Cooper, 2013). A high rate of non-fatal injuries committed with firearms is also reported. In 2014, there was a rate of 25.49 non-fatal gunshot injuries per 100,000 (both sexes) and a rate of 45.08 non-fatal gunshot injuries per 100,000 males (CDC, 2016b).

The research on firearm violence tends to focus on the proximal causes of firearm violence. A considerable degree of research focuses on evaluating the effectiveness of laws, programs, and interventions intended to prevent or reduce firearm violence by addressing current causal factors (see Makarios & Pratt's 2012 meta-analysis). Research and program evaluation also tend to focus on specific groups, including gangs (McGarrell et al., 2013) and urban youth (Carter et al., 2015; Petrosino et al., 2015).

Less research focuses on the distal causes of firearm violence. Existing research on distant causal factors indicates that aggressive behavior can be learned (Anderson & Bushman, 2002). For example, perceived parental support for fighting is predictive of aggression, and perceptions of parental attitudes are significantly related to fighting, injuries from fighting, and weapon carrying (Orpinas, Murray, & Kelder, 1999). Research also suggests that family may influence views on firearms. Vittes, Sorenson, and Gilbert (2003) found that residing in a home with a handgun and living with a member of the National Rifle Association (NRA) reduced support for firearm regulation. People may be socialized to view carrying firearms as an integral part of daily life (Thompson & Stidham, 2010). Additional research indicates that firearm ownership is a part of a pattern of learned behavior regarding beliefs about people of other races

---

[2] MSA defines a mass shooting as an incident that involves three or more victims, not including the shooter. The shooting victims may be fatalities or have received non-fatal gunshot wounds, and gang-related incidents are not included in the dataset. Incidents are only included in the dataset if at least three corroborating sources can be identified. It is important to note that the dataset may be incomplete due to limited digital record and report access from the 1960s through the 1980s. See the Stanford Geospatial Center (2016) for more information.

[3] All rates from the CDC are age-adjusted rates.

and ethnicities (Thompson & Stidham, 2010; see also Bankston & Thompson, 1989; Delmas & Bankston, 1993; Wright, Rossi, & Daly, 1983).

Traditionally, research on the causes of and ways of preventing firearm violence has focused on youth in gangs and youth in urban areas. In one respect, this makes sense, because these youth are at an increased risk for involvement in firearm violence. However, this research focus often results in a focus on perpetrators of color. Little violence research has focused on firearm violence committed by white males except for suicides committed by elderly men. Public discourse on firearm violence committed by white males, especially violent public events, tends to quickly and inaccurately turn to mental disorder (Metzl & MacLeish, 2015). Firearm violence committed by white males is framed as the behavior of "insane" individuals, but violence committed by people of color is framed as a reflection of black communal aggression (Metzl & MacLeish, 2015). This discourse allows the U.S. public to avoid more difficult and uncomfortable discussions about our history and culture, and to propagate the rhetoric regarding race and propensity for violence. These discussions regarding firearm violence committed by white males also often point out that many of these events were committed with legally-purchased firearms, but very little substantive discussion occurs after these revelations. These trends have led some researchers to suggest that "…weapon use needs to be understood within the wider social context" (Brennan & Moore, 2009, p. 223).

Socialization and Violence. "Socialization… [is a] learning process [and] entails how standardized attitudes, values, and beliefs are culturally transmitted and influence behavioral patterns" (Taylor, 2009, p. 15; see also Durkheim, 2008/1915; Geertz, 1973; Kohn, 2004; Seidman, 2004). Altheimer and Boswell (2012) examined the relationship between firearm availability and violence across 21 countries, including the U.S., and found that socio-historical and cultural processes influence how people use firearms. Cultural processes, specifically, "may influence knowledge of weapons…as well as situational definitions of when it is appropriate to use a weapon to injure or kill someone" (Altheimer & Boswell, 2012, p. 688; Corzine, Huff-Corzine, & Whitt, 1999; Kopel, 1992). Lemieux (2014) explored the effect of firearm culture on firearm violence and mass shootings in the U.S. He identified a relationship between firearm culture and the rate of murder by firearm in the Southern region of the U.S., but he used military expenditures and movie revenue as proxy measures for firearm culture (Lemieux, 2014).

Not all firearm owners commit violent crimes. However, there is a strong link between high rates of firearm ownership and firearm violence. The U.S., in particular, has high rates of private firearm ownership and high rates of firearm violence (Blithe & Lanterman, 2017). Studying cultures with high rates of firearm ownership is one important way to learn more about firearm violence (Ott, Aoki, & Dickinson, 2011). Violence of all types is commonly linked to cultural factors. Many children grow up immersed in violence or, as Perry (1997) described, incubated in terror. Perry argued that pervasive experiences with violence could lead to cycles of violence. He claimed, "experience, not genetics, results in the critical neurobiological factors associated with violence" (p. 124). In their study of rape culture, Phipps, Ringrose, Renold, and Jackson (2018) found that violent group mentality and the acceptance of violent cultural discourse led to a normalization of violence against women. Thus, culture, and particularly cultures that are discursively and physically seeped in violence, such as gun shows, are important to study as a potential factor in violent views and behavior.

Gun Shows. Gun shows comprise a significant proportion of the largely unregulated secondary firearms market (Hemenway, 2004). According to Cook and Ludwig (1996), between 30% and 40% of all firearm sales occur in the secondary market (see also Wintemute 2013). While research suggests that a small percentage (3.9%-9%) of firearms are purchased at gun shows (Cook & Ludwig, 1996; Hepburn, Miller, Azrael, & Hemenway, 2007), research also suggests that undocumented private sales are ubiquitous and illegal straw purchases are common at gun shows in states that have comparatively lax gun laws (Wintemute, 2007; Wintemute, 2013).

The best available data suggest that an extraordinary number of people attend the 2,000 to 5,200 gun shows held each year (Bureau of Alcohol, Tobacco, Firearms, and Explosives, 2007). Gun shows are an understudied environment despite the number of people attending them annually. This is likely due, in part, to the suspicion of strangers or people perceived to be out-group members (Olmstead, 1988; Taylor, 2009). When gun shows are studied, the focus is typically on crimes committed with firearms purchased at gun shows (Braga, Wintemute, Pierce, Cook, & Ridgeway, 2012; Cole, 2008; Hemenway, 2004; Koper, 2014; Wintemute, Hemenway, Webster, Pierce, & Braga, 2010). Considerably less gun show research focuses on firearm culture or subculture (Kohn, 2004; Taylor, 2009; Yamane, 2017) and stigma management practices (Blithe & Lanterman, 2017; Taylor, 2009). Very little research focuses on who is attending gun shows and why that may matter; only Hemenway (2004) mentions the presence of a young child at a single gun show.

Research Methods

Research on firearms violence and crimes committed with firearms is primarily quantitative. The National Research Collaborative on Firearm Violence highlighted the need for qualitative firearms research, particularly ethnographic study of select populations, to identify factors that influence individual and group firearm behavior (Weiner et al., 2007). Kohn (2004) explained that ethnographic research is valuable because it "provide[s] an understanding of behavior" which is often lost in purely quantitative research (p. 5). In other words, the results of ethnographic research can help us understand why we observe particular trends and this ethnographic study is lacking in firearms research.

Gaps in the Literature

This study addresses gaps in the firearms literature by providing a qualitative analysis of group firearm behavior. In this paper, we examine gun shows, venues with pronounced firearm culture, to identify possible connections between childhood socialization into firearm culture and firearm violence by white males later in life. Understanding cultural aspects of firearm violence is important to understanding firearm violence itself—stereotypes and myths abound about who commits these crimes, and sorting out where and how culture becomes a factor is necessary.

THEORETICAL FRAMEWORK

Social process theorists assert that to understand social behavior, it is imperative to understand how people define their reality through interaction with other people (Walsh, 2015). This process includes individual and collective dimensions, and verbal and non-verbal language and symbols. Akers' (1998) social learning theory (SLT) is a social process theory that provides

a framework to explore the possibility that firearm views and behaviors are learned through socialization via intergenerational communication and activities. Akers' SLT reflects an amalgamation of the symbolic interactionism of Sutherland's (1947) differential association theory, by retaining the concepts of differential association and definitions, and Bandura's (1973, 1977, 1986) early social learning theory, which combined cognitive learning theory and behavioral learning theory, by including the concepts of imitation and differential reinforcement (Akers & Sellers, 2009). SLT facilitates the exploration of the mechanisms and social dimension of learning various behaviors. Put simply, SLT suggests that individuals learn values and behavior patterns by observing and imitating other people, especially their early caregivers.

Differential association has normative and interactional dimensions (Akers & Sellers, 2009). The normative dimension is the conglomeration of norms and values to which an individual is exposed through the interactional dimension (Akers & Sellers, 2009, p. 90). The interactional dimension is the "direct association and interaction with others who engage in certain kinds of behavior [and convey or model certain values], as well as the indirect association with more distant reference groups" (Akers & Sellers, 2009, p. 90). The direct associations (e.g., family, friends) and indirect reference groups with which a person interacts (e.g., other groups in the community engaged in certain activities) provide the primary social context in which learning occurs. Akers and Sellers (2009) explain that "associations that occur earlier (priority), last longer and occupy more of one's time (duration), take place more often (frequency), and involve others with whom one has the more important and closer relationships (intensity) will have the greater effect on behavior" (p. 90). This suggests that interactions in the immediate family that occur early in life will have the greatest impact on a person's norms and values.

Definitions are the meanings that a person attaches to particular behaviors (Akers & Sellers, 2009). These meanings can be approving or neutralizing and increase the likelihood of an act or unfavorable and decrease the likelihood of the act, whether or not the acts are considered right or wrong by conventional standards. These definitions function as discriminative stimuli, which operate as cues to the individual about what responses are appropriate in a given situation and are developed through imitation and differential reinforcement (Akers & Sellers, 2009).

SLT asserts that people learn behavior, in part, by imitating behavior that they observe. The observation of behavior in primary groups, such as the family, has a significant impact on the acquisition of either pro-social or deviant behavior (Akers & Sellers, 2009). Akers and Sellers (2009) argue that the observation of behavior in primary groups has more of an effect on the "initial acquisition and performance of novel behavior than the maintenance or cessation of behavioral patterns once established, but it continues to have some effect in maintaining behavior" (p. 93).

Behavior that is initially learned through differential association, directed via definitions, and practiced through imitation will ultimately be maintained or discarded as a function of differential reinforcement. Differential reinforcement occurs through the tally or "balance of anticipated or actual rewards and punishment" (Akers & Sellers, 2009, p. 91). The exchanges between people, especially in primary groups, represent the setting in which rewards or punishments are distributed. Specifically, the "words, responses, presence, and behavior of other persons directly reinforce behavior… [and] provide the setting for reinforcement" (Akers & Sellers, 2009, p. 92). This setting permits the discriminative stimuli developed through

definitions to operate and determine whether or not a person will maintain a behavior. Akers and Sellers (2009) indicate that the rewards one derives through differential reinforcement can be symbolic and that they can reflect or fulfill "ideological, religious, [or] political…goals" (p. 93).

METHODS

Collaborative Event Ethnography

Collaborative Event Ethnography (CEE) was used in this study. CEE is used to study dynamic, large-scale sites (Brosius & Campbell, 2010; Büscher, 2014; Ganesh & Stohl, 2013). The study of large-scale sites can yield useful information, but they present significant logistical constraints. It is difficult for individual researchers to document, make sense of what they observe, and situate the observations in a "broader analytical perspective" when studying large, dynamic locations (Brosius & Campbell, 2010, p. 247). CEE addresses this challenge by adopting a different approach than traditional ethnography, which involves deep immersion in a particular community or culture. Instead, CEE allows researchers to achieve an "ethnographic symmetry" (Robbins, 2002), by "studying up" at large-scale sites (Gusterson, 1997; Nader, 1972) and observing macro-level trends while also "studying down" and immersing oneself in the observation of individual experiences and interactions (Brosius & Campbell, 2010).

Collaborative observation and a multi-site approach are also key CEE components. CEE requires that researchers work together to document observations at individual sites and across multiple sites. The multi-site approach involves following people, things, and metaphors across sites (Brosius & Campbell, 2010; Marcus, 1995). The multi-site approach is critical to understanding social phenomena, because, as Hannerz (2003) explains, "sites are connected with one another in such ways that the relationships between them are as important…as the relationships within them" (p. 206). We adopted a collaborative, multi-site approach to compare and contrast themes across gun shows to explore firearm culture.

Data and Sample

We also adopted a team approach to data collection, analysis, and verification. We attended most of the shows together and, sometimes, with research assistants. The team approach contributed to the richness of the data. The first author is a criminologist and the second author is a communication scholar. We have different subject-matter expertise and generally adopt diverse methods, so we compiled a wider range of observations than either of us would have individually generated. Experts agree that multidisciplinary teams enhance the quality and breadth of data collection and analysis (Curry, Nembhard, & Bradley, 2009; Denzin & Lincoln, 2000; Mays & Pope, 1995; Patton, 1999).

We conducted observations at seven gun shows in three states (Nevada, Ohio, and Virginia), representing regional variation, for a total of 13 discrete observations. Four different organizers hosted the shows; a variety which provides a more comprehensive picture of gun culture than shows hosted by a single organizer. The two largest shows featured more than 1,000 displays over 1.5 miles. We visited shows on Fridays (seven observations), Saturdays (two observations), and Sundays (four observations) to identify whether or not attendance or activities varied by standard workweek day or weekend days. We also visited shows at varying times throughout the day. Shows typically operate from 9:00 AM to 5:00 or 6:00 PM on Fridays and

Saturdays. Generally, Sundays feature shorter hours of operation; the shows we visited on Sundays were open from 9:00 AM to 3:00 or 4:00 PM. Our results are based on two Friday morning observations, three early afternoon and two late afternoon observations on Friday, two mid-afternoon Saturday observations, two Sunday morning observations, and two Sunday afternoon observations.

The observation periods ranged from one hour and fifteen minutes to two and one-half hours. Our activities included walking through shows together and separately, observing displays and interactions, listening to conversations, collecting print materials, and, sometimes, interacting with other attendees and vendors. Observations were documented via scratch notes and headnotes during the shows (Lindlof & Taylor, 2002). We wrote separate, detailed field notes after each show. Collectively, we generated more than 50 single-spaced pages of field notes and collected approximately 200 artifacts, including flyers, booklets, pamphlets, business cards, and stickers.

The data were evaluated via thematic content analysis. We adopted an inductive approach, analyzing the field notes and artifacts together and identifying themes in the data. First, we assigned each datum a category. Second, we evaluated the categories, ultimately refining and collapsing some categories. Third, we reviewed the categories until we determined that we identified distinct themes in the data. Finally, we verified the data and categories through the triangulation process. We compared both researchers' field notes, research assistants' field notes, and artifacts to ensure convergence across data sources (Patton, 2015).

FINDINGS

We identified several themes which suggest social learning occurs at gun shows. In the following sections, we present the findings for the following themes: (1) families with children attending and working at shows; (2) children engaged in a variety of activities, ranging from normal child play to potentially dangerous behavior; and (3) an environment characterized by racism, anti-Semitism, sexism and gender stereotypes, historical and political manipulation, and the conflation of safety and aggression.

Family Attendance and Work

Adults and families with children were observed at every show. Children were seen attending shows with adult men or in what appeared to be family units. The children ranged in age from infants in strollers to teenagers. Minors, from approximately 10 to 12 years of age to teenagers, were also observed working or assisting adults at vendor booths. They were engaged in a variety of activities, including handling ammunition, selling conducted energy devices (CEDs)[4], and modeling concealed carry purses. Children were observed at shows on weekends and Fridays during normal school hours, which suggests that some children attended gun shows

---

[4] CED is the proper term for the device commonly referred to as a "Taser," which is a brand of CED. CEDs are less lethal weapons that conduct energy to cause involuntary muscle contractions, thus rendering a person temporarily incapacitated (Alpert et al., 2011).

instead of school. Minors attending and working at gun shows, as well as the adults accompanying them, were overwhelmingly white.

Children's Activities

Children were observed engaging in a variety of activities from playing and bonding with adults to participating in objectively dangerous activity. Every show had booths and tables with standard children's toys, including stuffed animals, coloring books and crayons, geodes, brightly-colored jewelry, and remote-controlled vehicles. Children were observed expressing interest in or playing with these toys. Juvenile and adult male pairs were ubiquitous. We also observed some of these male children engaged in bonding activities with adult males. For example, a father was observed in the company of a son, who appeared to be approximately age 12 and attending his first gun show. The boy exclaimed, "Oh, dad, this is better than you ever described!" At another show, we observed three generations of men engage in what appeared to be a rite of passage. A middle-aged man stood with his arm around the shoulder of a smiling boy who appeared to be around age 15. A vendor handed an antique rifle to an elderly man who turned to the boy and said, "This is why we call this a legacy gun. I will give it to you. Someday, you will give this to your grandson."

Minors were observed engaged in a lot of unsupervised activity. At each show, we observed children, some of them quite young, walking around without adults, suggesting that they were permitted to do so or that their respective adults were distracted and the distraction created situations in which children could wander off unsupervised. At every show, children of varying ages were observed conversing with vendors and handling firearms and knives, many of them unsupervised by parents or guardians. We also observed Boy Scouts at one show selling popcorn at a table near the front doors of the hall and walking through the show soliciting customers.

Children of all ages were also observed witnessing or participating in potentially dangerous activity. We witnessed adults pointing firearms at other people, which runs contrary to safe firearm practices, in view of children. We also observed teenaged boys handle firearms in unsafe ways, such as pointing them at other people; they were engaging in behavior similar to the adults around them, suggesting that they learned this behavior at some point. In one scenario, two young girls were seen grabbing knives from a vendor table and pretending to stab each other. Their father would turn around and instruct them to cease the behavior. They would resume this behavior as soon as he returned to his discussion with the vendor and the vendor did not intervene in what was an imminently dangerous situation.

Firearms, especially handguns, are now available in a variety of colors. There are also several companies that produce colored toy guns that are indistinguishable from real guns. We observed these firearms at every gun show. Children find them visually appealing and are drawn to both the toy and real colored guns. We witnessed children commenting on and handling brightly colored and rhinestone encrusted "Hello Kitty" guns. We also observed children, assisted by adults, shooting rubber band guns, which may be interpreted as initial socialization into firearm culture.

Finally, some of the shows sold alcohol. At these shows, alcohol service began as soon as the shows opened at 9:00 AM. Children witnessed adults drink alcohol and handle firearms,

which is also an inherently dangerous combination of activities. In other words, children observed adults model unsafe firearm behaviors that they may later imitate.

Environment

Racism and anti-Semitism. Children were exposed to racist and anti-Semitic visual and verbal communication in profusion. Racism and anti-Semitism were ubiquitous. We observed abundant displays and objects that reflected or touted racist views. At every show, we observed American Confederacy objects. At some, we saw men dressed as Confederate soldiers walking around. Every show included vendors selling materials about the value of slavery, Sambo and Mammy objects, and images of former President Obama manipulated to look like Sambo or a gorilla. We also observed 'Jap Hunting Licenses,' copies of Bugliosi and Gentry's *Helter Skelter* (1974) about Manson's views on race war, depictions of Muslims with weapons and in suicide vests, and items emblazoned with the phrase, 'No more free stuff. Illegals out.' Anti-Semitism was also a consistent theme across shows. We observed a tremendous amount of Nazi paraphernalia, including flags, full uniforms, common and rare medals, copies of Hitler's *Mein Kampf* (1925, 1926), and items and uniform components with the insignia for the Nazi SS, known for their especially hostile view of Jewish people. Show attendees were also overheard freely discussing how great it was to find these rare objects to complete collections and vendors conveying pride with regard to "selling history."

Sexism and stereotypes. Sexism and gender stereotypes were also common themes across shows. Objects about women and for women were hypersexualized. Women were depicted as having long flowing hair with large breasts, tiny waists, and large, pert buttocks in high-heeled shoes. Clothing and concealed-carry purses for women were almost universally pink or in animal print and covered in rhinestones. We also observed themes at the intersection of sexism and both racism and political manipulation. For example, we interacted with female vendors attempting to sell CEDs to women by continually triggering them and relaying stories about how women must protect themselves from being raped by African American men, trafficking in racial and gender stereotypes. One of us noted that this sales scheme operates like classical conditioning, repeatedly pairing phenomena. We also observed myriad manipulated images of Nancy Pelosi, a Democrat who advocates a modicum of gun control, with handgun barrels redesigned to look like male genitalia in her mouth with "Lube Girl" scrolled across the images. Children were exposed to gender stereotypes and distorted images of women throughout the venues and, at no point, did we hear adults discourage these stereotypes or images.

History, politics, and manipulation. We observed, independently and in combination, historical and political manipulation. The Betsy Ross flag, the flag with 13 stripes and 13 stars in a circle, as well as the Gadsden flag, the yellow flag with the coiled snake emblazoned with, "Don't Tread on Me" were displayed at all shows. The First Navy Jack, a red and white striped flag with an outstretched snake and the phrase, "Don't Tread on Me" was also observed at some shows. Both versions of the "Don't Tread on Me" flag stem from a 1751 article in the *Pennsylvania Gazette* written by Benjamin Franklin about convict transportation, or the practice of transporting criminals from England to the American colonies. This flag was initially emblazoned with the phrase, "JOIN, or DIE," and various versions of this flag have been used by the United States Navy at multiple points in U.S. history (Streufert, 1994). These symbols reflect early American Independence, patriotism, and fighting spirit, but do not have anything to do with firearms, per se. Instead, these symbols have been co-opted by a segment of the American public

that believes that the Second Amendment to the Constitution of the United States confers unfettered rights to firearm ownership. Another common theme across shows included items painted or covered in the modern American flag. For example, we saw a rifle painted in an American flag motif, as well as images of items decorated in this way, at NRA tables.

We regularly observed the manipulation or misattribution of quotes to serve a particular purpose. One quote from George Washington, in particular, was frequently manipulated. The spurious quote reads, "A free people ought not only be armed and disciplined, but they should have sufficient arms and ammunition to maintain a status of independence from any who might attempt to abuse them, which would include their own government." This quote is partially accurate. According to the Mount Vernon Library, this quote is how Washington's First Annual Message to Congress on the State of the Union begins, but it is then "manipulated into a differing context and the remaining text is inaccurate" (Mount Vernon Ladies' Association [MVLA], 2016). The actual text of Washington's speech reads:

> A free people ought not only to be armed but disciplined; to which end a uniform and well-digested plan is requisite; and their safety and interest require that they should promote such manufactories as tend to render them independent of others for essential, particularly military, supplies (MLVA, 2016).

Another frequently observed spurious quote regarding the importance of firearms and attributed to Washington reads, "Firearms stand next in importance to the Constitution itself. They are the American people's liberty, teeth, and keystone under independence." According to the Mount Vernon Library, there is no evidence supporting this statement as an assertion from Washington—it is neither a quote nor is it even close to any utterance included in written materials or speeches (MLVA, 2016).

Western imagery was common across shows. In some cases, materials referenced the simplicity and virtues of Western life and cowboy culture. Other materials highlighted the benefits of life in the Wild West. A point highlighted in these materials and of interest to those discussing these materials was the ability to live a life free from intervention of the law, generally, and from government regulation of firearms, in particular.

A theme observed at every show was the equation of former President Obama and Hitler. Those advancing this argument via written materials and in discussion assert that Hitler disarmed the populace, which is the only reason World War II occurred and, for those who believe in the Holocaust, the reason that people of the Jewish faith were subject to genocide. They assert that President Obama, and anyone else advocating any degree of firearm regulation, are attempting to disarm the populace as Hitler did, which will render them susceptible to genocide. However, this argument sends mixed messages to observers. The argument that Hitler was despicable for disarming the populace coexists with the equally accepted argument that Hitler was a wise man for seeking to exterminate Jewish people. We observed no attempt to advance a nuanced argument regarding Hitler or to reconcile these seemingly contradictory perspectives. Related to firearms and religion, we observed vendors selling materials that equate gun control and attacks on Christianity. In some cases, vendors displayed materials suggesting that firearm regulation was intended to facilitate a holocaust of Christians, which is happening because former President Obama is Muslim. However, we observed no reference to other politicians in these materials. At

one show, we saw children's books about Christianity, the virtues of firearms, and the evil of gun control.

Finally, we observed displays for the Oath Keepers at most shows. Generally, the Oath Keepers appeal to a sub-population of active military, veterans, and first responders, particularly law enforcement officers. These populations swore an oath to defend the Constitution of the United States and to uphold the law, and will not obey orders that they view to be unconstitutional, including disarming U.S. citizens. For some people in these groups, this includes any attempt at firearm regulation.

Children attending these events were subject to these historical inaccuracies and misrepresentations. We did not observe a single instance of an adult with a child correcting these representations. It is possible that the adults may not be aware that vendors were presenting an inaccurate representation of history, which increases the likelihood that these inaccuracies will be reinforced at home.

Safety, fear, and violence. In total, of the thousands of displays we observed, we saw three displays about gun safes, one display about recording firearms information, one display about keeping firearms away from children, and one table about the Veterans Affairs Crisis Line. Otherwise, all of the tables, displays, and goods framed discussions about safety as being aggressive. These materials advanced the use of firearms and violence as problem-solving methods and asserted that there are two types of people in the world—hunters and the hunted. These perspectives send two messages. First, if you are not preparing to defend yourself, then you are allowing yourself to be a victim. Second, the best defense is a good offense. It is better to be aggressive and strike first than to wait and observe how people act. At no point did we observe adults explaining to children under their supervision that they should observe behavior before deciding how to engage people. There appeared to be an uncritical acceptance of the aggression narrative.

Thematic Differences

The only significant differences observed across gun shows relate to Western imagery. Two Friday afternoon observations were made at a show hosted by a particular organizer in Nevada. These shows featured more typically Western or cowboy items than other shows, including cowboy hats, chaps, cowboy boots, spurs, and animal hides and pelts. The increased representation of these items at shows hosted by this organizer reflected the cowboy archetype (Hemenway, 2004) and the predominance of the Western or cowboy firearm subculture (Kohn, 2004; Taylor, 2009). All of the enumerated themes were observed at these shows but were eclipsed by the Western or cowboy subculture.

DISCUSSION

Firearm violence is a pernicious problem that continues to plague the United States despite innumerable social, political, and economic changes. The reasons for the persistence of this public safety and public health problem have been elusive. We elected to explore firearm behavior in an environment in which firearms are theoretically sold through legal channels to investigate possible explanations for this phenomenon. Collectively, the imagery and exchanges we observed promoted racism, anti-Semitism, sexism, gender stereotypes, historical and political

manipulation; conflated safety and aggression; and conveyed the messages that protecting unfettered rights to possess firearms is patriotic, attempts to regulate firearms are undemocratic, it is acceptable to use force to resist firearm regulation, and, in some cases, it is acceptable to use firearms to address some problems and some people with whom you disagree. We also viewed many children attending or working at shows with adults, which facilitates intergenerational communication of messages about the use of firearms, violence, and safety in an environment propagating biased views. These observations also provide support for social learning theory and identify one mechanism through which some white males may be learning to use firearms to effect certain types of violence.

Children were at gun shows with adults or families, supporting the interactional dimension of differential association. The normative dimension was supported by adults and families taking children to an environment supportive of a specific set of norms. Many of these children were quite young—children in strollers and elementary-school age—lending support for the priority element. These associations last longer, occupy more time (duration), occur more often (frequency), and involve people with whom children have important relationships (intensity) thereby having a greater effect on behavior.

We did not tap into children's attitudes or definitions, but we observed their environment and behavior. They were exposed to an environment that is supportive of firearms, indisputably irresponsible contact with firearms, racism, anti-Semitism, sexism, manipulated history, political manipulation in isolation and in relation to Christianity, and a discourse of fear—the view that violence is imminent and that the best way to defend oneself is to be aggressive and strike first. We also witnessed their behavior—they were mostly unaffected by the proximity to firearms, they were interested in firearms, and we often saw them touching firearms and engaging in unsafe firearm behavior, suggesting that they were comfortable with or unafraid of firearms.

In some cases, children received overt positive reinforcement from parents, grandparents, and vendors (e.g., language, smiling, arm around the shoulder) supporting differential reinforcement. In other cases, their behavior was reinforced via people around them engaging in similar behavior and neither adult attendees nor vendors providing negative feedback on their behavior (e.g., underage handling of firearms, pointing firearms at people) or some of the characteristics of the environment (e.g., racism). The mere presence of their parents or guardians in this environment and the absence of negative feedback regarding messages communicated in that environment may be interpreted as tacit approval of particular ideologies—my adult brought me here, so this must be acceptable.

We observed less support for imitation due to the restrictions of the environment, the prohibition of additional data collection, and the absence of a longitudinal research component, but it was still evident. For example, we witnessed children and teenagers observe a parent's behavior and then engage in it (e.g., the way an adult looks at or examines weapons or makes inquiries to vendors; improperly handling firearms). Imitation is the most important in the initial acquisition of behavior, which is more of a concern in this study due to the younger ages of most of the children we observed.

In sum, our observations present a picture in which some children, particularly white males, are socialized in an environment where bias, firearms, and depictions of violence are normalized. Additionally, aggression, violence, and firearms are promoted as methods for

addressing fear or perceived problems. The confluence of these themes provides some insight into how some white males may be learning to use firearms to effect self-harm or violence on others. Certainly, not all young men who use firearms to cause harm previously attended gun shows and not all boys who attend gun shows perpetrate violence later in life; however, some children are exposed to messages which suggest violence is acceptable and desirable, via the diffusion of behavior. They may be in differential association with peers who have attended shows and, as Warr (2002) explained, these associations include virtual peer groups identified via the Internet, news, and entertainment media. These norms may influence their definitions of views and behavior that they imitate and for which they receive reinforcement from the same peers. Given past research on the influence of culture on knowledge and behavior (Durkheim, 2008/1915; Geertz, 1973; Kohn, 2004; Seidman, 2004; Taylor, 2009), including firearm behavior (Altheimer & Boswell, 2012; Corzine et al., 1999; Kopel, 1992; Lemieux, 2014) and violence, generally (Perry, 1997; Phipps et al., 2018), it is critical that we consider more thoroughly the potential impact of allowing minors to attend events that transmit biased and violent messages related to firearms, such as gun shows.

Limitations

These study findings provide insight into how certain firearm behaviors may develop, but the study design featured three limitations. First, the shows we attended may not be representative of all gun shows. We selected shows in three states in different regions of the country. We also sought out shows hosted by different organizers to diversify the type of wares sold at the shows and, by extension, the attendees attracted to the shows. These efforts were intended to ensure variation in the aspects of firearm culture at each show, but it is possible that these efforts were inadequate to ensure diversity. Second, our sample featured demographic homogeneity. The population we observed was unintentionally and overwhelmingly male and white. A small proportion of vendors and attendees at each show were female and were often accompanied by males; we observed very few people of color at these shows. It is possible that this demographic distribution reflects insufficient variation in show selection; it is also possible that gun show participation is a primarily white male activity. In either case, it is possible that the perspectives and behaviors observed at gun shows may vary with the diversification of vendors and attendees. Finally, we only collected observational data. The initial study design, approved by the Institutional Review Board, included gun show observations, as well as anonymous surveys and interviews about firearm safety and violence conducted with gun show attendees. We contacted the organizers of three shows to request permission and purchase vendor tables. In each case, the show organizers thought that our questions were neutral, but denied our requests. The organizers feared that asking show attendees about their views on firearm safety and violence would render them, "aggressive and violent." The show organizers felt that they could not guarantee our safety in the venues or the parking lots, so they refused to sell table space to us. Therefore, we were unable to collect additional data from show attendees.

Policy Implications and Future Research

The most obvious policy implication suggested by these results is to require that people must be at least 18 years of age to be admitted to gun shows. The most efficacious way to implement this reform would be through federal law, which would prevent states from avoiding or diluting the reform. This reform is also more easily enforced than other possible reforms. Gun show organizers would be responsible for checking government-issued identification, and law

enforcement agencies could periodically conduct undercover operations to ensure that minors are not present at the shows in the same way they conduct undercover operations at venues that sell or serve alcohol. This reform will not prevent exposure to biased attitudes or dangerous firearm behaviors in the home, but it can reduce unintentional or concentrated exposure to the phenomena identified in this study.

These findings support the role that social learning may play in certain types of firearm violence committed by some white males and suggest some avenues of inquiry regarding the presence and behavior of children at gun shows, whether and how suicide is discussed, and how firearm violence is discussed and portrayed in all forms of media. The findings also identified particular subcultures within the overarching firearm culture. Future work should identify how firearm subcultures differ, and how children are impacted. Other scholarship could focus on the perpetrators of firearm violence to learn more about their early socialization into firearm culture or experience at gun shows.

REFERENCES

Akers, R. L. (1998). *Social learning and social structure: A general theory of crime and deviance*. Boston, MA: Northeastern University Press.

Akers, R. L., & Sellers, C. S. (2009). *Criminological theories: Introduction, evaluation, and application* (5th ed.). New York, NY: Oxford University Press.

Alpert, G. P., Smith, M. R., Kaminski, R. J., Fridell, L. A., MacDonald, J., & Kubu, B. (2011). *Police use of force, Tasers, and other less-lethal weapons*. Washington, DC: U.S. Department of Justice, National Institute of Justice.

Altheimer, I., & Boswell, M. (2012). Reassessing the association between gun availability and homicide at the cross-national level. *American Journal of Criminal Justice, 37*(4), 682-704.

American Foundation for Suicide Prevention. (2016). *Suicide statistics*. Retrieved from https://afsp.org/about-suicide/suicide-statistics

Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology, 53*, 27-51.

Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.

Bankston, W. B., & Thompson, C. Y. (1989). Carrying firearms for protection: A causal model. *Sociological Inquiry, 59*(1), 75-87.

Blithe, S. J., & Lanterman, J. L. (2017). Camouflaged collectives: Managing stigma and identity at gun events. *Studies in Social Justice, 11*(1), 113-135.

Braga, A. A., Wintemute, G. J., Pierce, G. L., Cook, P. J., & Ridgeway, G. (2012). Interpreting the empirical evidence on illegal gun market dynamics. *Journal of Urban Health, 89*(5), 779-793.

Brennan, I. R., & Moore, S. C. (2009). Weapons and violence: A review of theory and research. *Aggression and Violent Behavior, 14*, 215-225.

Brosius, J. P., & Campbell, L. M. (2010). Collaborative event ethnography: Conservation and development trade-offs at the Fourth World Conservation Congress. *Conservation & Society, 8*(4), 245-255.

Bugliosi, V., & Gentry, C. (1974). *Helter skelter: The true story of the Manson murders*. New York, NY: W. W. Norton & Company.

Büscher, B. (2014). Collaborative event ethnography: Between structural power and empirical nuance? *Global Environmental Politics, 14*(3), 132-138.

Bureau of Alcohol, Tobacco, Firearms, and Explosives. (2007). *The Bureau of Alcohol, Tobacco, Firearms, and Explosives' investigative operations at gun shows*. Washington, DC: Author.

Carter, P. M., Walton, M. A., Roehler, D. R., Goldstick, J., Zimmerman, M. A., Blow, F. C., & Cunningham, R. M. (2015). Firearm violence among high-risk emergency department youth after an assault injury. *Pediatrics, 135*(5), 805-817.

Centers for Disease Control and Prevention. (2016a). *2014 United States firearm deaths and rates per 100,000* [WISQARS]. Retrieved from http://webappa.cdc.gov/cgi-bin/broker.exe

Centers for Disease Control and Prevention. (2016b). *2014 United States firearm gunshot nonfatal injuries and rates per 100,000* [WISQARS]. Retrieved from http://webappa.cdc.gov/cgi-bin/broker.exe

Centers for Disease Control and Prevention. (2016c). *2014 United States suicide firearm deaths and rates per 100,000* [WISQARS]. Retrieved from http://webappa.cdc.gov/cgi-bin/broker.exe

Cole, T. B. (2008). Firearm sales via "gun show loophole" thwart efforts to reduce gun violence. *JAMA, 300*(6), 640-641.

Cook, P. J., & Ludwig, J. (1996). *Guns in America: Results of a comprehensive national survey on firearms ownership and use*. Washington, DC: Police Foundation.

Cook, P. J., & Ludwig, J. (2000). *Gun violence: The real costs*. New York, NY: Oxford University Press.

Corso, P. A., Mercy, J. A., Simon, T. R., Finkelstein, E. A., & Miller, T. R. (2007). Medical costs and productivity losses due to interpersonal and self-directed violence in the United States. *American Journal of Preventive Medicine*, 32(6), 474-482.

Corzine, J., Huff-Corzine, L., & Whitt, H. P. (1999). Cultural and subcultural theories of homicide. In M. D. Smith & M. A. Zahn (Eds.), *Homicide: A sourcebook of social research* (pp. 42-57). Thousand Oaks, CA: Sage Publications, Inc.

Curry, L. A., Nembhard, I. M., & Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation, 119*(10), 1442-1452.

Delmas, J. C., & Bankston, W. B. (1993). The effect of racial prejudice on the ownership of firearms: A test of the fear and loathing hypothesis. *National Journal of Sociology, 7*, 139-161.

Denzin, N. K., & Lincoln, Y. S. (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Duerringer, C. M., & Justus, Z. S. (2016). Tropes in the rhetoric of gun rights: A pragma-dialectic analysis. *Argumentation and Advocacy, 52*(3), 181-199.

Durkheim, E. (2008/1915). *The elementary forms of the religious life*. Mineola, NY: Dover Publications, Inc.

Duwe, G. (2007). *Mass murder in the United States: A history*. Jefferson, NC: McFarland & Company.

Federal Bureau of Investigation. (2016a). *Latest crime statistics released: Increase in violent crime, decrease in property crime*. Retrieved from www.fbi.gov/news/stories/latest-crim-statistics-released

Federal Bureau of Investigation. (2016b). *Uniform Crime Report statistics: Estimated total violent crime in the United States, 1960 through 2012*. Retrieved from www.ucrdatatool.gov/Search/Crime/State/RunCrimeStatebyState.cfm

Federal Bureau of Investigation. (2017). *Crime in the U.S. 2016: Preliminary semiannual Uniform Crime Report, January-June 2016, Table 1*. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/preliminary-semiannual-uniform-crime-report-januaryjune-2016/tables/table-1

Follman, M., Lurie, J., Lee, J., & West, J. (2015). *What does gun violence really cost?* Retrieved from www.motherjones.com/politics/2015/04/true-cost-of-gun-violence-in-America

Friedman, U. (2016, October 10). "I'm British—I don't understand this": A journalist grapples with U.S. gun culture. *The Atlantic*. Retrieved from https://www.theatlantic.com/international/archive/2016/10/gary-younge-gun-violence-america/503045/

Ganesh, S., & Stohl, C. (2013). From Wall Street to Wellington: Protests in an era of digital ubiquity. *Communication Monographs, 80*(4), 425-451.

Geertz, C. R. (1973). *The interpretation of cultures*. New York, NY: Basic Books.

Gusterson, H. (1997). Studying up revisited. *PoLAR: Political and Legal Anthropology Review, 20*(1), 114-119.

Hannerz, U. (2003). Being there…and there…and there!: Reflections on multi-site ethnography. *Ethnography, 4*(22), 201-216.

Hemenway, D. (2004). *Private guns, public health*. Ann Arbor, MI: The University of Michigan Press.

Hepburn, L. M., Miller, M., Azrael, D., & Hemenway, D. (2007). The U.S. gun stock: Results from the National Firearm Survey. *Injury Prevention, 13*(1), 15-19.

Hitler. A. (1925, 1926). *Mein kampf*. Munich, Germany: Franz Eher Nachfolger GmbH.

Hogan, J. M., & Rood, C. (2015). Rhetorical studies and the gun debate: A public policy perspective. *Rhetoric & Public Affairs, 18*(2), 359-371.

Ikenberry, K., & Gold, W. (1967, July 27). Brown hails Cambridge riot: Holds parley after release from lockup. *The Evening Star*, pp. A1, A5.

Jamieson, C. (2013). Gun violence research: History of the federal funding freeze. *Psychological Science Agenda*. Retrieved from www.apa.org/science/about/psa/2013/02/gun-violence.aspx

Kellerman, A.L. (1993). Obstacles to firearm and violence research. *Health Affairs, 12(*4), 142-153.

Kellerman, A. L., Rivara, F. P., Rushforth, N. B., Banton, J. G., Reay, D. T., Francisco, J. T., …Somes, G. (1993). Gun ownership as a risk factor for homicide in the home. *The New England Journal of Medicine, 329*(15), 1084-1091.

Kessler, G. (2013). Bill Clinton over-the-top "fact" on mass shooting. *The Washington Post*. Retrieved on 8th August 2013 from http://www.washingtonpost.com/blogs/factchecker/post/bill-clintons-over-the-top-fact-on-massshootings/2013/01/10/7040d61e-5b7a-11e2-9fa9-5fbdc9530eb9_blog.html

Kohn, A. A. (2004). *Shooters: Myths and realities of America's gun cultures*. New York, NY: Oxford University Press.

Kopel, D. (1992). *The samurai, the Mountie, and the cowboy: Should America adopt the gun controls of other democracies?* Buffalo, NY: Prometheus Books.

Koper, C. S. (2014). Crime gun risk factors: Buyer, seller, firearm, and transaction characteristics associated with gun trafficking and criminal gun use. *Journal of Quantitative Criminology, 30*(2), 285-315.

Lemieux, F. (2014). Effect of gun culture and firearm laws on gun violence and mass shootings in the United States: A multi-level quantitative analysis. *International Journal of Criminal Justice Sciences, 9*(1), 74-93.

Lindlof, T. R., & Taylor, B. C. (2002). *Qualitative communication research methods*. Thousand Oaks, CA: Sage Publications.

Makarios, M. D., & Pratt, T. C. (2012). The effectiveness of policies and programs that attempt to reduce firearm violence: A meta-analysis. *Crime & Delinquency, 58*(2), 222-244.

Marcus, G. E. (1995). Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual Review of Anthropology, 24,* 95-117.

Mays, N., & Pope, C. (1995). Rigour and qualitative research. *BMJ, 311,* 109-112.

McGarrell, E. F., Corsaro, N., Melde, C., Hipple, N. K., Bynum, T., & Cobbina, J. (2013). Attempting to reduce firearms violence through a Comprehensive Anti-Gang Initiative (CAGI): An evaluation of process and impact. *Journal of Criminal Justice, 41*(1), 33-43.

Metzl, J. M., & MacLeish, K. T. (2015) Mental illness, mass shootings, and the politics of American firearms. *American Journal of Public Health, 105*(2), 240-249.

Miller, M., Azrael, D., & Hemenway, D. (2013). Firearm and violent death in the United States. In D. W. Webster & J. S. Vernick (Eds.), *Reducing gun violence in America: Informing policy with evidence and analysis* (pp. 1-20). Baltimore, MD: The Johns Hopkins University Press.

Mount Vernon Ladies' Association. (2016). Spurious quotations. Retrieved from www.mountvernon.org/digital-encyclopedia/article/spurious-quotations/

Nader, L. (1972). Up the anthropologist: Perspectives gained by studying up. In D. H. Hymes (Ed.), *Reinventing anthropology* (pp. 284-311). Ann Arbor, MI: University of Michigan Press.

Olmstead, A. D. (1988). Morally controversial leisure: The social world of gun collectors. *Symbolic Interaction, 11*(2), 277-287.

Orpinas, P., Murray, N., & Kelder, S. (1999). Parental influence on students' aggressive behaviors and weapon carrying. *Health Education & Behavior*, *26*(6), 774-787.

Ott, B. L., Aoki, E., & Dickinson, G. (2011). Ways of (not) seeing guns: Presence and absence at the Cody Firearms Museum. *Communication and Critical/Cultural Studies, 8*(3), 215-239.

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research, 34*(5 Part II), 1189-1208.

Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: Sage Publications.

Perry, B. (1997). Incubated in terror: Neurodevelopmental factors in the "cycle of violence." In J. Osofsky (Ed.), *Children in a violent society* (pp. 124-149). New York, NY: Guilford Press.

Petrosino, A., Campie, P., Pace, J., Fronius, T., Guckenburg, S., Wiatrowski, M., & Rivera, L. (2015). Cross-sector, multi-agency interventions to address urban youth firearms violence: A Rapid Evidence Assessment. *Aggression and Violent Behavior, 22,* 87-96.

Phipps, A. Ringrose, J., Renold, E., & Jackson, C. (2018). Rape culture, lad culture, and everyday sexism: Researching, conceptualizing and politicizing new mediations of gender and sexual violence. *Journal of Gender Studies, 27*(1), 1-8.

Richardson, E. G., & Hemenway, D. (2011). Homicide, suicide, and unintentional firearm fatality: Comparing the United States with other high-income countries, 2003. *The Journal of Trauma: Injury, Infection, and Critical Care*, *70*(1), 238-243.

Robbins, P. (2002). Obstacles to a First World political ecology? Looking near without looking up. *Environmental and Planning A*, *34*(8), 1509-1513.

Roeder, O., Eisen, L. B., & Bowling, J. (2015). *What caused the crime decline?* New York, NY: Brennan Center for Justice, New York University School of Law.

Seidman, S. (2004). *Contested knowledge: Social theory today* (3rd ed.). Malden, MA: Blackwell Publishing.

Smith, E. L., & Cooper, A. (2013). *Homicide in the U.S. known to law enforcement, 2011* (Report No. NCJ 243035). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Stanford Geospatial Center. (2016). *Stanford mass shootings in America (MSA)* [Data file and code book]. Retrieved from https://library.stanford.edu/projects/mass-shootings-america

Streufert, D. (1994). *The Gadsden Flag*. Retrieved from www.usflag.org/history/gadsden.html

Sutherland, E. H. (1947). *Principles of criminology* (4th ed.). Philadelphia, PA: Lippincott.

Taylor, J. D. (2009). *American gun culture: Collectors, shows and the story of the gun*. El Paso TX: LFB Scholarly Publishing LLC.

Thompson, J. A., & Stidham, R. (2010). Packing heat in the Tar Heel State: A county-level assessment of concealed carry permits. *Criminal Justice Review*, *35*(1), 52-66.

Vittes, K. A., Sorenson, S. B., & Gilbert, D. (2003). High school students' attitudes about firearms policies. *Journal of Adolescent Health*, *33*, 471-478.

Walsh, A. (2015). *Criminology: The essentials* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Warr, M. (2002). *Companions in crime: The social aspects of criminal conduct*. New York, NY: Cambridge University Press.

Weinberger, S. E., Hoyt, D. B., Lawrence, H. C., Levin, S., Henley, D. E., Alden, E. R., …Hubbard, W. C. (2015). Firearm-related injury and death in the United States: A call to action from 8 health professional organizations and the American Bar Association. *Annals of Internal Medicine*, *162,* 513-516.

Weiner, J., Wiebe, D. J., Richmond, T. S., Beam, K., Berman, A. L., Branas, C. C., …Webster, D. (2007). Reducing firearm violence: A research agenda. *Injury Prevention*, *13*(2), 80-84.

Wintemute, G. J. (2007). Gun shows across a multistate American gun market: Observational evidence of the effects of regulatory policies. *Injury Prevention, 13*(3), 150-155.

Wintemute, G. J. (2013). Comprehensive background checks for firearm sales: Evidence from gun shows. In D. W. Webster & J. S. Vernick (Eds.), *Reducing gun violence in America: Informing policy with evidence and analysis* (pp. 95-107). Baltimore, MD: The Johns Hopkins University Press.

Wintemute, G. J., Hemenway, D., Webster, D., Pierce, G., & Braga, A. A. (2010). Gun shows and gun violence: Fatally flawed study yields misleading results. *American Journal of Public Health, 100*(10), 1856-1860.

Wright, J. D., Rossi, P., & Daly, K. (1983). *Under the gun*. Hawthorne, NY: Aldine de Gruyter.

Yamane, D. (2017). The sociology of U.S. gun culture. *Sociology Compass, 11*(7), 1-10.

Zimring, F. E., & Hawkins, G. (1999). *Crime is not the problem: Lethal violence in America*. New York, NY: Oxford University Press.

Jennifer L. Lanterman, Ph.D. is an Assistant Professor of Criminal Justice at the University of Nevada, Reno. Her research interests include the institutional and community-based management and treatment of high-risk and high-need offenders, the etiology and management of firearm violence, and applied ethics. Her work has been published in journals, including *Criminal Justice and Behavior*, *Criminology and Public Policy*, *Feminist Criminology*, *Justice Research and Policy, Studies in Social Justice*, and *The Prison Journal.*

Sarah J. Blithe, Ph.D. is an Associate Professor of Communication Studies at the University of Nevada, Reno. Her research interests include social justice issues, particularly organizational and policy inequalities; occupational identities; and feminist pedagogy. Her work has been published in academic journals such as *Human Relations*, *Management Communication Quarterly*, *Women's Studies in Communication, Women & Language,* and *Studies in Social Justice.* Recent projects include her book, *Gender Equality and Work Life Balance: Glass Handcuffs and Working Men in the U.S.* and a two-year study of firearm culture.

Preliminary Investigation of Pharmaceutical Counterfeiters in the United States

JAY P. KENNEDY
Michigan State University

KSENIA PETLAKH
SUNY Delhi

Jeremy M. Wilson
Michigan State University

Abstract

Pharmaceutical counterfeiting is one of the most pressing public health concerns in the United States and abroad, and recently an increasing amount of scholarly attention has been given to this issue. However, the extant literature lacks a systematic investigation of the specific roles undertaken within pharmaceutical counterfeiting schemes. We attempt to address this knowledge gap through an analysis of individuals convicted in federal court of counterfeiting offenses related to U.S.-based pharmaceutical counterfeiting incidents. From our investigation we identified six distinct roles that can classify an individual's involvement in a pharmaceutical counterfeiting scheme: *Key/Lead, Supporting, Sales/Distribution to Legitimate Others, Sales/Distribution to Illegitimate Others, Production,* and *Purchase.* Through an examination of these roles and their distinct characteristics we propose several role-related crime prevention strategies. Additionally, we discuss the broader implications of our work for the study of pharmaceutical counterfeiting and identify directions for future research.

Keywords: Counterfeiting; offenders; pharmaceuticals

INTRODUCTION

Across the globe, counterfeit pharmaceuticals have led to millions of deaths and created a wide range of health and safety risks for millions of people (Catizone, 2006; Cockburn et al., 2005; Harris, Stevens, & Morris, 2009; Hoseini et al., 2011; International Intellectual Property Institute, 2003; Qureshi et al., 2011; Yar, 2008). Numerous types of products are exploited by pharmaceutical counterfeiters, including lifestyle drugs such as Viagra® and Cialis®, as well as life-saving drugs such as medications used in the treatment of cancer and AIDS. While recent years have seen an increase in research and scholarship addressing pharmaceutical counterfeiting and ways to prevent its proliferation (Kennedy, Haberman & Wilson, 2016; Lavorgna, 2015), there has been little research directly exploring the individuals involved in these schemes.

Work by Spink and his colleagues (2010; 2013) has attempted to draw together a general typology of product counterfeiters, yet, these works treat all counterfeiting schemes as the same.

When viewed through the lens of criminal opportunity theories (Clarke, 1997; Cohen & Felson, 1979), such an assumption seems misguided as the elements of counterfeiting schemes likely vary by the product being counterfeited. While some counterfeiting roles are likely to be found in almost all schemes, certain roles may be more important for particular types of schemes. To date, there has been no direct research seeking to systematically investigate and subsequently categorize the specific roles individuals undertake as part of a pharmaceutical counterfeiting scheme. We attempt to fill this gap by articulating a typology of pharmaceutical counterfeiting roles.

The identification and classification of pharmaceutical counterfeiting scheme roles is an important and necessary step in understanding the opportunity structure for these crimes because it allows us to gain an understanding of who is responsible for specific parts of the criminal scheme. Currently, we label all individuals involved with these schemes with the general term "counterfeiter," which may be an inappropriate overgeneralization. It is highly unlikely that the individuals involved in these schemes are generalists who perform all aspects of all necessary roles. The sophistication of many pharmaceutical counterfeiting schemes necessitates the involvement of multiple individuals as in some cases it is extremely difficult for one person to handle the manufacturing, distribution, and sales of a counterfeit drug.

Using the current designation, we would find that in any one pharmaceutical counterfeiting scheme there may be hundreds of "counterfeiters" all with important and necessary roles in that scheme. While these roles are necessarily related, using one common term to describe each of them likely masks many of the important role-based differences that exist. Furthermore, using a single descriptor for the individuals involved in these schemes may end up masking important differences in the individuals involved in pharmaceutical counterfeiting schemes. Having a better understanding of the unique roles undertaken in pharmaceutical counterfeiting schemes allows for the development of more targeted situational responses (Clarke, 1980).

This article examines the characteristics and activities of individuals involved in pharmaceutical counterfeiting schemes occurring within the United States and uncovered by federal and state authorities from 2000 to 2008. Our aim was to develop a better understanding of the offender roles most commonly found in pharmaceutical counterfeiting schemes and to identify unique features of these roles that can be leveraged when developing situationally-appropriate responses. We accomplished this aim through an exploration of the individuals involved in pharmaceutical counterfeiting schemes, the roles these individuals played in their respective schemes, and by developing an understanding of how these roles are interrelated and at times overlapping.

PHARMACEUTICAL COUNTERFEITING

Pharmaceutical counterfeiting schemes are a harmful and dangerous form of product counterfeiting, which is a crime that involves the unauthorized production of a product bearing the trademark of a legitimate good. The use of a recognized trademark by an unauthorized party is a violation of the brand owner's intellectual property rights and is punishable by the federal government under intellectual property rights laws. According to several governmental and non-governmental organizations (Business Action to Stop Counterfeiting and Piracy, 2011;

International Anti-Counterfeiting Coalition, 2005; U.S. Government Accountability Office, 2010), counterfeiting costs consumers, businesses, and governments several hundreds of billions of dollars each year. Beyond the costs of these crimes, pharmaceutical counterfeiting can create serious health problems for unsuspecting patients.

Counterfeit goods are typically described as either deceptive or non-deceptive (Grossman & Shapiro, 1988). Deceptive counterfeits attempt to fool consumers into purchasing a phony product that appears to be legitimate, while non-deceptive counterfeits are often produced to meet consumer demand for look-alike products. Counterfeit pharmaceuticals are deceptive counterfeits, as counterfeiters are directly targeting consumers who are in search of legitimate pharmaceutical products. The range of goods that have been counterfeited is vast and includes clothing, jewelry, personal care items like shampoo and lotion, components used in automotive and aircraft manufacturing, and luxury goods such as watches and purses. Unfortunately, the products that have the potential to cause the most harm to consumers and society are counterfeit pharmaceuticals.

Counterfeit Pharmaceuticals

Counterfeit goods do not always create health and safety concerns for consumers. However, many counterfeit products do have the potential to threaten consumers' lives, particularly when these products are made with ineffective or harmful substitute materials, or are produced through sub-standard manufacturing processes. A number of different activities constitute pharmaceutical counterfeiting, such as altering the labeling or packaging of legitimate products so that they no longer reflect what is actually in the package, diluting legitimate pharmaceuticals to be less potent, and the creation of completely fake drugs that contain little to no active ingredients. In each case, counterfeit pharmaceuticals have reduced, or non-existent, medicinal qualities and are not likely to function in the manner expected by patients or physicians (Bunker, 2007; Yar, 2008).

Consumers likely do not expect being deceived and have no way of knowing or determining the authenticity of the pharmaceutical products they consume. Because counterfeits mimic legitimate drugs in appearance, and because consumers inherently trust the legitimacy of the pharmaceutical products they consume, the potential for patient harm from counterfeit pharmaceuticals is great. For example, by some estimates as many as 700,000 people die each year from malaria and tuberculosis because they have taken ineffective counterfeit vaccinations (Harris, Stevens & Morris, 2009).

It is likely that people living in impoverished conditions with a lack of access to modern medical infrastructure are those most likely to be impacted by the counterfeit drug trade (Newton et al., 2006). However, work by Trent (2013) suggests that regardless of one's economic status or wealth, the very young and the elderly are most likely to suffer the harmful effects of counterfeit medications. At the same time, the consumerism found in more affluent societies, such as the United States, fuels a multitude of additional opportunities for pharmaceutical counterfeiters. This is particularly true when it comes to demand for cosmetic or lifestyle pharmaceuticals such as Botox® or Viagra®.

Whether the drug is intended to save a life or simply enhance one's lifestyle, when a counterfeit leads to negative side-effects, ineffectiveness, and patient injury it may be concluded that there is something wrong with the legitimate drug (Caudron et al., 2008; Kelesidis et al., 2007; Newton, Green & Fernández, 2010). As a result, counterfeit pharmaceuticals pose a direct threat to the individuals that consume these illicit goods, but they also harm potential future patients who would receive legitimate drugs. Associating a counterfeit pharmaceutical's negative characteristics with a legitimate pharmaceutical may lead doctors to refrain from issuing the drug, and may even lead to drug recalls or legal suits against the drug maker. As a result, the chain of harm that results from the growth of product counterfeiting reaches well beyond the end consumer who was initially harmed by the counterfeit product, ultimately touching future consumers, physicians, pharmaceutical companies, and society at large.

Counterfeiters

Early stages of the study of unique forms of crime frequently include attempts to assess what the criminal offenders engaged in that particular crime look like. For example, the delineation of who the white-collar offender was became one of Sutherland's (1940) greatest contributions to the field; it also became the subject of much scholarly debate (Burgess, 1950; Hartung, 1950; Sutherland, 1945; Tappan, 1947). While offender-based definitions of white-collar crime appear to have lost their influence, the recognition that there was something inherently unique about these offenders was critical for the development of white-collar crime scholarship.

Similarly, cybercrime research has acknowledged the usefulness of developing an accurate profile of the cybercriminal (Nykodym, Taylor & Vilela, 2005; Rogers, 2003), particularly when cyber attacks originate from within an organization or group (Shaw, 2006). Understanding how characteristics of cybercriminals relate to the type of cybercrime being committed can help law enforcement agencies become more efficient at detecting and apprehending these individuals (Chakravarthy, 2014). Because there are many different activities that need to happen in order for a pharmaceutical counterfeiting scheme to be successful (Kennedy, Haberman & Wilson, 2016), identifying the roles most commonly found in these schemes, as well as any unique characteristics of the individuals who occupy these roles is important to future crime prevention efforts.

Counterfeiters are successful in their crimes, in part, because they are able to create efficient organizations where the criminal workload is shared. For pharmaceutical counterfeiting to be successful, multiple people must be involved in the manufacturing, packaging, shipping, and distribution of counterfeit goods. There are likely few 'lone wolves' or solitary offenders searching the environment for someone to victimize. Rather, many counterfeiters are highly organized and collaborative, and the growth of counterfeiting across the globe has increased the need for organization and the coordination of activities related to counterfeiting schemes. As a result, the term 'counterfeiter' can be used to describe any number of individuals involved in various counterfeiting operations, and it is unlikely that a single profile appropriately captures all counterfeiter roles.

METHODS

Data

The data used in this study came from a product counterfeiting incident database developed and maintained by the Center for Anti-Counterfeiting and Product Protection (A-CAPP) at Michigan State University. This database is a collection of incident-level data gathered from open-source materials related to product counterfeiting schemes occurring within the United States between 2000 and 2008. Information regarding the processes used to develop this database can be found in Heinonen and Wilson (2012). From this data set, we first selected any cases that were related to pharmaceutical counterfeiting. Once all of the pharmaceutical incidents were identified, the data set was further reduced to include only those cases where the drugs involved in the scheme were prescription pharmaceuticals.

It may be the case that the type of pharmaceutical product counterfeited (e.g., vitamins, supplements, diabetic test strips, prescription drugs, etc.) significantly affects the structure of the scheme, as well as the roles undertaken by individuals involved in the scheme. We selected only those cases involving a prescription pharmaceutical to create a parsimonious typology, and because these are the most heavily regulated pharmaceutical products available to consumers. However, the role categorizations we develop may overlap conceptually with the roles found in schemes relating to other pharmaceutical products. As such, the typology we develop may serve as a useful benchmark for the development of other counterfeiter typologies.

Finally, we examined only those cases where an individual was convicted of a counterfeiting offense. While previous studies have explored the specific incidents contained within the database (Heinonen & Wilson, 2012; Kennedy, Haberman & Wilson, 2016), our study intended to explore the roles undertaken by pharmaceutical counterfeiters. As such, our study was focused on 156 individuals convicted of pharmaceutical counterfeiting offenses in the United States.

Analysis Strategy

Because we intended to identify previously undefined roles commonly found within pharmaceutical counterfeiting schemes, we followed the spirit of qualitative content analysis and reviewed the data for emergent role-based categories or themes (Glaser & Strauss, 1967; Miles & Huberman, 1994). Following a process outlined by Aksulu and Wade (2010), the first and second author engaged in an iterative and structured process of coding, interpretation, and re-coding to arrive at the final role designations. We deviated slightly from the process used by Aksulu and Wade by utilizing a short list of pre-identified roles to guide our initial searches. However, as the analysis proceeded, these categories grew, evolved, and changed in accordance with the emergence of important themes found within the data (Glaser & Strauss, 1967).

The first step in the coding process was to examine all information gathered about a particular scheme for information that might indicate as to the specific roles found in that scheme. We were looking to identify any relevant and important information about an individual's particular activities that were directly related to the furtherance of the scheme.

From this information descriptive codes, or short collections of data summarizing the role, were created; a total of 20 initial descriptive codes were identified. Once all of the descriptive codes were collected, we moved to the process of interpretive coding, where codes were refined into standardized parent codes and sub-codes. Saturation (the point where no new codes emerged) was reached when approximately 70% of the interpretive coding process was completed.

Once the interpretive step concluded, we organized the codes into patterns, condensing similar codes to remove redundancy. This process of pattern coding was a back-and-forth process where the first and second author independently coded the information relevant to each identified role and discussed any disagreements to reach a consensus regarding the appropriate role code. The authors had 78.5% agreement in their initial independent coding; disagreements were easily resolved and helped to facilitate refinement of the final codes.

Once pattern coding was completed, a total of six codes were identified: Key/Lead, Supporting, Sales/Distribution to Legitimate Others, Sales/Distribution to Illegitimate Others, Production, and Purchase. The final stage in the coding process was the independent assessment of the codes by individuals unaffiliated with the study. Three graduate students were given a series of statements (18 in total, three from each of the six categories identified by the authors) drawn directly from the raw data files, as well as descriptions of the six role codes identified through the pattern coding process.

The students were asked to read each statement and assign a role code to each. Students were allowed to list as many codes as they felt appropriate, and were given the opportunity to create new codes if they thought that none of the codes the authors provided appropriately fit the data; no new codes were suggested. Reliability was assessed by comparing the primary code assigned to each statement by the independent coders to the code assigned to the statement by the authors. There were a total of 12 coding disagreements out of a possible 54 coder-author pairings. However, when considering all additional codes the independent coders assigned to the statements, the number of clear disagreements dropped to 6; there were no statements where all three independent coders had clear disagreements with the authors' coding of the statement.

A Krippendorff's alpha was calculated to assess inter-coder reliability among the coders alone, and then among the coders and the authors. Krippendorff's alpha is a robust measure of reliability that ranges from 0.000 (the absence of reliability) to 1.000 (perfect reliability) that is well suited for content analyses, particularly when multiple coders are involved (Hayes & Krippendorff, 2007). An assessment of the independent coder's inter-coder reliability produced a Krippendorff's alpha of .82, while an analysis of all coders (authors and independent coders) produced a Krippendorff's alpha of .78. When the six clear disagreements are left out of the analysis the Krippendorff's alpha comparing coding across all coders increases to .88. Thus, we have confidence in the reliability of the coding scheme developed during the pattern coding process. Examples of descriptive statements used in the coding process and the descriptive statistics for each role code are displayed in Tables 1 and 2, respectively.

Table 1: Descriptive Information from Offender Source Files

Role	Description
Key/Lead	Individual was the leader of a group accused of selling undocumented and unsafely stored cancer, HIV and other drugs, sparking a statewide crackdown on the loosely regulated drug wholesale trade in South Florida.
Supporting	Individual arranged $23 million worth of prescription drug sales between a manufacturer of counterfeit drugs and the leader of a counterfeit drug distribution ring.
Sales/Distribution to Legitimate Others	Individual was a salesman involved in the secondary wholesale market who purchased and then resold counterfeit goods through his employer, a large nationally-recognized healthcare supply company.
Sales/Distribution to Illegitimate Others	Individual imported counterfeit drugs into the US, acting as a wholesaler of counterfeit goods to others interested in distributing these goods directly to consumers.
Production	Individual managed a facility that produced counterfeit drugs in China and shipped to co-conspirators in the US.
Purchasing	Individual purchased counterfeit drugs in Mexico on behalf of a distributor of counterfeit goods; facilitated shipping of item from Mexico into the US.

Table 2: Descriptive Statistics for Role Codes

Role	Coded Primary Role		Coded Secondary Role	
	N	%	N	%
Key/Lead	27	17.31%	0	0.00%
Supporting	66	42.31%	6	7.79%
Sales/Distribution to Legitimate Others	39	25.00%	45	58.44%
Sales/Distribution to Illegitimate Others	2	1.28%	9	11.69%
Production	13	8.33%	14	18.18%
Purchasing	9	5.77%	3	3.90%
Totals	*156*	*100.00%*	*77*	*100.00%*

Throughout the presentation of results, we use descriptive statistics to describe relationships found within the data. However, given the nature of the sample and the purposes of the study, we avoid entering into any inferential analyses that would lead us to make predictive claims about pharmaceutical counterfeiters and their crimes; we leave these processes to later research. Instead, we place our results within a dialogue intended to describe a particular class of criminal that has yet to be empirically analyzed, with the goal of identifying important characteristics that can be useful in later studies of pharmaceutical counterfeiting schemes.

FINDINGS

A Brief Note About the Incidents

There were 63 pharmaceutical counterfeiting schemes examined. As mentioned above, product counterfeiting is a global problem that crosses international borders and allows criminals to victimize consumers all over the world. Reflecting this fact, just over half of the schemes we examined (52.4 percent, N = 33) had an identifiable international component. Of the remaining 30 schemes, ten (15.9 percent), were national in scope; another 20 (31.7 percent) occurred at the state or local level. We do not believe that these findings imply that the pharmaceutical schemes conducted at the local- or national-level do not have an international component, rather the data made no mention of any international connections. Despite the large presence of international schemes, the majority of schemes were relatively small in terms of the number of individuals involved, as 58.7 percent (N = 37) involved three or fewer people. However, the fact that 17.5 percent of schemes involved more than ten convicted individuals underscores the reality that counterfeiting schemes can be quite large and complex.

For many schemes, the extent of victimization is unclear as 77.8 percent of cases (N = 49) provided no information on the number of victims impacted by the scheme. When data were available on the number of victims, three schemes with between 25 and 50 identified victims and another 11 schemes with more than 50 victims were found. A large percentage of schemes (41.3 percent, N = 26) were conducted through a healthcare provider such as a doctor's office, physical (non-internet based) pharmacy, assisted living facility, or some other licensed healthcare entity. These schemes were more likely to be conducted at the local level, while schemes based around internet pharmacies were more likely to have an identified international component (χ^2 [6, N = 63] = 24.199, $p < .000$).

Scheme Roles

The individuals involved with the schemes we examined occupied a number of different roles across the various schemes, roles which were differentiated by the types of activities undertaken. Because an individual could be involved in a number of different activities in any one scheme, we assigned both primary and secondary role codes to individuals where appropriate.

Key/Lead. Individuals assigned the role code of *Key/Lead* were the originator of their respective counterfeiting scheme, the main person leading counterfeiting operations, or the sole individual involved in the scheme. A total of 27 individuals (17.3 percent) were assigned this code as their primary counterfeiting role; because of the nature of the activities affiliated with

this code, it was never assigned as a secondary role. The following are excerpts from the data describing the activities of individuals coded Key/Lead:

> *Mark Anthony Kolowich was sentenced in federal district court in San Diego for his role in operating one of the largest Internet pharmacy schemes ever prosecuted. Kolowich, the owner of World Express Rx, pled guilty to conspiring to sell counterfeit pharmaceuticals, commit mail fraud, smuggle pharmaceuticals, and conspiracy to launder money. In a related case in the Southern District of Florida, Kolowich pled guilty to conspiring to import unapproved drugs into the United States, introducing such drugs in interstate commerce, and smuggling unapproved drugs into the United States.*

> *Niaja Kane, the subject of an OCI case, sent samples of medications to a counterfeit pharmaceutical manufacturer in China to be made on her behalf. After the counterfeit medication was created, it was then shipped back to her in the U.S. for eventual sale on the internet and other venues. Kane intentionally trafficked and attempted to traffic in goods, all of which were counterfeit, and knowingly used on and in connection with such goods counterfeit marks.*

> *A ring that allegedly sold counterfeit and diluted prescription drugs to hospitals and pharmacies nationwide was broken up Monday with the arrests of 19 people in South Florida and Osceola County. Agents said drug wholesaler Michael Carlow headed the group that peddled tens of millions of dollars' worth of phony, expired, relabeled and watered-down medications, many used to treat serious illnesses such as cancer, AIDS and kidney failure.*

Every counterfeiting scheme has an individual that is the Key/Lead for the scheme. This person typically coordinates the activities of multiple parties and guides the direction of the scheme. They may be the person to originate the scheme, but this is not clear from the data. For most individuals (67.95 percent, N = 106) the counterfeiting scheme was not their primary occupation. However, individuals who were the key/lead of a scheme were more likely to have the counterfeiting scheme as their primary occupation (χ^2 [10, $N = 156$] = 29.942, $p < .001$).

Supporting. The most common primary role code assigned to the individuals we examined was that of *Supporting*. Offenders labeled with this code provided a range of services that were meant to support a counterfeiting scheme. Their activities included supplying materials such as raw ingredients and packaging products, organizing the mass distribution of spam emails and other online advertising, smuggling counterfeit pharmaceuticals into the country, assisting in some aspect of a scheme's operation such as maintaining an Internet website, or the theft of products that were then used in a counterfeiting scheme. Sixty-six individuals (42.3 percent) were assigned this label to describe their primary role in a scheme; an additional six individuals (3.8 percent) were assigned this code as a secondary role. The wide range of activities undertaken in support of pharmaceutical counterfeiting schemes was highlighted by the following statements:

> *Rounsborg [the defendant] did not take any steps to investigate or confirm that the Lipitor tablets received at [his company] for repackaging were authentic Lipitor*

intended for distribution in the United States, U.S. attorneys stated. As a result, Rounsborg conspired with others to continue repackaging product, even though on occasion Rounsborg was aware of facts that would indicate that some of the product he received may have been diverted.

In or about November 2002, Christopher Wayne Lamoreaux agreed with co-defendants to remove the drug Coumadin from blister packages marked "for hospital use only" and repackage the drugs in bulk plastic bottles that would disguise and conceal the fact that the Coumadin was "for hospital use only." Between in or about November 2002 and March 2003, defendant agreed with co-defendants to repackage purported Bextra® and Lipitor®. On or about the dates listed below, co-defendants paid secret commissions and kickbacks to Christopher Wayne Lamoreaux.

Stuart Smith (a hospital employee) stole drugs from the University of Colorado, selling them to the operator of a counterfeit pharmaceutical ring. Smith entered a plea to a charge of the unlawful sale of drugs.

Co-defendant Joan Davis admitted in her guilty plea agreement that she aided and abetted another individual in operating an Internet business and in importing misbranded drugs from Germany into the U.S. through the use of false, forged, and fraudulent documents designed to deceive government employees.

Paul Kriger pleaded guilty on Jan. 26, 2007, to participating in a conspiracy to sell stolen pharmaceutical drugs. Kriger was the owner and operator of OTS Sales, Inc. (OTS), a California corporation engaged in the wholesale brokerage of prescription drugs in the secondary market on behalf of several co-defendants. In late December 2001 and early January 2002, OTS brokered the purchase of Imitrex, Advair, Flovent, and Flonase. Kriger was paid commissions of approximately $106,000 for brokering the purchase of the drugs.

In many ways, the individuals in Supporting roles are the most important people when it comes to the successful execution of a scheme. These are the people who do the heavy lifting, ensuring that schemes operate efficiently and effectively. As a result, the activities they undertake can be quite broad. One of the most important roles in these schemes is advertising, which involves any activities undertaken with the aim of securing customers. At times pharmaceutical counterfeiters enlisted the aid of professionals whose job it was to drive consumers into the counterfeiting scheme. In many of these instances advertisements for counterfeit pharmaceuticals were intermingled with advertisements for other products:

Oleg Nikolaenko…made hundreds of thousands of dollars by sending billions of spam emails advertising counterfeit Rolex watches, herbal remedies, and counterfeit prescription medications. The FBI said in the affidavit filed with the criminal complaint that they and investigators from the FTC were led to Nikolaenko as a result of investigations and arrests...for trafficking in counterfeit watches and prescription medications. The investigation, in the U.S., Australia and New Zealand led to the MegaD botnet and Nikolaenko.

At other times, the advertisement of in-demand products was all that was needed to secure potential victims and could be completed by the scheme perpetrator themselves. This was common with doctors advertising products to consumers, with the following example being a typical scheme activity:

> *between January 2004 and February 2005, defendant ALBERT POET placed regular advertisements in local newspapers offering "Botox" treatments at his offices.*

Sales/Distribution to legitimate others. Individuals assigned the primary role code *Sales/Distribution to Legitimate Others* comprised 25.0 percent (N = 39) of the individuals we examined. This code was assigned to individuals who sold counterfeits to legitimate entities, including consumers and legitimate wholesale or healthcare organizations not involved in the counterfeiting scheme. While a large percentage of individuals were assigned this code to summarize their primary scheme roles, an additional 45 individuals (28.8 percent) were assigned this code to describe their secondary roles in the scheme. This suggests that selling counterfeit goods likely goes hand in hand with other activities needed to pull off a counterfeiting scheme. The following statements showcase the actions of individuals who sold counterfeit pharmaceuticals to legitimate others:

> *According to court records, defendant Chad Livdahl and several co-defendants conspired to sell 3,081 vials, each containing five nanograms of Botulinum Toxin Type A and other ingredients, in a formulation designed to imitate Allergan's Botox® Cosmetic, to health care providers.*

> *Ted S. Thalmann, owner and corporate secretary of The Medicine Shoppe of Edwardsville, pled guilty to a misdemeanor charge of misbranding of a drug. The charging documents indicate that prescription drugs were repackaged from the manufacturer's original stock bottle and placed into blister packs labeled with incorrect expiration dates and supplied to area nursing homes from March 2007 through March 2008.*

> *Thomas Martino ran wholesale pharmaceutical operations in Nevada and Utah and acted as a middleman distributing bogus medications from South Florida into the nation's mainstream drug supply, prosecutors said. Martino's company, Optia Medical, doctored paperwork to legitimize tens of millions in questionable epogen, Procrit and immune globulin, all expensive injectable drugs used by patients with cancer and HIV/AIDS, said Oscar Gelpi, an assistant attorney general who helped prosecute the case.*

> *Frank Ianeillo admitted that he participated in a scheme to defraud the U.S. Food and Drug Administration by obstructing the lawful functions of the FDA to regulate the interstate sale and distribution of drugs and to safeguard the health and safety of consumers who purchase drugs. Ianeillo, a salesman involved in the legitimate secondary wholesale pharmaceutical market, made no effort to determine or verify the legitimacy, source, and origin of the drugs he purchased and then resold. Ianeillo also admitted that at times he sold drugs, he did not provide his buyer with*

any paperwork or other documentation to establish the legitimate source, origin, and bona fide nature of the drugs sold.

Sales/Distribution to illegitimate others. Juxtaposing the large number of people involved in selling counterfeit drugs to legitimate others, only two individuals (1.3 percent) were assigned the code *Sales/Distribution to Illegitimate Others* as their primary scheme role, and only a further nine individuals (5.8 percent) were assigned this code to describe their secondary scheme activities. Individuals given this code sold counterfeits to other counterfeiting organizations, legitimate business owners seeking to sell counterfeit goods, and distributors of counterfeit goods. The following excerpts describe the actions of these individuals:

Girish Vishwanath is the director of exports for Benzo Chemical Industries, which is located in Bombay, India. He is charged with selling counterfeit Viagra pills to undercover federal agents. He is also charged with selling to undercover officers the items necessary to make counterfeit Viagra: a tablet punching machine, diamond-shaped dies, and the punches required to deboss the tablets with the Pfizer logo and "VGR 100" indicating the tablet's strength. The tablet punching machine, which stands approximately six feet tall and weighs about one ton, was purchased from Vishwanath for $11,000 and was shipped to the undercovers in Puerto Rico. Vishwanath is also charged with agreeing to provide undercover officers with powder or granules of sildenafil citrate, Viagra's active ingredient so that they could make their own counterfeit Viagra tablets.

Because Vishwanath's actions could also be classified as Production (which is described below) or Supporting these roles were assigned as secondary codes, yet his main actions involved selling counterfeit goods to unapproved parties. The description of Vishwanath's activities highlights the overlap that can be found in the activities of many people involved in pharmaceutical counterfeiting schemes. At times this overlap can make it difficult to determine what an individual's primary role in a scheme is, as the following description also highlights.

A Minnesota man who purchased hormones from Mason City partners to illegally sell to bodybuilders has pleaded guilty in U.S. District Court. Basil Han, 29, Andover, Minnesota, was convicted of conspiring with others to distribute human growth hormones for unauthorized uses, to traffic in counterfeit goods, and to defraud the Food and Drug Administration (FDA).

Han admitted at his plea hearing last week that he sold human growth hormones that were not going to be used to treat diseases or other recognized medical conditions, but rather for bodybuilding.

Production. Thirteen of the remaining individuals (8.3 percent) were assigned the code *Production,* as their primary role meaning they were involved with the production of counterfeit goods by producing/applying a false label to the product, manufacturing counterfeits, altering or diluting legitimate pharmaceuticals, or packaging counterfeits. An additional 14 individuals (8.9 percent) were assigned this code as a secondary role. This is the role that most aptly fits the definition of a counterfeiter, as these individuals are engaged in activities that would violate U.S. laws against the production of counterfeit goods.

Winhway Lee is the general manager of Tianjin Shuaike Chemical Co., a manufacturer and exporter of pharmaceutical products based in Tianjin, People's Republic of China. His company served as the main supplier of counterfeit Viagra to several persons based in Hong Kong. The product was then sold and exported to the US. Lee also provided counterfeit Viagra directly to an undercover agent who sought to purchase the drug for distribution in New York.

A pharmacist pleaded guilty on Tuesday to diluting cancer drugs destined for dozens of patients, saying he wanted to spare his victims the pain of a trial.

Robert Courtney has been held since August on 20 felony counts of product tampering, drug adulteration and drug misbranding, which carries a maximum penalty of 196 years in prison. The plea agreement calls for a sentence of between 17 and 30 years.

During meetings with undercover federal agents, Shengyang Zhou readily and repeatedly acknowledged that he was the manufacturer of counterfeit versions of Alli, a dietary supplement, being shipped to the United States. He discussed specific aspects of his counterfeiting activities regarding this product. Among other things, Zhou indicated that he did not put the lot number on the external packaging of the fake Alli product that he had previously manufactured. Zhou reported that he planned on producing an additional 5,000 boxes of the Alli product in his next batch which will appear the same as the authentic product.

Purchasing. Nine individuals (5.8 percent) were assigned the role code *Purchasing,* meaning the individual was responsible for purchasing counterfeit items for the scheme; three individuals (1.9 percent) were assigned *Purchasing* as a secondary scheme role. When an individual was assigned this role as a primary code, it meant they specialized in the sourcing or buying of counterfeit goods.

According to the facts filed with the court, for about three years before December 2009, Hughes began ordering large quantities of prescription and pharmaceutical drugs from sources in India and China without prescriptions for resale. Hughes is not licensed or authorized to sell and distribute prescription drugs and pharmaceuticals.

Masaru Yamasato was arrested following an investigation conducted by the United States Food and Drug Administration – Office of Criminal Investigations. Yamasato was charged in a criminal complaint with trafficking in counterfeit goods and sale of counterfeit drugs. According to the criminal complaint, Yamasato acknowledged that he and a partner purchased the drugs over the Internet from a source in China. The counterfeit drugs were then sold to a customer, who in turn sold the counterfeit drugs to individuals throughout Asia. Yamasato also voluntarily provided agents with documents showing that he purchased the counterfeit drugs from a source in China, Cherry Wong, who, according to the complaint, is a major supplier of counterfeit pharmaceuticals.

> *Jose Reynaldo Ortiz-Teran, the owner of Farmacia Sonora, was arrested in Arizona and indicted by a federal grand jury on charges of conspiracy, conspiracy to launder money and criminal forfeiture. The indictment alleges that Ortiz would obtain prescription pharmaceuticals without a prescription in Mexico and ship them to customers of the counterfeiting conspiracy via the mail.*

A little under half of the individuals (44.9 percent, N = 70) had more than one role in their counterfeiting schemes; when the counterfeiting scheme was an individual's primary occupation, they were more likely to have multiple roles within the scheme (χ^2 [2, $N = 156$] = 8.389, $p < .05$). It might be expected that schemes with fewer individuals would be more likely to have individuals occupying multiple roles; however this was not the case (χ^2 [4, $N = 156$] = 4.377, $p = .357$). In situations where an individual had only one identifiable role (55.1 percent, N = 86), most held supporting roles (54.7 percent, N = 47). Only six individuals (7.0 percent) who held a single role held the position of key/lead, while 21 individuals (30.0 percent) with multiple roles held the position of key/lead, which is more than any other role for individuals with multiple roles.

Additional Information on Pharmaceutical Counterfeiters

Like many white-collar offenders, the individuals we examined did not have extensive criminal histories. In fact, of the 156 individuals, we examined only three (2.0 percent) had prior convictions for pharmaceutical counterfeiting. Each of these individuals had only one identifiable role in their respective schemes, with two of the three functioning as the key/lead for the scheme; the remaining individual was involved with product sales/distribution. The majority of the individuals involved in the counterfeiting schemes we examined were male (82.7 percent, N = 129). The race of more than half of these individuals (58.9 percent) could not be identified, but where race was determinable, it was found that the majority (42.2 percent) were White.

Results of several chi-square tests of independence indicate that there were no significant differences in the number of roles (one role or multiple roles) across gender (χ^2 [1, $N = 156$] = .225, $p = .635$) or racial categories (χ^2 [5, $N = 156$] = 9.474, $p = .092$). The median year of birth was 1961, indicating that most individuals were in their late 40s to early 50s when they were engaged in their criminal schemes. Supporting this, we combined data on the year a counterfeiting scheme commenced and ended with the individual's year of birth to determine their approximate age at the beginning and end of the scheme. While the age at commencement varied from a low of 17 to a high of 68, the average age at the beginning of a counterfeiting scheme was 41.36. Age at the end of a scheme ranged from a low of 22 to a high of 71, with an average age of 43.48.

Most individuals (71.2 percent, N = 111) had no contact with victims as they were involved in schemes that operated through the internet or by mail, or because they were manufacturers or middlemen who only interacted with others involved with the counterfeiting scheme. The individuals most likely to have contact with victims worked in healthcare as a doctor, nurse, pharmacist, or in some other direct care capacity (χ^2 [1, $N = 156$] = 63.953, $p < .000$). Healthcare workers made up just over 21 percent (N = 33) of the individuals involved in the schemes we examined.

Chi-square tests of independence also indicate that when counterfeiting was not an individual's primary occupation, they were more likely to receive a sentence of only probation (χ^2 [6, N = 156] = 14.185, p < .05). The individual's role in the scheme did not significantly affect their sentencing outcome (χ^2 [15, N = 156] = 24.510, p = .057). More than one-third (37.8 percent, N = 59) of the individuals received a sentence consisting only of probation. Those sentenced to prison (N = 97) were sentenced to an average of 55 months, although the median sentence was only 30 months, and sentences ranged from as little as a single month to a high of 468 months. Almost 70 percent of the individuals (N = 109) accepted a plea agreement, although the actual number of plea bargains may be higher as we were unable to determine whether or not plea agreements were reached in 19.2 percent (N = 30) of cases. Individuals were more likely to take a plea bargain if they were involved in an international scheme (χ^2 [3, N = 126] = 17.324, p < .001).

DISCUSSION AND CONCLUSION

In this article, we examined the characteristics and activities of individuals involved in pharmaceutical counterfeiting schemes that occurred in the United States to develop an initial typology of unique pharmaceutical counterfeiting scheme roles. Through the development of this typology, we have taken a step towards understanding the elements needed to complete pharmaceutical counterfeiting schemes, as well as the unique individual activities that take place within these schemes. This understanding allows us to now make several situationally-appropriate crime prevention recommendations that focus on specific offender roles, rather than the general crime of pharmaceutical counterfeiting.

The individuals examined in our study were responsible for a wide range of activities from the origination and management of a pharmaceutical counterfeiting scheme, to the theft of products that later made their way into a counterfeit distribution ring. At several points, we felt it necessary to make qualitative distinctions among identified scheme roles even though the number of people assigned to these may have been low. In particular, we thought it necessary to make distinctions between individuals who sold pharmaceuticals to legitimate others, and those who sold pharmaceuticals to illegitimate others.

Role-based differences that exist between those who sell to legitimate others versus those who sell to illegitimate others are important, in part, because they can be used to explore how barriers to entry vary depending upon the legitimacy of the supply chain being accessed. For example, when counterfeit pharmaceuticals are sold to legitimate others, the counterfeit distributors employ methods intended to mask the illegitimate nature of their goods. The ability to place illegitimate goods into the legitimate pharmaceutical distribution stream obfuscates the illicit origin and nature of these goods and adds a veil of legitimacy to them (Benson & Simpson, 2015). Once these illicit drugs are distributed to other legitimate entities for use, healthcare providers become unwitting distribution points for the counterfeiters. Therefore, enhanced counterfeit detection methods and improved verification procedures are needed to make it more difficult for counterfeiting schemes to be successful.

One strategy that may prove very fruitful in increasing guardianship within the legitimate supply chain is the recently enacted Drug Supply Chain Security Act (Pub. L. 113-54), which mandates the serialization of all compounded pharmaceutical drugs and the tracking of these

products from the point of manufacture to the point of dispense. In essence, this act creates a living record of the pharmaceutical's movements throughout the supply chain, a record that travels with the pharmaceutical as it moves from point to point in the system. This recordation system will make it difficult for counterfeiters to intermingle unauthorized pharmaceuticals into the legitimate supply chain, as they will not have the proper historical logs needed to assure their legitimacy. The use of sterilization techniques is also intended to increase substantially the level of difficulty faced by counterfeiters.

While the Drug Supply Chain Security Act is not perfect, for example recent developments in on-demand pharmaceutical manufacturing are not addressed by this act, it is a step in the right direction. The development and enhancement of situationally-appropriate guardianship and monitoring strategies aimed at increasing oversight within the legitimate supply chain is a necessary and on-going crime prevention activity. Yet, these strategies may do little to impact the distributors of counterfeit pharmaceuticals who are selling to illegitimate others. In these cases, crime prevention methods that focus upon identifying commonly used illicit distribution streams or distribution hubs may be most effective in reducing the number of counterfeit pharmaceuticals that find their way to consumers. Similar to the work that has been done on interventions in open-air drug markets (Corsaro, Brunson & McGarrell, 2013; Dickinson & Wright, 2015; Hsu & Miller, 2017), and hot spots for other types of crime, strategies that increase counterfeit distributors' perceptions of apprehension likelihood and punishment, or that otherwise make distribution hubs undesirable places for crime may have a substantial impact on reducing the flow of counterfeit pharmaceuticals through illicit distribution networks.

Additionally, we felt it necessary to keep the roles of *Production* and *Purchase* as distinct roles, rather than subsuming them under the more general category of *Support*. The process of independent coding supported our decision, and we argue that these roles need to remain qualitatively distinct. Each of these activities typically creates a unique record or log of activity relevant to the counterfeiting scheme generally, yet, unique to their part of the scheme. These records can connect the individuals involved in the counterfeiting scheme to the scheme's illegal activities, and they may also identify specific actors who have primary responsibility for two vitally important aspects of each scheme.

For example, when an individual purchases counterfeit pharmaceuticals or other peripheral goods from the producer of the counterfeits they may a use third-party money transfer services like MoneyGram or Western Union. This is in part due to the anonymity that comes with sending money through networks of independent payment processors, rather than sending funds through one's financial institution. Financial institutions, such as banks and third-party payment processors like Western Union, can track who is sending funds, where they are sent, the amount sent, and to whom funds are sent. This creates a detailed record that can be used to map the flow of funds against the flow of counterfeit or illicit goods. Third-party payment processors can then use this information to develop patterns of funds transfers that are combined with existing knowledge of pharmaceutical counterfeiting schemes to create a network of key individuals and locations that are central to the success of these schemes (personal conversation with Phil Hopkins October 2015).

Where patterns are identified, payment processors (either on their own, or in concert with law enforcement) can take steps to close off counterfeiters' funding by withholding funds,

thereby denying counterfeiters the benefits of their activities, or by controlling access to their services. Whatever situationally appropriate technique is undertaken by payment processors, the need to transfer funds to various individuals/groups is a necessary part of any counterfeiting scheme. Preventing, or at least significantly increasing the difficulty related to, the transfer of funds removes the primary incentive that motivates counterfeiters to engage in their crimes. While it may not be possible to close off every potential payment avenue, the producers of counterfeit goods will have to work increasingly harder, making it even more difficult to realize a profit, to receive payment for their work. This will force some counterfeiters out of the business while making the business substantially less profitable for the remaining parties.

Additionally, when the individuals sending and receiving payments for counterfeit goods are identified their locations can be mapped, and network diagrams developed. These diagrams can be used to highlight the individuals and locations that are most commonly involved in pharmaceutical counterfeiting schemes (i.e., the development of counterfeiting hot spots), allowing crime prevention resources to be targeted most efficiently and effectively. Understanding how counterfeit producers are spatially distributed may also help to alert the conscience of consumers, through targeted or localized information campaigns and warnings, who might otherwise be taken in by these schemes. In terms of the individuals who purchase counterfeit pharmaceuticals for resale or distribution, understanding the logistical networks within which they operate can help law enforcement to disrupt groups of payment processors who are friendly to these types of illicit activities.

One final reason that the role of *Producer* needs to remain distinct from other roles is that this role most aptly identifies who the counterfeiter is, as the individuals in this role undertake activities that directly violate trademark protections. These individuals are the true counterfeiters. This is not to say that those who produce counterfeits are more deviant, criminal, or culpable than others involved in counterfeiting schemes, it is simply a reflection of the fact that these individuals complete the acts that violate intellectual property rights laws related to product counterfeiting.

Because of the complexity and breadth of the schemes examined in this study, we were not surprised to find that *Support* was the most commonly identified role category. While it may seem that the role category *Support* is broad, we feel that the emergence of this category reflects the complexity of pharmaceutical counterfeiting schemes. We examined schemes that included large-scale operations conducted online and involving a multitude of individuals, as well as schemes that were devised, orchestrated and performed by a single licensed healthcare provider. There is great variation in the types of supporting activities that will be needed within each of these schemes, yet, within the totality of pharmaceutical counterfeiting schemes, these activities all support the operation of the scheme. All pharmaceutical counterfeiting schemes require the product to be manufactured, sourced, shipped, labeled, marketed and advertised, and then distributed.

However, what sets one scheme apart from other schemes are how each of these activities is completed, which leads to differences in the types of roles members of the scheme undertake. Depending upon the makeup of any given scheme, pharmaceutical counterfeiting schemes can require vast amounts of support from many individuals (such as when product is manufactured and shipped from China through a network of intermediaries, then marketed and sold through e-

commerce), or little to no support (as is the case when a healthcare provider adulterates drugs given to patients). This means that the crime prevention initiatives undertaken to address individuals in *Support* roles will depend significantly on the situational factors that define the particular scheme within which the individual operates.

Given that more than half of the schemes we investigated had an identified international component to them, it is important to stress the need for international cooperation in the prevention and mitigation of pharmaceutical counterfeiting threats. Cooperation among law enforcement partners and governments is key to both hardening the global pharmaceutical supply chain against counterfeiters and other criminals, as well as disrupting international counterfeiting markets and pharmaceutical schemes that cross country borders. While this article examined pharmaceutical counterfeiting schemes prosecuted in the United States, the importance and weight of global commerce and trade, particularly when it comes to pharmaceuticals, cannot be ignored. Addressing pharmaceutical counterfeiting schemes occurring within the United States, or any country for that matter, will in most cases require an assessment of the networks and opportunities that originate from, and exist within foreign countries. As such, the development of cross-national regulations and policies aimed at the global problem of pharmaceutical counterfeiting is likely to lead to important and substantial benefits within the United States.

On average, the pharmaceutical counterfeiting schemes we examined ran for just over two years. However, this period reflects prosecutors' ability to accurately determine the beginning date of counterfeiting activities; determining an ending date is a more precise exercise. With Internet-based schemes, it seems surprising that only two years would have passed from inception to scheme termination. The nearly endless opportunities for adaptation and change within the online environment lends itself well to the perpetuation of these types of activities. It may be possible that the relatively short duration of the schemes we examined highlights the ineffectiveness of certain counterfeiters – those who got caught may be the least skilled. Conversely, some of the individuals we examined may have been quite good at their crimes and may have very quickly developed very successful, high profile, schemes, leading them to become victims of their own success. It may also be the case, and future research should investigate this, that schemes that aligned with a counterfeiter's occupation have a different average duration relative to other schemes.

Many counterfeiting schemes occur alongside the legitimate work an individual is performing, which allows them to use their legitimate workplace activities to hide their deviance. Similar to white-collar offenders, the individuals we studied tended to defy the traditional age-crime curve and had few documented negative interactions with the criminal justice system before their convictions for pharmaceutical counterfeiting offenses. It is possible that a lack of prior criminal history is not indicative of a lack of criminal behavior, but instead may be a reflection of an individual's ability to evade detection by law enforcement. Furthermore, as with many corporate crimes the average age of the individuals we studied suggests that counterfeiting schemes require some level of learned skill and ability (Benson & Simpson, 2015). This is mainly reflected in cases that involve healthcare professionals, as the knowledge and skills necessary to pull off a counterfeiting scheme are likely learned through legitimate professional activities.

The fact that the knowledge and skill needed to complete pharmaceutical counterfeiting schemes is in many ways similar to or the same as the knowledge and skill required to complete one's legitimate occupation touches upon counterfeiters' adaptability. While one's skills may help them to identify an opportunity to engage in a crime, it is the possession of those skills that enables them to complete that crime. Certain skill sets and abilities, therefore, become necessary conditions for opportunity identification, *and* conditions required for crime completion. These same skills and abilities also likely help to define the role an individual will take within a pharmaceutical counterfeiting scheme.

Related to this, it was a troubling finding of this study that a sizeable proportion of individuals involved in the pharmaceutical counterfeiting schemes we examined were healthcare providers. As licensed healthcare providers, doctors, nurses, and pharmacists have taken oaths to protect patient health and safety. Their willful involvement in counterfeiting schemes means that these individuals have leveraged, to the highest degree possible, the legitimacy that comes along with their titles and positions. Often doctor-patient interactions occur within a context where patients rely upon a provider's credentials and expertise for the development of trust (Entwistle & Quick, 2006). The legitimacy afforded to healthcare providers can often mask their deviance and allows the provider to abuse the bonds of trust that exist between the provider and their patient (Benson & Simpson, 2015).

It may be the case that any conflict healthcare providers feel between the legitimate goals of the medical profession and the illegal and harmful nature of pharmaceutical counterfeiting is resolved through the use of neutralization techniques (Sykes & Matza, 1957). This may allow healthcare professionals to rationalize their deviance prior to the crime, as well as to neutralize the impact of their actions following discovery of the crime in an attempt to manage the stigma attached to their deviant behavior (Benson, 1985). Unlike other types of pharmaceutical counterfeiters, healthcare providers have duties and responsibilities to the public, and will likely look for ways to reduce their culpability and control the negative social fallout related to their crimes. Efforts should be made to continually inform and educate healthcare providers about the dangers of counterfeit pharmaceuticals, while at the same time efforts around increasing oversight of these individuals should be undertaken.

Because of the close relationships healthcare providers often maintain with pharmaceutical companies, there is an opportunity for the marketplace to institute crime prevention measures that are not reliant upon the actions of law enforcement or the government. In particular, the vested interest that pharmaceutical companies have in promoting their products, combined with their interests around patient health and safety, as well as the avoidance of negative publicity, create fertile ground for company-led oversight initiatives. For example, the daily interactions that occur between healthcare providers and pharmaceutical sales reps are opportunities for increased oversight and guardianship of patients, and the pharmaceutical company's products. When sales reps visit doctors and pharmacists, they can check stock against sales records, a discrepancy between the two might indicate that illegitimate goods have found their way into the office. Using market-driven crime prevention initiatives places the impetus for counterfeit detection and removal on the trademark rights holders, and may lead to more effective and timely identification of illicit drugs.

Limitations

As with all research, this study has several limitations that must be addressed. First, the individuals we examined are not a random selection of pharmaceutical counterfeiters in the United States. However, no database of all pharmaceutical counterfeiters convicted in the United States currently exists. Although we may not be able to statistically validate the representativeness of our sample to the population of pharmaceutical counterfeiters in the country, our results are an important first step toward understanding this unique class of offender. As such, representativeness was less important of an objective than was identifying and qualifying the distinctions and similarities that exist among pharmaceutical counterfeiting scheme roles.

This study's results are also limited by the fact that it only examined individuals convicted of federal offenses. States also have laws against pharmaceutical counterfeiting, and instances of counterfeiting occurring at the local level that are prosecuted by the state rather than the federal government are not included in this analysis. As a result, it is possible that our results do not capture the unique factors of offender roles that occur at the state level. However, we feel that the schemes examined in this study capture a wide range of pharmaceutical counterfeiting incidents generally, and any schemes prosecuted at the state-level likely mirror those explored here. As such, we feel that these schemes are not likely to add substantively to our findings, yet, we encourage future research to examine this possibility.

Related to each of the previous issues is the fact that the data we examine come solely from pharmaceutical counterfeiting cases that were prosecuted in the United States. While it is clear that pharmaceutical counterfeiting schemes that involve patients in the United States have international elements to them, our examination of US-based prosecutions precluded a larger study of non-US citizens. It may be the case that, country-based differences in trademark laws, pharmaceutical regulations, enforcement procedures, culture, and other factors will lead to a different picture of the unique counterfeiter roles found within pharmaceutical counterfeiting schemes that are prosecuted outside of the United States. Future research should explore the applicability of our typology to countries other than the US.

Future Research

We hope that this study represents an initial step forward in understanding who pharmaceutical counterfeiters are, rather than a solitary exploration of these offenders. As such, we reiterate the recommendation that future research explores whether our classification of pharmaceutical counterfeiting roles fits with a more representative sample of individuals from abroad. Pharmaceutical counterfeiting is a global problem, and there may be important distinctions between the counterfeiters in the United States and those from other nations. Additionally, future research should look to see if our classification of counterfeiter roles applies to other forms of product counterfeiting. Pharmaceutical counterfeiting is only one type of product counterfeiting, so it is possible that the roles identified in this study will be found in other forms of product counterfeiting. It is also possible that pharmaceutical counterfeiting has many unique and distinctive roles that may characterize it as a criminal endeavor.

Future research should also explore how technology can affect the roles that humans play in pharmaceutical counterfeiting schemes. For example, research has investigated the role of licensed healthcare providers in pharmaceutical counterfeiting schemes (Kennedy, Haberman & Wilson, 2016), yet, it is possible that the structure and operation of these schemes will shift as technologies like on-demand pharmaceutical manufacturing (Adamo et al., 2016) become prevalent. Technological changes may not change the types of activities that are needed to pull off a pharmaceutical counterfeiting scheme; rather it may make it lead to fewer people needing to be involved in each scheme. In essence, technology may make counterfeiters more efficient, and it may also replace the need to have specialized skills and abilities, which would open up opportunities for pharmaceutical counterfeiting to increasing numbers of motivated offenders.

CONCLUSION

The outcomes of our study, a classification of the roles involved in pharmaceutical counterfeiting schemes, represents a more efficient and focused method for classifying the individuals involved in these crimes. From this classification, we can see a segmentation of counterfeiting scheme duties, which offers opportunities for the development and implementation of role-based crime prevention strategies. Given the distinctions in roles, we have identified it seems most appropriate to reserve use of the term 'counterfeiter' to those individuals responsible for the production of counterfeit goods, as described earlier. However, we suggest that other counterfeiting scheme roles use the term 'counterfeiter' as a qualifier that distinguishes the type of criminal activity in which the person is engaged. For example, individuals who operate a website in support of an Internet counterfeiting scheme might be referred to as a 'counterfeiting supporter,' and the individuals who sell or distribute counterfeit pharmaceuticals could be referred to as 'pharmaceutical counterfeit distributors.' Through additional research, these labels are likely to become more refined, and the unique characteristics that differentiate each of these roles are likely to lead to more refined and tailored crime prevention initiatives.

REFERENCES

Adamo, A., Beingessner, R. L., Behnam, M., Chen, J., Jamison, T. F., Jensen, K. F., Monbaliu, J. C. M., Myerson, A. S., Revalor, E. M., Snead, D. R., & Selzer, T. (2016). On-demand continuous-flow production of pharmaceuticals in a compact, reconfigurable system. *Science*, *352*(6281), 61-67.

Aksulu, A., & Wade, M. (2010). A comprehensive review and synthesis of open source research. *Journal of the Association for Information Systems*, *11*(11), 576-656.

Benson, M. L. (1985). Denying the guilty mind: Accounting for involvement in a white-collar crime. *Criminology*, *23*(4), 583-607.

Benson, M. L. & Simpson, S. S. (2015). *Understanding White-Collar Crime: An Opportunity Perspective.* New York: Routledge.

Bunker, A. M. (2007). Deadly dose: Counterfeit pharmaceuticals, intellectual property and human health. *Journal of the Patent and Trademark Office Society, 89*(6), 493-887.

Burgess, E. W. (1950). Comment, and concluding comment. *American Journal of Sociology, 56*(1), 31-34.

Business Action to Stop Counterfeiting and Piracy. (2011). *Estimating the Global Economic and Social Impacts of Counterfeiting and Piracy.* London: Frontier Economics.

Catizone, C. (2006). Counterfeit drugs and States' efforts to combat the problem. *Journal of Pharmacy Practice*, *19*(3), 165-170.

Caudron, J. M., Ford, N., Henkens, M., Mace, C., Kiddle-Monroe, R., & Pinel, J. (2008). Substandard medicines in resource-poor settings: a problem that can no longer be ignored. *Tropical Medicine and International Health*, *13*(8), 1062-1072.

Chakravarthy, A. (2014, September). *Analysis of cyber-criminal profiling and cyber-attacks: A comprehensive study.* Paper presented at the 3rd World Conference on Applied Sciences, Engineering and Technology, Kathmandu, Nepal.

Clarke, R. V. (1980). " situational" Crime Prevention: Theory and Practice. *The British Journal of Criminology, 20,*(2), 136-147.

Clarke, R. V. G. (1997). *Situational Crime Prevention*. Monsey, NY: Criminal Justice Press.

Cockburn, R., Newton, P. N., Agyarko, E. K., Akunyili, D., & White, N. J. (2005). The global threat of counterfeit drugs: Why industry and governments must communicate the dangers. *PLoS Med, 2*(4), Article e100.

Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, *44*(4)*, 588-608.

Corsaro, N., Brunson, R. K., & McGarrell, E. F. (2013). Problem-oriented policing and open-air drug markets: Examining the Rockford pulling levers deterrence strategy. *Crime & Delinquency*, *59*(7), 1085-1107.

Dickinson, T., & Wright, R. (2015). Gossip, decision-making and deterrence in drug markets. *British Journal of Criminology*, *55*(6), 1263-1281.

Entwistle, V. A., & Quick, O. (2006). Trust in the context of patient safety problems. *Journal of Health Organization and Management*, *20*(5), 397-416.

Glaser, B. G. & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research.* Chicago: Aldine-Athestor.

Grossman, G., & Shapiro, C. (1988). Counterfeit-product trade. *American Economic Review*, *78*(1), 59-75.

Harris, J., Stevens, P., & Morris, J. (2009). Keeping it real: Combating the spread of fake drugs in poor countries. *International Policy Network*. Retrieved from http://www.policynetwork.net/sites/default/files/keeping_ it_real_2009.pdf.

Hartung, F. E. (1950). White-collar offenses in the wholesale meat industry in Detroit. *American Journal of Sociology, 56(1), 25-30.*

Hayes, A. F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures*, *1*(1), 77-89.

Heinonen, J. A. & Wilson, J. M. (2012). Product counterfeiting at the state level: An empirical examination of Michigan-related incidents. *International Journal of Comparative and Applied Criminal Justice, 36*(4), 273-290.

Hoseini, S. A. R., Darbooy, S., Tehrani Banihasemi, S. A., Naseri, S. M., & Dinarvand, R. (2011). Counterfeit medicines: Report of a cross-sectional retrospective study in Iran. *Public Health, 125*(3)*,* 165-171.

Hsu, K. H., & Miller, J. (2017). Assessing the Situational Predictors of Drug Markets across Street Segments and Intersections. *Journal of Research in Crime and Delinquency*, *54*(6), 902-929.

International Anti-Counterfeiting Coalition (IACC). (2005). *The Negative Consequences of International Intellectual Property Theft: Economic Harm, Threats to the Public Health and Safety, and Links to Organized Crime and Terrorist Organizations*. Washington, D.C.: IACC.

International Intellectual Property Institute. (2003). *Counterfeit goods and the public's health and safety.* Washington, D.C.: Forzley, M.

Kelesidis, T., Kelesidis, I., Rafailidis, P. I., & Falagas, M. E. (2007). Counterfeit or substandard antimicrobial drugs: a review of the scientific evidence. *Journal of Antimicrobial Chemotherapy*, *60*(2), 214-236.

Kennedy, J. P., Haberman, C. P. & Wilson, J. M. (2016). Occupational pharmaceutical counterfeiting schemes: A crime scripts analysis. *Victims and Offenders*. (Online ahead-of-print). DOI: 10.1080/15564886.2016.1217961.

Lavorgna, A. (2015). The Online Trade in Counterfeit Pharmaceuticals: New Criminal Opportunities, Trends and Challenges. *European Journal of Criminology, 205*(12), 226-241.

Miles, M. B. & Hubberman, A. M. (1994). *An Expanded Sourcebook: Qualitative Data Analysis*. 2nd ed. Thousand Oaks, CA: Sage.

Newton, P. N., Green, M. D., & Fernández, F. M. (2010). Impact of poor-quality medicines in the 'developing' world. *Trends in Pharmacological Sciences*, *31*(3), 99-101.

Newton, P. N., Green, M. D., Fernández, F. M., Day, N. P., & White, N. J. (2006). Counterfeit anti-infective drug226-241.s. *The Lancet: Infectious Diseases*, *6*(9), 602-613.

Nykodym, N., Taylor, R., & Vilela, J. (2005). Criminal Profiling and insider cyber crime. *Computer Law and Security Review, 21*(5), 408-414.

Qureshi, Z. P., Norris, L., Sartor, O., McKoy, J. M., Armstrong, J., Raisch, D. W., et al. (2011). Caveat oncologist: Clinical findings and consequences of distributing counterfeit Erythropoietin in the United States. *Journal of Oncology Practice, 8*(2), 84-90.

Rogers, M. (2003). The role of criminal profiling in the computer forensics process. *Computers and Security*, *22*(4), 292-298.

Shaw, E. D. (2006). The role of behavioral research and profiling in malicious cyber insider investigations. *Digital Investigation*, *3*(1), 20-31.

Spink, J., Helferich, O. K., & Griggs, J. E. (2010). Combating the impact of product counterfeiting. *Distribution Business Management Journal*, *10*(1), 59-63.

Spink, J., Moyer, D. C., Park, H., & Heinonen, J. A. (2013). Defining the types of counterfeiters, counterfeiting, and offender organizations. *Crime Science*, *2*(1), 1-10.

Sutherland, E. H. (1940). White-collar criminality. *American Sociological Review*, *5*(1), 1-12.

Sutherland, E. H. (1945). Is" White collar crime" crime? *American Sociological Review, 10*(2), 132-139.

Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review, 22*(6), 664-670.

Tappan, P. W. (1947). Who is the Criminal? *American Sociological Review*, 12(1), 96-102.

Trent, C. (2013, November). Assessing the risks of counterfeiting and illicit diversion for health c are products. *A-CAPP Paper Series.* Retrieved from http://a-capp.msu.edu/sites/default/files/HealthCareProducts Risk_Trent_PaperSeries_FINAL.pdf

U.S. Government Accountability Office. (2010). *Intellectual Property: Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods*. Washington, D.C.: GAO.

Yar, M. (2008). The other global drugs crisis: Assessing the scope, impacts and drivers of the trade in dangerous counterfeit pharmaceuticals. *International Journal of Social Inquiry, 1*(1), 151-166.

Jay Kennedy is an assistant professor at Michigan State University, jointly appointed to the School of Criminal Justice and the Center for Anti-Counterfeiting and Product Protection. His current research explores managerial and organizational responses to employee theft within small and medium enterprises, the incarceration and post-incarceration experiences of white-collar offenders, the sale of counterfeit goods on the Internet, and the structure of occupational pharmaceutical counterfeiting schemes.

Ksenia Petlakh is an Assistant Professor of Criminal Justice at the State University of New York at Delhi. She earned her Ph.D. in Criminal Justice from Michigan State University and her BA in Criminal Justice and Political Science from the University of Michigan-Dearborn. Her research interests include law and the courts, criminal indigent defense, judicial administration, and temperament theory.

Jeremy M. Wilson is a professor in the School of Criminal Justice at Michigan State University, where he founded and directs the Center for Anti-Counterfeiting and Product Protection and the Program on Police Consolidation and Shared Services. He has collaborated with police agencies, communities, task forces, companies, professional associations, and governments throughout the United States and the world on many complex public safety problems. Among other areas, he has written extensively on brand protection, product counterfeiting, police consolidation and staffing, field interventions for violence prevention, and internal security.

INTERVIEWING CYBERCRIME OFFENDERS

Alice Hutchings[1]
University of Cambridge

Thomas J. Holt[2]
Michigan State University

Abstract

Research on cybercrime offending and victimization has increased dramatically over the past two decades, though qualitative scholarship on more technical offenses such as computer misuse has not kept pace with this broader trend. This research aims to identify potential best practices for researchers considering qualitative interviews as a method for researching computer misuse offenses, more commonly involving hacking techniques. The authors interviewed six experienced researchers who conducted qualitative examinations of active or incarcerated cybercriminals to understand their common experiences with recruitment, ways in which they interviewed research participants, ethical issues, and publishing their research. This analysis explores the difficulties associated with this area of research that are not typically discussed in the methods section of a research paper. The findings demonstrate the problems that emerge in research and the precautions researchers may need to take to protect themselves, their participants, and the research data.

Keywords: Qualitative research, cybercrime, interviewing

INTRODUCTION

Nils Christie (1997, p. 21) differentiates between 'near data,' which includes information pertaining to a small number of participants while providing thousands of insights, and 'distant data,' such as large datasets from official records, which may contain thousands of cases but provides little in-depth understanding. In relation to cybercrime, qualitative interviews with offenders have been a crucial method to gather such 'near data'. Accessing this population comes with unique challenges, and the number of academic researchers who have successfully carried out such work is small. In this article, we aim to provide helpful insights for researchers who are considering using qualitative interviews to research cybercrime offender populations. By learning from the experiences of others, researchers can avoid hidden pitfalls, ensure they have appropriate ethical safeguards in place, and consider how they would respond to potential situations.

Cybercrime is a relatively new topic for criminological inquiry, with the majority of published work emerging during the first decade of the 21st century (e.g., Diamond & Bachmann, 2015; Holt & Bossler, 2016). While the term is being used in this paper to describe

computer crimes that compromise data or financial security, such as attacks against computer systems or the use or development of malicious software (malware), it is important to note that cybercrime has also been used to describe offenses ranging from digital piracy to cyberstalking and child sexual exploitation (Brenner, 2010; Wall, 2001). There is a relatively broad literature surrounding certain offenses like digital piracy due to the perceived prevalence of this behavior cross-nationally (Business Software Alliance, 2016; Higgins & Marcum, 2011). Similarly, research examining interpersonal crimes, such as cyberbullying and online harassment has exploded in the last decade, with particular emphasis on interdisciplinary investigations (e.g., Patchin & Hinduja, 2016; Tokunaga, 2010).

Despite growing interest in cybercrime scholarship generally, studies of computer misuse which compromises data or financial security, more commonly referred to as computer hacking in popular media (e.g., Furnell, 2002; Steinmetz, 2015) remain relatively limited. There are definitional issues that complicate the study of this topic. For example, individuals may use their knowledge and skills to compromise computer networks with or without permission from the system owners (Jordan & Taylor, 1998; Meyer, 1989; Schell & Dodge, 2002; Steinmetz, 2015). As a result, their activities may be either criminal or legitimate depending on the individual and their relationship to the system owners (e.g., Jordan & Taylor, 1998). Furthermore, those with legitimate access may misuse their privileges in an attempt to gain access to sensitive information or systems (Shaw, Ruby, & Post, 1998). In such instances, the individual's actions are illegal but may not be immediately detected (e.g., Schell & Dodge, 2002).

In addition, terms such as 'hacker' and 'hacking' are contested among various communities. While the term is often used to describe criminal actors and their activities, this is neither the original nor the only meaning of hacker (Furnell, 2002; Jordan & Taylor, 1998; Levy, 1984). Levy (1984, p. 36) describes hackers as those that 'guide computers to greater heights than anyone expected,' and in computer science and engineering communities is meant as an honorific term to describe those who use innovative methods to solve complex problems, often involving computer software or hardware (Levy, 1984; Taylor, 1999). Thus, attempts to examine criminal hacking activities may be inherently limited due to different perceptions of the term among populations of interest.

Researchers with an interest in cybercrime, particularly those involving computer misuse to access data, often utilise qualitative research methods to examine this phenomenon, with diverse data sources ranging from interviews with offenders to posts from websites, forums, chat logs, and other online sources (e.g. Holt, 2007; Holt, 2010; Hutchings, 2013b, 2014; Hutchings & Chua, 2017; Hutchings & Clayton, 2016, 2017; Hutchings & Holt, 2015; Jordan & Taylor, 1998; Meyer, 1989; Steinmetz, 2015; Taylor, 2001; Turgeman-Goldschmidt, 2007). Qualitative interviews, particularly with active cybercrime offenders, can make a valuable contribution to our understanding of this offense. The offender's own words allow us to gain insights into aspects which cannot be measured quantitatively and explore issues which we know little about. There is difficulty in accessing offender populations actively engaged in cybercrime due to the secrecy encouraged among the various communities and the relatively closed nature of their social networks (Taylor, 1999). Similar issues are evident in attempts to access incarcerated offenders due to their involvement in criminal behavior and concern over discussing activities with others (Hutchings, 2013b).

Due to the inherent difficulties researchers experience in accessing cybercrime offender populations, there is a need to understand the ways that they are overcome in practice. Identifying successful methodological strategies that can be implemented in the field are vital

to enhance the quality of scholarship produced, and improve the perception of researchers among the underground world of cybercrime offenders. Thus, this study analyzed a set of six interviews with criminologists who have engaged in interviews with active cybercrime offender populations to understand their personal experiences in the field. This investigation identified their successes and failures, complications throughout the research process, and recommendations for scholars new to this area of research. The methodological implications of this study were examined to provide guidance for future scholarship to improve the state of cybercrime research.

Examining the Use of Interviews in Cybercrime Research

The literature on cybercrime offenders provides insights into the challenge of developing interview samples. The 'hacker' subculture has maintained a historically antagonistic relationship to law enforcement, government, and authority figures generally (Holt, 2007; Jordan & Taylor, 1998; Levy, 1984; Thomas, 2002). They also report feeling misrepresented in popular media and academic research as criminals due to the negative connotations that surround the term 'hacking' (Holt, 2007; Jordan & Taylor, 1998; Schell & Dodge, 2002; Steinmetz, 2015). 'Hacking' has also been sensationalized and distorted in various films, such as *The Matrix* and *Hackers*, despite subject knowledge experts providing their input (Thomas, 2002). Finally, some potential participants have expressed an unwillingness to engage in active interviews over the risk of arrest and prosecution through cybercrime laws (e.g., Taylor, 1999).

These factors may lead cybercrime offenders to be unwilling to participate in a research study conducted by criminologists who may distort their views or unfairly portray their actions. For instance, multiple researchers have had limited interview samples, consisting of less than 20 people, despite the application of traditional data collection strategies including snowball sampling and distribution of surveys at conferences (Holt, 2007; Holt, Freilich, & Chermak, 2017; Hutchings, 2013b; Kinkade, Bachmann, & Bachmann, 2013; Steinmetz, 2015). A small number of researchers succeeded in expanding their interview populations, notably Turgeman-Goldschmidt (2007) and Jordan and Taylor (1998). It is instructive that Jordan and Taylor's (1998) sample of 80 interviews were collected over a ten year period, consisting of Taylor's (1993) dissertation dataset involving both electronic and face-to-face interview protocols.

Turgeman-Goldschmidt's (2007) 54 person sample illustrated the limits of multiple data collection strategies, as she employed eight different data collection strategies over two years of data collection. Snowball and chain referral techniques generated 25 interviewees, which is sizeable compared to other research on this topic. This supports the argument that snowball techniques can be useful for hidden populations, such as those involved in crime and deviance (Berg, 2007). By comparison, only five interviews were collected from attendees of three Israeli hacker conferences, and six from friends and family referrals. Her sample even included seven interviews as presented via media outlets on television and in magazines (Turgeman-Goldschmidt, 2007).

Limited access to offender populations led scholars to utilize multiple qualitative data sources in the course of their research to triangulate their findings. Several researchers utilized participant observations at conferences and local group meetings (e.g. Holt, 2007; Kinkade et al., 2013; Steinmetz, 2015), posts in forums and other forms of computer-mediated communication (Holt, 2007), media accounts and security vendor reports (Lusthaus, 2012; Steinmetz, 2015), or court documents (Hutchings, 2013a,

2013b) to better understand the activities of cybercrime offenders. Some have also combined interviews with computer security professionals and law enforcement to understand the views about offending and offenders by those in and out of the subculture (Hutchings, 2013a, 2013b; Lusthaus, 2012; Taylor, 1999).

The use of multiple qualitative datasets and data triangulation is somewhat debated among scholars due to the potential that the researcher may attempt to validate one form of data over another (e.g., Garfinkel, 1967; Hammersley & Atkinson, 1983; Silverman, 2000). Comparing data that represent different versions of reality can become distorted when the phenomenon being researched is a social construct. Researchers who can avoid simply aggregating their results and instead focus on the contextual nature of the data and how it was collected can provide more nuanced analyses (Silverman, 2000). To that end, studies that drew upon data collected on and off-line have been able to highlight the unique dynamics of the hacker subculture and its influence on behavior (e.g., Holt, 2007; Steinmetz, 2015).

Though these studies gave substantive insights into the nature of cybercrime, they shed little light on the methodological challenges that researchers face when attempting to engage in qualitative scholarship on cybercrime offending, particularly when using interview data. These publications give minimal input as to the ethical challenges they faced before, during, or after engaging in data collection. There is also little information provided on the extent to which researchers were successful in implementing their research design, and what steps were necessary to ensure that success.

There is also a growing body of scholarship on cybercrime that eschews interviews in favor of data collected from posts in web forums and other forms of social media (see Décary-Hétu & Dupont, 2012; Dupont, Côté, Savine, & Décary-Hétu, 2016; Franklin, Paxson, Perrig, & Savage, 2007; Holt, 2013; Holt, Smirnova, Chua, & Copes, 2015; Holt, Smirnova, & Hutchings, 2016; Hutchings & Clayton, 2017; Hutchings & Holt, 2015; Motoyama, McCoy, Levchenko, Savage, & Voelker, 2011; Yip, Webber, & Shadbolt, 2013). This broad transition calls to question why and how researchers pivot from interview data to other forms of data collection and analysis. Thus, this study attempted to address all of these issues to understand the ways that researchers conducted qualitative scholarship, how they viewed their experiences, and the ways their subsequent research changed as a function of these outcomes.

DATA AND METHODS

The sample for this study was developed by contacting all reachable scholars who published criminological or sociological research using interview data to examine various forms of cybercrime. We focused specifically on qualitative studies exploring cybercrimes involving acts of computer misuse to acquire financial data or system access, including fraud, malware, and complex forms of cyber-trespass, to understand how they conducted their work, methodological complexities, ethical challenges, and any ways that their work has changed as a result of prior experiences. This focus excludes quantitative researchers who have used various college samples or other data sets to test traditional criminological theories with cybercrime (e.g., Bossler & Burruss, 2011; Holt, Bossler, & May, 2012; Maimon, Alper, Sobesto, & Cukier, 2014).

The potential interviewees were initially contacted via email by the researchers and invited to participate in the study. Those who gave their consent were provided with an information sheet outlining the ethical protections provided by the two research ethics boards that approved the research and then asked for permission to record the interview. In total, six

researchers were interviewed, and responses analyzed, which provided a 66.6% response rate. The remaining three researchers did not respond to the invitations to participate. Those interviewed ranged in experience, from doctoral students to full-ranked professors. One additional interview was conducted, however, it was found that the researcher's area of expertise was outside the scope of this project, and was excluded from this analysis. Due to the small population, the authors are also research participants and interviewed each other. While this may be unusual for a qualitative interview, there are other research methods where the researcher is also a participant, such as action research (Berg, 2007). Theoretical saturation (Guest, Bunce, & Johnson, 2006) may not have been reached. While all recently published criminological and sociological scholars were invited to participate, this study did not include those whose work has not been published recently or computer scientists who may have a more social science research orientation. Those perspectives would benefit future research and better inform this study.

Interviews took place face-to-face, as well as using online video technology. The interviews were qualitative and semi-structured. An interview schedule was used, which outlined the topics to be canvassed; however, each interview was tailored to suit the researcher, depending on their experiences. Questions explored the researcher's background and experiences in qualitatively interviewing cybercrime offenders, recruitment, ways in which they interviewed their research participants, ethical issues, and publishing their research.

Verbal consent was sought, both for the interview to be recorded and for the data to be used for analysis. The interviews took between 51 minutes and 90 minutes, with a mean time of 67 minutes. All interviews were transcribed, excluding any information identifying the researcher or specific third parties, and the transcriptions were analyzed using NVivo. To avoid confusion, the research participants for this study are referred to as 'researchers' in the following section, with the term 'participants' used to describe their research subjects.

FINDINGS

The findings of this study are presented thematically to highlight the rationale for research, past experiences with active research in the field, the publishing experience, and lessons learned from their experiences. Quotes are provided from the interviewees when appropriate to situate the experiences of the researchers in their own words.

Why Interview Cybercrime Offenders?

Unsurprisingly, all researchers believed that qualitative interviews are particularly valuable for researching cybercrime offenders. Reasons for qualitatively interviewing cybercrime offenders were broadly classified as: correcting misunderstandings; providing a deep understanding; identifying new lines of inquiry; accessing a hidden population; providing a voice; and perceiving quantitative approaches as being insufficient. Researchers also stated that the methods used should depend on the type of questions being posed, with qualitative interviews being particularly appropriate for explorative research.

In relation to correcting misunderstandings, one researcher spoke about the 'myth and mythology' surrounding cybercrime offenders. For instance, the researcher described how cybercrime offenders are often depicted as 'the lone computer hacker pulling a ski mask over his face, pecking away behind the computer' (R001), while they were instead interested in the human elements, particularly group dynamics. As well as correcting misunderstandings,

qualitative interviews were seen as providing a deep understanding of matters that were poorly understood. It was felt that interviews lead to new themes and topics that had previously not been thought about, or at least not in any amount of detail. As cybercrime is a relatively new phenomenon, qualitative interviews were seen as particularly useful, as they could open up new lines of inquiry:

> Cybercrime's a new topic, trying to get a sense of what's going on, I think qualitative is a very appropriate method, and I think that would be the case for a number of kind of, newish fields where you're still trying to get a feeling for the landscape. I think qualitative is also good for a very micro-level of understanding of what's going on, the mechanisms, how people, individuals… as soon as you start getting up to different levels, and trying to answer different types of questions, then different methodologies become more appropriate (R004).

Particular aspects relating to cybercrime offenders were also seen as especially conducive to research using qualitative interviews. This included the illegal nature of their activities, the removal from physical interaction with targets and victims, and the small size of the population, which make them particularly hidden and hard to access. It was noted that the cybercrime offender population could also be mischievous, as well as untrusting. However, with careful recruitment methods, research involving qualitative interviews could break down those barriers. Through this process, it was felt that an objective researcher allows the population to have a voice, to have their experiences and views expressed safely and anonymously.

The final rationale for qualitative interviews related to concerns about some quantitative approaches. It was felt that by reducing observations down to numbers, a lot of the richness inherent in the data was lost, and that nuances, meanings, norms, and values were not quantifiable. Another researcher pointed out that while some may criticise qualitative research for being subjective, often quantitative approaches suffered the same shortcomings, such as deciding what to measure, and how. Qualitative interviews were perceived as being more appropriate than quantitative surveys when there was a need to tailor the experience to the particular experiences of the participant. Trust was another important concept, with researchers agreeing that the personable approach required for qualitative research helped their research participants open up to them, but also that they could have more confidence in the responses, compared to what they might receive in surveys.

Recruitment

The researchers were asked to reflect on their experiences in recruiting cybercrime offenders to take part in their research. The main locations that researchers had recruited, or attempted to recruit, participants from were online forums, Internet relay chat (IRC), email distribution lists, customer-facing websites operated by potential participants, conferences, and events organized or attended by relevant communities. These may be considered 'cold' recruitment methods, where there was no intermediary to introduce the researcher. Other recruitment strategies included researchers gaining access to their research participants by way of personal introductions through contacts, and referrals from other participants ('snowball sampling'). The main differences in the 'cold' recruitment strategies were whether they were on- or offline and whether it was directed at a mass audience, or if there was a more selective approach, such as invitations issued to just one individual or a small group.

Some of the most discussed challenges related to building trust and perceived legitimacy with potential participants. The researchers felt that cybercrime offenders tended to be quite 'skeptical' and 'wary of outsiders':

> I mean, we're talking about people who generally tend to be a little skeptical, who are wary of outsiders and may be unwilling to disclose everything about themselves, because they're never quite sure what that person's up to (R001).

For example, cybercrime offenders could be concerned that the researcher is actually from law enforcement or intelligence services. Researchers suggested ways to build trust, including blending in with others in the environment, staying natural, learning and understanding the language being used, having a relevant online presence (such as a university webpage), being honest and open about the research being conducted, and demonstrating a willingness to learn. Things to avoid included deceiving potential participants, using stereotypical definitions, showing ego, and inappropriately claiming expertise. Trust is also multi-directional, with researchers avoiding potential research participants when they felt it might have lead to an unsafe situation for themselves or others. This was exemplified in the following quote from Respondent 001:

> There have been a few people that I've thought could do [negative things] and would do that, and I've heard have done that. And those are people that I've learned about through my key informants, and I sort of talked to them, but I never made them a formal part of my research, knowing full well what they could do. And it's not that I cared that they would do stuff to me, I was more worried about there being a fallout for other people in the group if I got involved. So there was a little bit of that, like, navigating the waters in the subculture to keep myself safe, but more to keep other people safe.

Building trust was seen as especially challenging when recruiting potential participants through online environments. Online interactions are usually text-based, and some researchers have had trouble in being taken seriously. This was less of a challenge when recruiting cybercrime offenders in-person. However, while recruiting cybercrime offenders in-person was generally seen as more feasible in terms of getting agreement to participate, the main challenge is being able to get access to the specific population that is relevant to the researcher. Researchers often felt that attendees at 'hacker' conferences, for example, were more 'deviant' than criminal, and finding the relevant people to make introductions to highly skilled offenders was difficult.

Recruiting in online interactions where multiple individuals receive the same message, such as forums, IRC, or email distribution lists, can lead to what was referred to as 'flameballs' (a play on 'snowball' and 'flaming', which refers to 'the hostile expression of strong emotions and feelings' in online communication (Lea, O'Shea, Fung, & Spears, 1992, p. 89)). One researcher advised that a call for participants sent on an email distribution list relevant for the population being researched while being successful in recruiting some subjects, had met with an initial negative reaction. This resulted in an escalation of negative exchanges on the same list. Another experience resulted in forum moderators deleting posts that attempted to recruit participants, and threatening to delete accounts, as they violated the terms of service of the site.

The benefits of being introduced, either through snowballing or other personal introductions, are not having to prove credibility continually, and being put in contact with

hard-to-access participants. However, one researcher felt that cybercrime offenders might prefer to be approached through 'cold' methods, as it reduces the number of people who were aware that they had taken place in the research, and the type of information that the researcher had about them. This may help explain why most researchers advised that, for cybercrime offenders, snowball sampling is often not a very successful technique. Respondent 005 succinctly explained:

> I've tried to use snowball sampling mostly, and I wouldn't describe it as being necessarily successful, a lot of the hackers I've talked to would maybe connect me with one other person, at most, but even there those connections would fail probably 25 to 30 percent of the time, I don't know how that compares to the offline rates.

Many of the researchers found that those being interviewed will not introduce the researcher to other potential participants, or when introductions do happen, they do not result in an interview. One researcher believed that this was due to risk. Their research subjects may have taken the risk on themselves to speak to them but can be unwilling to spread that risk to others. There could also reputational risks to someone who had made a misjudged introduction, so not making an introduction feels safer and comes at no cost.

None of the researchers had used referrals from the criminal justice system. Therefore, for accessing cybercrime offenders, none of the researchers had used 'formal' gatekeepers, such as law enforcement or prison staff. However, for many researchers there existed informal gatekeepers, who could either pave their way and introduce them to potential participants, or shut them out, hindering them from being able to access particular groups. Opening the gate was often seen as key in assisting the researcher to develop trust within particular communities, or gaining access to closed forums. Similar to snowballing, being a gatekeeper requires a certain level of responsibility, so while it does happen, such relationships are not easily fostered and are relatively rare. One researcher paid a 'professional recruiter,' a consultant who had access to a specialized population of interest. The recruiter not only gained access to the participants but also interviewed them on behalf of the researcher as part of a formal agreement.

One aspect of recruitment involves explaining to potential participants the subject that is being researched. It was evident that researchers have preferred terms that they used and that the meanings of these terms are not necessarily uniformly shared among other researchers or their various participants. For example, terms such as 'hacking' and 'hacker' reflect the divergent uses more broadly within society. Researchers had a number of tactics to broach the research subject with their participants, while also allowing for differences in terminology. One researcher described to their potential participants how some people define the research subject, allowing them to respond with their definition, or (dis)agreement, and therefore progressing the conversation:

> So, I have, my strategy is that I usually defer to them as the experts. So I say, so, you know, a lot of people describe hacking as this, so I'll give like a textbook definition, and you can see them roll their eyes, but when you frame it in that way, they don't say, they automatically sense that you're a little skeptical of it, so they're willing to give their full definition, and then I allow them to define it, and then our conversation proceeds from there (R001).

Other researchers preferred to have very general definitions and to let their participants outline what they think cybercrime is, only setting out clear parameters of what they do not include within the scope of their research.

Interviewing

The various ways researchers interviewed their participants, as well as the associated benefits and problems, were explored. Interview methods included interviews face-to-face with the participants, conversations that took place over email, online interactive chat sessions, online video, as well as by phone. While the researchers did not necessarily advocate for one method over another, they recognized that each had their weak and strong points. In-person interviews were generally preferred, but it was acknowledged that they were often more difficult to organize, particularly when participants were not geographically close to the researcher.

One of the benefits of interviewing participants in-person included being able to develop a good dynamic. This was seen as being instrumental in breaking down barriers quicker and easier than methods in which the researcher was physically removed from the participant. It was felt that in-person interviews tended to go for longer, and the participants opened up more. One researcher described in-person interviews as being beneficial as it took the participant outside the type of environment that they are used to, and removed from their offender persona. Online, offenders can wear a mask of anonymity, which is stripped away during an in-person interview. Furthermore, as their normal environments are ones where manipulating information is the norm, it was believed that this could be advantageous for gaining accurate insights, as noted by Respondent 003:

> I think in-person interviews, it's kind of easier to make contact with the person, it's a particular form of communication, it's easier to mediate, and it gets hackers slightly away from the kind of habitual sock puppet manipulation of information environments that they're used to.

However, it was recognized that there was also value in online interviews, as it placed the researcher in the communicative environment that the participant was used to. One of the main problems with interviewing in-person was the cost and time-intensive travel that was sometimes required, for the researcher and/or their participants.

A number of benefits of online text communication were identified. First, there is no need to transcribe the interview, which means it takes less time to prepare for analysis, and there is less scope for mishearing what was said or introducing typographical errors. Also, cybercrime offenders may feel more comfortable talking to researchers online, as it could be perceived as being less risky than meeting in-person. And finally, for interviews over email, participants can take part in the research at a time that is convenient for them.

One of the concerns that researchers had about conversations that took place over email or through interactive chat sessions was they are solely based on text communications. Therefore, these methods miss many cues, such as changes in facial expressions, body language, silences and pauses, or tone of voice, that are used to impart meaning. For example, cues can signal to a researcher that they may want to ask further questions about the topic being addressed, and can identify further avenues of inquiry. Furthermore, Respondent 003 advised that there was the possibility for collusion when interviewing participants through interactive chat sessions, recounting an event where

users of an online forum had coordinated their answers when being interviewed by a journalist:

> There's some of the accounts of the Anonymous hackers where […] they grouped in a chatroom, when they had a journalist, interviewing them, and they all grouped in a separate chatroom and coordinated their answers, to try and effectively just to have fun. […] I think they were aware, but I don't think that they'd fully taken in that their interview was going to be in a newspaper, but they were just trying to take the piss out of a journalist who they thought was being pompous, I think that's the way that they presented it (R003).

This researcher also advised that it was possible that one individual may operate more than one online presence to manipulate the conversation.

Interviewing which took place by video or telephone was described as mimicking in-person interviews. Audio or video interviews come with the convenience of breaking down geographic boundaries and logistical problems and being able to hear the voice of the participant. In the case of video communication, the researcher also has access to non-verbal cues. One researcher felt that a downside of video or telephone interviewing, compared to in-person, was that the participant was more likely to want to fit it around their schedule, which sometimes meant changing pre-arranged times and dates, while they were more likely to keep an in-person appointment, and instead reschedule their diary around that commitment.

Researcher Effects

Researchers were cognisant that during the recruitment and interview process, their individual characteristics could have an effect on their participants' behavior and responses. Respondent 001 noted:

> So, I'm a straight white male in America, there are certain populations that are going to be easier for me to get access to, and certain ways that I can behave that might not be accessible to a black woman, or whoever.

The age and gender of the researcher were discussed as being the most salient characteristics, particularly as participants tend to be younger men. 'Hacker' conferences could be intimidating for women or older attendees, and some researchers who appeared different to the 'norm' had been challenged on their attendance. It was felt that there had been a recent positive shift away from this direction, as the research population aged, and more women became involved.

Self-presentation was also felt to affect the researcher/participant dynamic. As was previously discussed in relation to recruitment, trust is a significant factor in having participants agree to be interviewed, as well as provide thoughtful responses. One researcher thought that being open and easy-going, rather than cagey or guarded, was an essential way to present themselves to their potential participants. In some cases, it would be improper to provide an answer to a question, such as wanting to know what someone else had said to the researcher. However, in this type of situation, the best response was felt to be reminding the participant that their responses would be kept confidential.

The researcher's institutional affiliation and title may also have an impact on how they are perceived by their participants. One researcher recalled that a potential participant had

responded more positively once they realized that they were a faculty member, rather than a graduate student. Another researcher found that their connection to the university's criminal justice program had been a barrier to recruitment, as potential participants had mistakenly believed that they were affiliated with law enforcement.

In addition to the characteristics of a researcher affecting the research process, it was noted that the research process itself could have an impact on the population being researched. One researcher felt that through the interview process, researchers could potentially 'interfere with natural behavior because of what's involved' (R002).

Technical Knowledge

One theme that arose often when speaking with the researchers was whether they should have technical knowledge about cybercrime offending. All those that raised the topic felt that they should, however the reasoning for this varied. One researcher felt that having some technical expertise would be useful when it came to developing trust, as well as being able to probe further into some responses. Respondent 001 noted:

> Don't pretend like you are an expert, and this is going across most things, but most people in cybercrime, to some extent, have a level of technical expertise that's going to be beyond you, and you're not going to be able to guess your way through it, be willing to turn off the ego, and most people are willing to respond to someone who wants to learn. […]

Another researcher expressed similar sentiments but also believed that in the process of learning technical skills, a social scientist would develop a better understanding of the 'norms, values, and social structure' (R002) of the research population.

Being familiar with different ways that potential participants might choose to communicate was an additional reason for acquiring technical knowledge. This included the use of encrypted communication methods. The researcher who raised this also cautioned that researchers who came across as 'a complete technoclutz' (R003) may be viewed with suspicion, and could even become a target for mischief.

Differences By Cybercrime Type

Researchers were conscious of a range of factors that might have an impact on the experience of interviewing cybercrime offender participants. One salient factor is the type of cybercrime the participant is involved in. For example, one researcher found that politically motivated offenders tended to be open to participation, as it was seen as a way of disseminating their message. On the other hand, another researcher noted that there was very little qualitative research involving interviews with active cybercrime offenders from countries with a reputation for being home to particularly virulent cybercriminals. It was speculated that there would be very different challenges in gaining access to these populations.

Researchers noted that some of the more potentially interesting members of the research population might be those who are the most secretive, as they have the most to lose. Conversely, focusing only on the more visible and loudest groups, although easier to access, may mean that the researcher misses crucial pieces of information, or develops a skewed perspective if attempting to generalize findings. This was noted by Respondent 003:

> You can get in a very voluble group of hackers and find out that actually, you know, they haven't really done anything, or hacked anything, they're just, you know, kind of just a very loud group in a forum.

For this reason, many of the researchers used additional qualitative and quantitative methods, to supplement, or instead of, qualitative interviewing. Some researchers also interviewed other specialists who investigate different aspects of cybercrime, such as law enforcement and those that work in the computer security industry.

Ethics

The researchers were asked what they perceived to be the main ethical concerns for cybercrime research. Most researchers felt that the confidentiality and anonymity of their participants and the participants' data as being the main concern. Related to this was the need to protect participants from law enforcement as a result of participating in the research. Additional principal concerns included the potential to cause harm to the participants by causing psychological distress, as well as researcher safety, and having informed consent information that was set out in clear terms.

Anonymity was believed to be particularly important for cybercrime offender participants, due to the nature of their illegal activities. Furthermore, Respondent 001 noted that 'most of these people, as guarded as they are, have a larger than average online presence' (R001); therefore there was a risk that information about participants could be used to re-identify them indirectly.

Steps that researchers took to try to maintain anonymity included de-identifying interviews at the point of transcription, including deleting any specific information that could be linked back to an individual. Furthermore, while excerpts of interviews were frequently published, researchers did not allow others to have access to the whole transcripts, in case the amalgamation of the data could be used to identify who was spoken to. Some researchers avoided the use of emails to correspond with participants or used a throwaway email account that was deleted soon afterward. However, one researcher advised that some of their participants had wanted to be identified, at least by their moniker, as they were active in social movements and political activists. In some cases, potential participants had declined due to the anonymity provisions offered:

> I know I've lost research participants in social movements and hacktivists because I've said, you know, I think you should be anonymous, and they say no, unless I can attach myself to this, then I don't want to talk to you, that's part of my political activism, to do this (R003).

Closely related to anonymity was data security. Researchers used a variety of methods to secure data, including encrypting files, locking disks in filing cabinets, and airgapping computers that held data so they were not connected to the Internet. Some researchers also ensured that they checked the logs of their firewalls, and scanned their computers regularly with anti-virus software. Some researchers deleted data that were no longer necessary for the research. For example, one researcher described how they transcribe the interviews themselves, ensuring that any potentially identifiable information was omitted, then deleted the audio file.

Another concern has arisen following 'open data' requirements from funders, in which researchers are to provide de-identified data to an archival service. The amount of information that qualitative interviews can reveal about a person means that de-identification is problematic. This is particularly challenging with sensitive subject matter such as cybercrime offending. To comply, one researcher specified that the data were not to be made freely available online, however, could be viewed in person at the archives.

The potential for law enforcement to request access to the researcher's data was a concern. Some researchers had experienced this, while the majority had not. For those that had experienced requests, they had come in two forms. The first type of request was general in nature, suggesting that the researcher might have information that could be of use to police, and could they gain access to it:

> So, I've had […] very kind of general, fishing requests, so, oh you have data on this, we'd like to look at it, can you provide us with a copy. It's not targeted to a particular person, but it's just potentially been of interest to them. And I've been able to just flatly say no, not at all (R006).

The second type of request was more targeted, requesting data about a particular individual. For example, one researcher had been contacted by law enforcement advising that someone who had been arrested was claiming to have been interviewed by them, and could they provide the interview data. The researcher had clearly outlined in the application seeking ethics approval, and the informed consent information provided to participants, that they would only provide data to law enforcement if they were legally required to do so (for example, on receipt of a subpoena), and that all data would be de-identified. Therefore, they had a clear basis for refusing these informal requests for access to the data. Furthermore, as the data was de-identified, the researcher was unable to confirm or deny that they had interviewed the suspect. They made it clear that even if law enforcement had access to the research data, it would not be possible to link the information contained to an individual, and no further requests were received.

Another concern that researchers raised was when they might have a moral, if not legal, responsibility to let law enforcement know about something that they had been told during an interview. One researcher addressed this concern by advising their research participants not to tell them about any activities being planned, or that might have a serious impact, and reminded them of this during the interview if required. Another possible strategy that was suggested was to interview former offenders. Respondent 004 felt that law enforcement realized the importance of academic research in this field:

> Nobody has ever formally requested, and in fact, […] I've been pretty impressed with [law enforcement] realising the importance of academic research in this area, and understanding that they have their job, which is law enforcement, and I'm doing research, and that research might be useful in the end to them, in a broad sense. […] And I think it's great that a lot of these agents are open to that, and are aware of academic research, and are happy to help, and they've never once suggested that, you know, I hand over information, or that they would even be interested in that. They're kind of like, you know, I've got my own investigations, I'm busy enough, there's enough cybercriminals out there, I don't need yours.

The researcher whose experience being contacted by law enforcement about a specific person was outlined above had mainly been concerned about the potential impact on their research

participant. However, a related concern was the possibility of retaliation if they had provided data. This falls under the concerns about researcher safety. Overall, researchers did not hold grave fears that their research put them in an unsafe position (although some said they would be concerned about inexperienced researchers with no knowledge of the field conducting interviews).

The researchers used a number of precautions to avoid potentially risky situations. For in-person interviews, researchers tended to use public spaces, or areas where others were around, such as cafes, universities, and group spaces in libraries. Some let others know where they were going, and what time they were due to finish. Other tactics included limiting the places where personal addresses and telephone numbers were held, including having an anonymous electoral roll registration. One researcher found the risk assessment process required by their university to be useful, such as thinking about whom they would get in touch with in different local contexts if they did experience difficulties.

While no one reported feeling unsafe as a result of their research, some had experienced electronic pranks and attacks. These included accessing a school database and inserting the researcher's phone number in place of the parents for a frequently truant child, so they received a telephone call whenever the student was absent. Another had experienced a denial of service attack, but this had been thwarted by the university's network. Sometimes, the research participants can be helpful. A potential participant had contacted one researcher, supplying a list of places where their university may be vulnerable to attack. It appears that the most harm this caused was to the university's security team's weekend, which they spent fixing the vulnerabilities.

For qualitative research, the construction of a narrative, and the presentation of research findings, particularly for large amounts of rich data, is a particular challenge. It was also identified as being an ethical issue, as how research findings are presented can impact the research population. This may also affect the researcher's ability to recruit participants in the future, and even other researchers doing similar work. As well as ensuring that participants could not be identified through information provided in publications, the researchers spoke about ensuring that they were objective as possible when presenting their findings.

The researchers were asked if they provided incentives to participants, and what the ethical issues were in relation to this practice. Most researchers did not provide incentives. Those that had provided incentives did not do so for all their research projects. One pragmatic reason for not providing incentives was due to limited budgets. However, researchers also felt that it could be unethical or have negative impacts on the research process in some situations. One researcher had refused to pay potential participants who had demanded a fee and found that they had sometimes participated anyway. There was a feeling that turning the research process into a transaction changed the dynamic, and could impact the responses that were received. Researchers were concerned that, particularly for cybercrime offenders, providing incentives created a 'gameable transaction,' potentially allowing the researcher to be scammed. Respondent 001 stated, 'I want people to be there because they want to talk to me, not because they want to get a reward out of it.'

On the other hand, researchers that had offered gift vouchers found that generally, their participants had been reluctant to accept the incentive. Instead, participants seemed to be incentivized by non-monetary rewards, such as having a medium in which to safely have their voice heard and having access to the published work. Another ethical issue related to the digital trail that could be used to identify participants, such as linking a gift

voucher with the researcher's credit card, and then, for redeeming online, identifying the IP address used, and any delivery address, or reviewing security camera footage for physical redemptions.

One concern for some researchers was the possibility that the interview process may have a negative psychological impact on their participants. One researcher noted that they provided information about counseling services on their information sheet provided to potential participants. While they also advised participants that they were not a psychologist, a number of participants told the researcher that they felt better for having done the interview, and it had felt like a therapy session. However, in one situation the researcher had been concerned after their participant had started crying in the interview. In this case, the participant's offending had negatively impacted their relationship with their family, to the point that they were estranged. The researcher was concerned that they had caused psychological distress, at least temporarily, and felt providing counseling service information had been justified. Respondent 006 summed up the ethical challenges present in conducting cybercrime research quite succinctly, stating:

> Don't underestimate the importance of ethical review, they'll help make sure nothing goes wrong, and have your back if it does. But, first and foremost, you need to protect your research participants and ensure no harm comes about as a result of your research.

Publishing

Overall, researchers had mainly positive experiences when it came to publishing their work. There was a feeling that as cybercrime was a relatively new phenomenon, editors were more open to exploratory qualitative methods. The main problems experienced related to peer review, particularly as there has been a rather limited field of potential reviewers. Researchers recounted experiences where they felt reviewers had expertise about qualitative methodologies, but not cybercrime, or conversely, had subject matter expertise but were biased against the methods used. The latter was common when trying to publish in outlets that crossed the computer science/social science divide:

> Because I'm trying to publish both in computer science and in criminology, computer science, they go qualitative, this is rubbish; it's just a bunch of anecdotes, it's no good, when you go to peer review, it's just really really hard (R006).

As well as unfamiliarity with qualitative methods, the computer sciences generally have different publishing styles and methods compared with the social sciences, disseminating their research findings through published conference papers rather than journals or books. However, the social sciences had previously not been very receptive to the unfamiliar terminology and concepts associated with cybercrime, although it was believed that this was improving.

DISCUSSION AND CONCLUSION

Though the body of criminological scholarship on cybercrime research has increased dramatically over the last two decades (Holt & Bossler, 2016), there is still a relatively limited corpus of study on cybercrime offenders. The majority of these studies are qualitative, though quantitative scholarship has increased over the last few years. This begs the question as to why qualitative scholarship has slowed, and the experiences of qualitative scholars in the field generally. This study attempted to address these issues through an analysis of a series

of six interviews conducted with experienced scholars who have conducted and published qualitative studies of those who have engaged in cybercrime offending.

The findings provide several valuable insights into the process of interviewing cybercrime offenders. Specifically, researchers reported utilizing multiple avenues to access potential interviewees on and off-line. There was some agreement that so-called cold call/contact methods were preferred, but made it difficult to establish trust with potential interviewees. Researchers also felt that conferences had some potential to facilitate connections, though the population was primarily composed of those engaged in deviant, rather than criminal, behaviors. This may limit the potential utility of the findings to understand the criminal practices of the cybercrime offenders.

There was, however, agreement that snowball sampling techniques were largely ineffective to obtain a sample of interviewees. This is surprising given the majority of qualitative research on various forms of traditional offending populations utilize snowball sampling techniques to acquire large populations of respondents (e.g., Cherbonneau & Copes, 2006; Jacobs, 1996; Miller & Decker, 2001; Wright & Decker, 1997; Wright & Decker, 1994). Further study is needed to understand the dynamics that affect the development of cybercrime offender studies and the extent to which this issue may be evident with other forms of online criminal activities. In turn, we may better understand the differences between cybercriminality and real-world offending.

Researchers also noted that their attempts to interview active online offender populations might lead them to be targeted for minor forms of cyberattack or compromise. Qualitative researchers have noted the risk of victimization and violence that may accompany attempts to study active offender populations, whether associated with armed robbery (Wright & Decker, 1997), drug sales (Jacobs, 1996), or gang activity (Miller & Decker, 2001). The risk associated with studying cybercrime may not, however, be evident to young scholars who are unfamiliar with the research area. Thus, there is a need to better communicate the ways that scholars need to protect themselves and their institutions in the event of retaliatory attacks or pranks that cybercriminals may perform as a function of their involvement in a research study.

This research also demonstrates the importance of ethical review to avoid harm to the researcher and their participants. Precautions that have been taken to minimize harm have been found to be useful, particularly when it comes to de-identifying data. A related concern is an ever-more-common requirement from funding bodies and publishers for 'open data.' There are admirable philosophies in support of open data requirements. However, for sensitive topics such as cybercrime, where qualitative data may hold clues about who was spoken to, no matter how well it has been sanitized, it can be problematic to comply with these requirements while also being in a position to protect participants. In some cases, funders will acknowledge such restrictions and may have exemptions in place (for example, the UK Engineering and Physical Sciences Research Council has an exemption for personal and sensitive data).

Taken as a whole, this study demonstrates the need for future scholars to continue to use qualitative methodologies to understand the evolution of cybercriminality better. The depth of information that can be developed from robust interview protocols can improve our understanding of the practices of actors, their motivations, and decision-making processes. This sort of research can also improve our understanding of the ways that the practices of offenders evolve, and differ by place (e.g., Holt et al., 2017). Without

such inquiry, we will be unable to move beyond the limited results that can be produced from quantitative studies of college student samples and honeypot data that provides limited insights into offender behavior (see Holt & Bossler, 2016).

REFERENCES

Berg, B. L. (2007). *Qualitative Research Methods for the Social Sciences* (6th ed.). Boston: Pearson Education, Inc.

Bossler, A. M., & Burruss, G. W. (2011). The general theory of crime and computer hacking: Low self-control hackers. In T. J. Holt & B. H. Schell (Eds.), *Corporate Hacking and Technology-Driven Crime: Social Dynamics and Implications* (pp. 38-67). Hershey: Information Science Reference.

Brenner, S. W. (2010). *Cybercrime: criminal threats from cyberspace*. Santa Barbara: ABC-CLIO.

Business Software Alliance. (2016). 2016 BSA Global Software Survey: Seizing Opportunity Through License Compliance. Retrieved May 9, 2017, from http://globalstudy.bsa.org/2016/index.html

Cherbonneau, M., & Copes, H. (2006). 'Drive it like you Stole it': Auto theft and the illusion of normalcy. *British Journal of Criminology, 46*(2), 193-211.

Christie, N. (1997). Four blocks against insight: Notes on the oversocialization of criminologists. *Theoretical Criminology, 1*(1), 13-23.

Décary-Hétu, D., & Dupont, B. (2012). The social network of hackers. *Global Crime, 13*(3), 160-175.

Diamond, B., & Bachmann, M. (2015). Out of the beta phase: Obstacles, challenges, and promising paths in the study of cyber criminology. *International Journal of Cyber Criminology, 9*(1), 24.

Dupont, B., Côté, A.-M., Savine, C., & Décary-Hétu, D. (2016). The ecology of trust among hackers. *Global Crime, 17*(2), 129-151.

Franklin, J., Paxson, V., Perrig, A., & Savage, S. (2007). *An inquiry into the nature and causes of the wealth of internet miscreants.* ACM Conference on Computer and Communications Security (CCS), Virginia, October 29-November 2.

Furnell, S. (2002). *Cybercrime: Vandalizing the Information Society*. London: Pearson Education Limited.

Garfinkel, H. (1967). *Studies in Ethnomethodology*. New York: Prentice Hall.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82.

Hammersley, M., & Atkinson, P. (1983). *Ethnology: Principles in Practice*. Nueva York: Tavistock.

Higgins, G. E., & Marcum, C. D. (2011). *Digital Piracy: An Integrated Theoretical Approach*. Durham: Carolina Academic Press.

Holt, T. J. (2007). Subcultural evolution? Examining the influence of on- and off-line experiences on deviant subcultures. *Deviant Behavior, 28*(2), 171-198.

Holt, T. J. (2010). Examining the role of technology in the formation of deviant subcultures. *Social Science Computer Review, 28*(4), 466-481.

Holt, T. J. (2013). Exploring the social organisation and structure of stolen data markets. *Global Crime, 14*(2-3), 155-174.

Holt, T. J., & Bossler, A. M. (2016). *Cybercrime in Progress: Theory and Prevention of Technology-Enabled Offenses*. Oxon: Routledge.

Holt, T. J., Bossler, A. M., & May, D. C. (2012). Low self-control, deviant peer associations, and juvenile cyberdeviance. *American Journal of Criminal Justice, 37*(3), 378-395.

Holt, T. J., Freilich, J. D., & Chermak, S. M. (2017). Exploring the subculture of ideologically motivated cyber-attackers. *Journal of Contemporary Criminal Justice*.

Holt, T. J., Smirnova, O., Chua, Y. T., & Copes, H. (2015). Examining the risk reduction strategies of actors in online criminal markets. *Global Crime, 16*(2), 81-103.

Holt, T. J., Smirnova, O., & Hutchings, A. (2016). Examining signals of trust in criminal markets online. *Journal of Cybersecurity, 2*(2), 137-145.

Hutchings, A. (2013a). Hacking and fraud: Qualitative analysis of online offending and victimization. In K. Jaishankar & N. Ronel (Eds.), *Global Criminology: Crime and Victimization in the Globalized Era* (pp. 93-114). Boca Raton: CRC Press.

Hutchings, A. (2013b). *Theory and Crime: Does it Compute?* Ph.D. thesis, Griffith University, Brisbane.

Hutchings, A. (2014). Crime from the keyboard: Organised cybercrime, co-offending, initiation and knowledge transmission. *Crime, Law & Social Change, 62*(1), 1-20.

Hutchings, A., & Chua, Y. T. (2017). Gendering cybercrime. In T. J. Holt (Ed.), *Cybercrime Through an Interdisciplinary Lens* (pp. 167-188). Oxford: Taylor & Francis Group.

Hutchings, A., & Clayton, R. (2016). Exploring the provision of online booter services. *Deviant Behavior, 37*(10), 1163-1178.

Hutchings, A., & Clayton, R. (2017). *Configuring Zeus: A case study of online crime target selection and knowledge transmission*. APWG Symposium on Electronic Crime Research (eCrime), Arizona, April 25-27.

Hutchings, A., & Holt, T. J. (2015). A crime script analysis of the online stolen data market. *British Journal of Criminology, 55*(3), 596-614.

Jacobs, B. A. (1996). Crack dealers and restrictive deterrence: Identifying narcs. *Criminology, 34*(3), 409-431.

Jordan, T., & Taylor, P. (1998). A sociology of hackers. *The Sociological Review, 46*(4), 757-780.

Kinkade, P., Bachmann, M., & Bachmann, B. (2013). Hacker Woodstock: Observations of an off-line cyber culture at the Chaos Communication Camp 2011. In T. J. Holt (Ed.), *Crime On-Line: Correlates, Causes, and Context* (2nd ed., pp. 27-53). Raleigh: Carolina Academic Press.

Lea, M., O'Shea, T., Fung, P., & Spears, R. (1992). 'Flaming' in computer-mediated communication: Observations, explanations, implications *Contexts of Computer-Mediated Communication* (pp. 89-112). Hertfordshire: Harvester Wheatsheaf.

Levy, S. (1984). *Hackers: Heroes of the Computer Revolution*. Garden City: Anchor Press/Doubleday.

Lusthaus, J. (2012). Trust in the world of cybercrime. *Global Crime, 13*(2), 71-94.

Maimon, D., Alper, M., Sobesto, B., & Cukier, M. (2014). Restrictive deterrent effects of a warning banner in an attacked computer system. *Criminology, 52*(1), 33-59.

Meyer, G. R. (1989). *The Social Organization of the Computer Underground.* Master of Arts, Northern Illinois University, DeKalb.

Miller, J., & Decker, S. H. (2001). Young women and gang violence: Gender, street offending, and violent victimization in gangs. *Justice Quarterly, 18*(1), 115-140.

Motoyama, M., McCoy, D., Levchenko, K., Savage, S., & Voelker, G. M. (2011). *An analysis of underground forums*. Paper presented at the ACM SIGCOMM Conference on Internet Measurement, Berlin.

Patchin, J. W., & Hinduja, S. (2016). *Bullying today: Bullet points and best practices*. Thousand Oaks: Corwin Press.

Schell, B. H., & Dodge, J. L. (2002). *The Hacking of America: Who's Doing It, Why, and How*. Westport: Greenwood Publishing Group Inc.

Shaw, E., Ruby, K. G., & Post, J. M. (1998). The insider threat to information systems: The psychology of the dangerous insider. *Security Awareness Bulletin, 98*(2), 1-10.

Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*. London: Sage.

Steinmetz, K. F. (2015). Craft(y)ness: An ethnographic study of hacking. *The British Journal of Criminology, 55*(1), 125-145.

Taylor, P. (2001). Hacktivism: In search of lost ethics? In D. Wall (Ed.), *Crime and the Internet* (pp. 59-73). London: Routledge.

Taylor, P. A. (1993). *Hackers: a case-study of the social shaping of computing*. University of Edinburgh.

Taylor, P. A. (1999). *Hackers*. London: Routledge.

Thomas, D. (2002). *Hacker culture*. Minneapolis: University of Minnesota Press.

Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior, 26*(3), 277-287.

Turgeman-Goldschmidt, O. (2007). Meanings that hackers assign to their being a hacker. *International Journal of Cyber Criminology, 2*(2), 382.

Wall, D. S. (2001). Maintaining order and law on the Internet. In D. S. Wall (Ed.), *Crime and the Internet* (pp. 167-183). London: Routledge.

Wright, R., & Decker, S. (1997). Creating the illusion of impending death--Armed robbers in action. *Harry Frank Guggenheim Review, 2*, 10-18.

Wright, R. T., & Decker, S. (1994). *Burglars on the Job: Streetlife and Residential Break-ins*. Boston: Northeastern University Press.

Yip, M., Webber, C., & Shadbolt, N. (2013). Trust among cybercriminals? Carding forums, uncertainty and implications for policing. *Policing and Society, 23*(4), 516-539.

Dr. Alice Hutchings is a University Lecturer in the Department of Computer Science & Technology, University of Cambridge. A criminologist, her research interests include understanding cybercrime offenders and the prevention and disruption of online crime. She is a researcher in the Cambridge Cybercrime Centre, a multi-disciplinary initiative combining expertise from the University of Cambridge's Department of Computer Science & Technology, Institute of Criminology, and Faculty of Law.

Dr. Thomas J. Holt is a professor in the School of Criminal Justice at Michigan State University. His research focuses on cybercrime, cyberterror, and the police response to these offenses. His work has appeared in various outlets including British Journal of Criminology, Crime & Delinquency, Deviant Behavior, and Journal of Criminal Justice.

Revisiting a Classic: A Qualitative Analysis of Differential Opportunity Theory and its Utility in Explaining Residential Burglary

John A. Shjarback[1]
University of Texas at El Paso

Abstract

Cloward and Ohlin's (1960) differential opportunity theory made several significant contributions to criminology, including the emphasis on illegitimate means and the idea that social structure influences criminal opportunity. The problem, however, is that the field largely misinterpreted Cloward and Ohlin's intent as a simple variation of strain theory instead of a critical refinement of the existing perspective. Generally, the theory has not received much scholarly attention in terms of testing of its key propositions. Using semi-structured personal interviews with 105 active residential burglars in St. Louis, Missouri during 1989-1990, the current study uses qualitative measures to analyze differential opportunity theory as it applies to residential burglary. Results show support for the theory, including access to criminal learning environments and mentoring, the importance of criminal connections, neighborhood influence on offenders' risk perceptions, and the overall salience of neighborhood context on what are termed "front-end" and "back-end" opportunity structures. Emerging themes, practical implications, and directions for future research are discussed.

Keywords: differential opportunity theory; residential burglary; active offenders; qualitative methods; social structure

INTRODUCTION

The importance of social structure in explanations of crime and delinquency has risen and waned over time. Early criminologists from the Chicago school emphasized the role of neighborhoods and groups in social control and social organization (Shaw & McKay, 1942). These ideas were later adopted by Richard Cloward and Lloyd Ohlin (1960) during the development of their differential opportunity theory. Soon after this publication, however, the field of criminology moved away from the neighborhood and group traditions. Hirschi's (1969) social bond theory shifted attention to the individual-level correlates of offending, providing the impetus for a changing disciplinary trend that would last through the next few decades. Although the focus on social structure and neighborhood context would eventually reemerge due to a number of influential works in the 1980s and 1990s (Bursik & Grasmick, 1993; Sampson & Groves, 1989; Sampson, Raudenbush, & Earls, 1997), the true value of seminal works like that

of Cloward and Ohlin (1960) may have been skipped over and undervalued during these transitions.

Aside from the shift toward individual-level predictors during the late 1960s, two other significant reasons exist for the relative neglect of scholarly attention that differential opportunity theory has received. Cullen (1988) touches on the first factor in his criticism of the field of criminology for its misinterpretation of differential opportunity theory. According to Cullen, Cloward and Ohlin are largely viewed as simply proposing a variation of Merton's (1938) anomie theory; thus, reducing the authors to strain theorists. He goes on to argue that Cloward and Ohlin were offering a critique of existing strain theory, due to its incompleteness and failure to observe that the responses to strain are socially structured and constrained. Cullen (1988: 224) reiterates what he perceives to be the central message of differential opportunity theory, that "the illegitimate opportunity structure, not strain, regulates the content and form of deviant adaptations." Secondly, Cloward and Ohlin took divergent career paths to pursue their professional endeavors shortly after the 1960 publication. All of the aforementioned factors likely contributed to why differential opportunity theory lost intellectual steam not long after it originated.

The current paper aims to refocus scholarly attention on differential opportunity theory. In doing so, the purpose is to examine whether social structure matters in giving rise to residential burglary. A growing body of empirical work has discovered that neighborhood characteristics are associated with residential burglary (e.g., Bernasco, Johnson, & Ruiter, 2015; Chamberlain & Boggess, 2016). For example, factors such as an area's level of residential instability and concentrated disadvantage appear to influence target attractiveness. What is less clear, however, is the process by which an offender selects a location for a residential burglary (see Wright & Decker, 1994; Wright, Logie, & Decker, 1995 for exceptions[2]), how individuals initially get involved in residential burglary, and how neighborhood context influences offenders' perceptions of risk. Using semi-structured interviews with 105 active residential burglars from St. Louis, Missouri in 1989-1990, qualitative methodology is employed to assess the central tenets of differential opportunity theory as they apply to this particular type of crime. Special attention was paid to themes that emerged regarding how illegitimate means, as well as specific neighborhood characteristics, facilitated the successful completion of burglaries for those offenders under study.

OUTLINING DIFFERENTIAL OPPORTUNITY THEORY

Cloward and Ohlin integrated two distinct theoretical perspectives into their differential opportunity theory (see Kornhauser, 1978 for a discussion of the mixed model as well as a critique). More specifically, they merged the concept of anomie/strain with the Chicago school. The anomie tradition, influenced by Durkheim and later articulated by Merton, places attention

---

[2] These studies do an exceptional job of explaining many of the situational factors associated burglars' risk perceptions and choices of targets, such as the rationale for selecting one house over others. For example, previous work using these data finds that offenders weigh factors like signs of occupancy and the likelihood of finding valuables while selecting a dwelling. The effort here is to extend this research by focusing on broader risk perceptions associated with social structure and neighborhood context –not necessarily the immediate environmental factors of the house/dwelling itself (e.g., the existence versus non-existence of an alarm box, bolts/locks, a car in the driveway), which has been a primary focus of past research.

on the economic pressures that could lead to deviance. Anomie/strain develops because of a breakdown in the relationship between monetary goals and the legitimate avenues to accomplish them (Merton, 1938; Messner & Rosenfeld, 1994); often, the means to legitimately achieve monetary goals are limited. Additionally, Cloward and Ohlin presented elements of the Chicago school and its emphasis on social structure and learning (Shaw & McKay, 1942; Sutherland, 1937).

Cloward and Ohlin's theory introduced the utility of social structure when examining the anomie perspective (see Cullen, 1988). For example, persons located in various levels of social hierarchy (i.e., socioeconomic status) have different chances of reaching common success goals. Because the legitimate means to attain goals are limited for those in disadvantaged positions, the pressure to engage in delinquency, due to strain, will be highest in lower levels of society (see also Cohen, 1955). Therefore, Cloward and Ohlin (1960) posit that delinquent subcultures will typically (but not exclusively) be encountered by young minority males in lower class, urban areas. They were most interested in discovering why delinquent subcultures arise in certain locations of the social structure. Still, as Kornhauser (1978) discussed, anomie/strain is not enough to lead to delinquency.

Illegitimate Means

Perhaps the most important contribution of Cloward and Ohlin's (1960) theory was the emphasis they placed on the availability of illegitimate means. Many criminological theories center on the notions of either propensity/motivation or constraint. In fact, Tittle (1995) takes issue with a number of these perspectives (e.g., social bonds, differential association/social learning) for their lack of theoretical comprehensiveness or the inclusion of relevant causal variables, one of which includes opportunity. When they introduced their perspective, Cloward and Ohlin found existing theories unsatisfactory because they ignored the availability of illegal alternatives or opportunity. Similar to legitimate or conventional means, illegitimate means are also socially structured and not freely available to all. They were concerned with differences in access to illegitimate means within the lower class.

The notion that illegitimate means are limited and not readily available to everyone was not a new idea developed by Cloward and Ohlin. They make clear that the idea dates back to the work of Edwin Sutherland. While reconstructing the life history of a professional thief, Sutherland (1937) discovered the salience of tutelage and mentoring from older, more experienced thieves (see also McCarthy, 1996; Sullivan, 1989). According to Cloward and Ohlin, it is not enough to have the motivation to commit crime; it is also imperative to have access to a learning environment and people to acquire knowledge from.

Neighborhood Context and Criminal Learning Environments

Certain neighborhoods play a key role in fostering criminal learning environments for potential young offenders. Environments where stable patterns of crime already exist allow for the integration of offenders of different age levels (Cloward & Ohlin, 1960). Young adolescents converge in time and space with older, more experienced offenders where they are exposed to differential associations (Sutherland, 1939) of criminal values and skills. Again, it is the social structure (i.e., neighborhood context) that offers young, potential offenders opportunity and access to both learning and performance structures. In this way, differential opportunity theory

sounds like a precursor to Akers' (1998) Social Structure Social Learning (SSSL) theory[3], which is an attempt to place micro-level learning dynamics into a broader, more macro-level context. Perhaps influenced by Cloward and Ohlin, Akers proposed that social structure has an indirect effect on both criminal and conforming behavior through the social learning variables of differential association, differential reinforcement, definitions, and imitation (see also Akers & Jensen, 2008). The social structural contexts in which those social processes are nested provide a more complete description of learning. Akers' theory, however, continues to suffer from the same shortcomings, particularly neglecting to discuss variability in the availability of illegal alternatives and access to a learning environment (i.e., opportunity).

Early qualitative research highlights that, at a young age, children learn to admire and respect older criminals. For instance, Shaw's (1966) depiction of the criminal career of Stanley in *The Jack-Roller* illustrates this cultural transmission of youth looking up to the "big shots" in the neighborhood as role models. Additionally, quantitative work suggests that exposure/time spent with delinquent peers, one's loyalty to friends, and the importance placed on peer relations peaks in the early-to-late teens (Warr, 1993). In sum, conditions favorable to learning a role (i.e., differential opportunity) depend on features of the social structure in which delinquency arises, and criminal subculture is likely to arise in a neighborhood milieu characterized by close bonds between different age-levels of offenders (Cloward & Ohlin, 1960).

Neighborhood Context and Residential Burglary

Recent quantitative studies have examined the neighborhood characteristics associated with residential burglary and the role that community context contributes to target attractiveness.[4] Aside from the short distance between an offender's home location to the crime (Barker, 2000; Rengert, Piquero, & Jones, 1999; Wheeler, 2012), which suggests the home location has a strong impact on target selection, research has also found that residential burglaries are more likely to occur in neighborhoods with higher levels of residential instability (Bernasco et al., 2015), racial/ethnic heterogeneity (Bernasco & Luykx, 2003; Bernasco & Nieuwbeerta, 2005), and concentrated disadvantage (Chamberlain & Boggess, 2016; Nobles, Ward, & Tillyer, 2016). Chamberlain and Boggess (2016), in particular, uncovered evidence that offenders chose to burgle in neighborhoods with greater economic disadvantage compared to their home neighborhood. Disadvantaged areas lack informal social control, cohesion, and collective efficacy (Sampson & Groves, 1989; Sampson et al. 1997), which potentially affect burglars' *perceptions* of target attractiveness/selection. Offenders, for example, might be more willing to choose these neighborhoods because they believe residents have a reduced capacity to identify outsiders; therefore, allowing burglars a greater chance of avoiding detection. Still, scholars are left to merely speculate as to why such patterns exist. More qualitative work and in-depth interviews with offenders may be able to shed light on and supplement these findings.

---

[3] I thank reviewer #1 for pointing this out.

[4] Many of these studies arrive at their conclusions of "target attractiveness" by examining offense locations from arrest data or crimes reported to law enforcement and using discrete choice modeling strategies (McFadden, 1973). The strategies allow for the estimation of an individual selecting a chosen location (e.g., census tract; block group) out of a set of finite alternative options in the city.

Criminal Connections and Co-Offending

Cloward and Ohlin (1960) also emphasized that "connections" are essential to be successful in the criminal world. Not every person with a desire to engage in crime will be able to sustain his or her criminal lifestyle over time. Those who cultivate appropriate relationships in the criminal underworld have a better chance of succeeding. This is where apprenticeships and ties to older, more experienced offenders come into play. Cloward and Ohlin specifically examined the types of connections needed among burglars. They proposed that it is important to possess close and dependable ties with income-producing outlets for stolen goods, such as fences. Shover (1972), for example, found that most men are introduced to a fence by friends who have already established a relationship with one or more criminal receivers and that this initial contact with a fence often leads to introductions with other fences and burglars. Moreover, criminal connections might serve to further one's involvement in crime, as knowledge of the illegitimate world is deepened, new skills are acquired, and the opportunity to engage in new types of illegitimate activity is enhanced (Cloward & Ohlin, 1960). In keeping with the consistent theme of social structure, criminal elements like fences may be more prevalent in some neighborhoods compared to others. If a motivated offender cannot form these connections, then the possibility of attaining a long-lasting criminal career is reduced.

Closely related to criminal connections is the phenomenon of co-offending (Reiss, 1980). Although the discussion of co-offending dates back over a century (Breckenridge & Abbott (1912), and despite the fact that one of the most consistent findings in criminology is the association between delinquent peers and one's offending (Pratt et al., 2010; Warr & Stafford, 1991), there are relatively few studies on the topic (see Andresen & Felson, 2012). Prior active offender research has found residential burglary to be a particularly social type of crime. Offenders typically work in groups to commit burglaries, and they use relationships and interactions to gather/share information about potential targets (Mullins & Wright, 2003; Shover, 1972; Steffensmeier, 1983; Wright & Decker, 1994). While newer studies with larger sample sizes have questioned the prevalence of co-offending relative to solo offending for crime in general (Andresen & Felson, 2010; 2012; Carrington, 2009; Stolzenberg & D'Alessio, 2008; van Mastrigt & Farrington, 2009), this work has consistently shown that co-offending rates for residential burglary are higher than other types of disaggregated crime classifications (e.g., violent and drug-related offenses). Furthermore, Sarnecki (2001) uncovered that younger offenders tend to find their co-offenders in their immediate neighborhoods. Differential opportunity theory and a focus on neighborhood context more specifically may be a fruitful avenue for furthering our understanding of co-offending as it relates to residential burglary.

Neighborhood Context and Markets for Stolen Goods

More recent research has found that markets for stolen goods, or "hot items," can contribute to property crime like residential burglary (see Felson & Boba, 2010). And it is the general population of a community that largely drives these markets. Regardless of whether hot items travel through fences or are sold directly to people, it is the public's willingness to buy stolen property that truly matters. When disposing of stolen goods, a burglar depends on the public; people must be interested in the items. According to Felson and Boba (2010), evidence is growing that the demand for these goods drives property crime, more so than the other way around.

Because burglars rely on the public to exchange stolen property for money and the demand for goods has been shown to be a driving factor, social structure emerges once again as a salient feature for why some neighborhoods are more likely to generate or even attract property crime. Low-income areas might be more susceptible to property crime, even though their residents are not especially criminally inclined. Sutton (1998), for example, found that low-income areas were offered stolen goods more frequently than higher-status areas. Simple features of life in disadvantaged communities, such as people's interest in cheap, second-hand goods, provide a sizeable market for property offenders to unload/discard stolen items for two reasons (see Felson & Boba, 2010). First, the financially disadvantaged are more prone to favor used and secondary merchandise for obvious economic reasons. Second, and relatedly, goods that are stolen can be easily mixed in with legitimate second-hand items and sold at shops selling used appliances, pawnshops, thrift stores, sidewalk merchants, etc. In fact, because stolen goods can be camouflaged with other legitimate second-class merchandise and sold within the secondary market, research has uncovered that the line between a fence and a legitimate merchant is often thin (Cromwell, Olson, & Avary, 1991; Johns & Hays, 2003; Klockars, 1974). Disadvantaged low-income areas provide both buyers of second-class goods and the avenues to dispose of such items.

The Categorization of Illegitimate Opportunities

While the idea was not explicitly expressed or articulated by Cloward and Ohlin, there may be two general types of illegal opportunities –especially in regard to the crime of burglary. The two types include front-end versus back-end illegal opportunities. Front-end opportunities represent all of the illegitimate means one receives and possesses before and/or during the commission of the burglary itself, such as access to a criminal learning environment and the mentoring/tutelage gained from these relationships. By contrast, back-end opportunities represent all of the illegitimate means that allow for the successful disposal and sale of the stolen property, like connections to income-producing outlets (e.g., fences) as well as the ability of one to sell and people's willingness to buy stolen items.

Current Focus

The scholarly attention placed on neighborhood context and the broader social structure has been cyclical, dating back to the early twentieth century and the Chicago school's dominance. Within the last few decades, the field has witnessed a renewed interest in social context. In his Sutherland Award address, Sampson (2013) emphasized the importance of place, especially as manifested in neighborhoods, as a fundamental context for criminology moving forward. Sampson (2013: 2) went on to describe the world as "profoundly uneven and inequality by place is itself ubiquitous." Such a statement is consistent with the underlying theme of differential opportunity theory. Often, scholars studying inequality focus heavily on legitimate means and opportunities. What has been largely neglected from these discussions is that there is inequality in the distribution of illegitimate opportunities; not all neighborhoods present similar prospects or situations for crime to take place –both at the front and back ends. The current study addresses this shortcoming by examining how neighborhood context may influence residential burglary. Particular attention is paid to a theoretical perspective that has not received much attention throughout the years – Cloward and Ohlin's (1960) differential opportunity theory.

METHODS

Data and Sample

The data come from in-depth personal interviews with 105 active residential burglars, not incarcerated at the time, operating in St. Louis, Missouri between 1989 and 1990 (publically available through ICPSR). It should be noted that the data have been used extensively in past research; however, there are a number of reasons why this choice in datasets is appropriate. For one, there is a lack of datasets that provide qualitative interviews with active offenders and even fewer that are publicly available. Next, this urban, inner-city context makes for an ideal research setting to examine differential opportunity theory due to its focus on relatively disadvantaged communities. After all, and consistent with the theory, it is due to the lack of legitimate opportunities for financial gain or earning status that some turn to crime (Merton, 1938; Messner & Rosenfeld, 1994). The interviews were semi-structured, tape-recorded, and later transcribed verbatim to facilitate analysis. In terms of richness and depth, interviews ranged from one and a half to three hours long and were conducted in a way to allow participants to speak freely and informally with the interviewers. Broadly, the data covered the behaviors and attitudes of the offenders under study, including risk perceptions and methods used to carry out the crimes.

The sample is comprised of 105 active residential burglars currently engaged in committing these specific types of offenses. A large majority of the sample is male (83%; $n = 87$) and African-American (69%; $n = 72$). Both adults (74%; $n = 78$) and juveniles (26%; $n = 27$) are represented. At the time of the interviews, twenty-one (20%) of the subjects were under community supervision (i.e., probation or parole). The recruitment of participants began with a trained field ethnographer –an ex-offender who had retained ties to St. Louis street life (see Decker & Smith, 2015 for a further discussion). "Snowball" sampling techniques were employed (Sudman, 1976; Watters & Biernacki, 1989; Wright, Decker, Smith, & Redfern, 1992), whereby initial offenders known to the field ethnographer and the principal investigators were asked to refer other offenders; this process continued until a suitable sample size was reached. No referrals from law enforcement or other criminal justice personnel were used, in an effort to prevent the sample from consisting of a disproportionately high number of offenders who had been previously apprehended. More detailed information on the data and sample, including the recruitment strategies for the participants, are provided by Wright and Decker (1994).

Coding System and Analytic Techniques

The qualitative data were analyzed using a combination of a priori (i.e., deductive) and grounded (i.e., inductive) approaches (Glaser & Strauss, 1967). The process began with an *a priori* coding of topics related to differential opportunity theory's conceptual framework, such as criminal learning networks fostered by older or experienced offenders, criminal "connections," and other instances where neighborhood context may influence illegitimate means. There were a number of open-ended questions from the semi-structured interviews that were directly relevant in assessing Cloward and Ohlin's (1960) theory. For example, participants were asked about their first residential burglary and further probed about who they were with, whose idea it was, etc. Another set of questions dealt with how the subjects disposed of stolen items once they

completed residential burglaries. Moreover, the data were also assessed using grounded theory to look for other types of emerging themes related to Cloward and Ohlin's propositions.

The interview transcripts were thoroughly and systematically examined to assign codes to identify themes that emerged repeatedly. Each subject's interview was read in full, and a line-by-line text analysis was performed. In addition to the two types of coding, the Constant Comparison method (Charmaz, 2006; Glaser & Strauss, 1967) was used to determine whether codes and themes generated in one case were consistent across other cases in the sample. This step allowed the researcher to analyze the qualitative data with some quantitative measures, by getting a sense of measures of central tendency and dispersion on certain ideas/themes (i.e., simply adding a step to quantify the qualitative data). At times, it was difficult to organize the findings because certain themes seemed to run across topics, not an uncommon finding in qualitative research.

RESULTS

Lack of Legitimate Opportunities

A good starting point for any examination of differential opportunity theory is the lack of or limited access to legitimate opportunities for monetary gain. It was difficult, however, to analyze and code for these themes because the original research team did not necessarily include questions about the underlying motivations[5] behind both initial and continued involvement in burglary. Instead, the participants were asked about the situational circumstances surrounding their first residential burglary (e.g., age; who they were with; where it occurred). Nonetheless, twenty-one interviewees explicitly articulated the lack of legitimate opportunities, specifically being unemployed and in need of money, as a contributing factor to their involvement in residential burglary.

> But I wanted me some dough. I didn't have no money. Didn't have no ride. So I got up one morning, and I sat there and watched them leave and then went on in. Went around the back and went on in and got my merchandise and stuff. Took it out to the alley. (No. 16)

> Well, I wasn't workin', and I couldn't hold no job. (No. 20)

> For the money. Not for the thrill or excitement of doing it. Just for the money… it's just that my kids need this or I'm broke. (No. 23)

This theme also emerged when the participants were asked to recall any extended periods of time, usually six months or longer, when they did not engage in residential burglary. In most of these cases, stable employment was mentioned as the primary reason for their hiatus from offending.

---

[5] Previous analysis of the data (Wright & Decker, 1994) has revealed a strong motivation to engage in burglary in order to satisfy a need for immediate gratification for cash, either to support a drug habit or to keep up appearances related to street life (e.g., buying new clothes, jewelry, etc.). Still, an effort was made to look for themes beyond the demand for money and/or status for immediate gratification purposes while focusing on the underlying reasons why the interviewees could not finance these endeavors through legitimate methods.

I was working. Money was plentiful at the time. I didn't have to want for anything. (No. 25)

Workin. I was workin'. Why should you bother anything if you workin'? That's all I wanted to do anyway was work. I don't mind work. (No. 35)

When I was working. I didn't really have no reason to do it then. Because I knew I got paid every week or every two weeks so I have my own money to buy my own things. (No. 79)

These quotes illustrate that it is the lack of well-paid employment that led, at least in part, to their offending, and how increased legitimate opportunities for work caused them to temporarily desist from burglary.

Introduction to Residential Burglary

Because participants were asked specifically about the situational conditions surrounding their first residential burglary, the interviews were able to shed light on the proximate process in which one initially becomes involved in such a crime. Consistent with the findings from previous work (Mullins & Wright, 2003; Wright & Decker, 1994), more than eighty percent ($n = 85$) of the interviewees in the sample reported that they had committed their first residential burglary with other people –highlighting the prevalence of co-offending for this particular crime. In close to three-quarters of these cases ($n = 59$), participants mentioned that they were with friends. The remaining interviewees who indicated that they had participated in their first residential burglary with other co-offenders specified that they had done so with family members. Brothers were named in most of these cases but uncles and male cousins were mentioned as well. Such patterns of entry into one's first burglary via interactions with intimate groups (e.g., friends and family) support prior research.

By contrast, a little less than fifteen percent ($n = 15$) of the active offenders specified that they committed their first burglary alone. Even when these situations occurred, participants expressed knowing burglars (e.g., friends and/or family) and discussing this type of crime with them beforehand.

Most of my friends do it, so I said hell I try it too. They can get away with it; then I can too. (No. 20)

As he would teach me how to break in these houses, I just started pickin' it up by watchin' him. So I decided one day that I had this thought in my mind, all day long. Could I do this? He can do it. So what I did was go by myself, and I knew what I needed. (No. 48)

Older and experienced burglars. When taking part in a first residential burglary with others, a significant percentage of the time this occurred with people who were older and/or had experience carrying out such crimes. In more than half of these cases ($n = 44$), participants indicated that they had partaken in the crime with older offenders.

Well, I was with a couple of older buddies of mine in high school. (No. 25)

> Yeah. That's what pulled me into it. They was into it more than I was. They was older fellah's. I always hung out with older fellah's when I was growing up. Basically, that's what they were into. (No. 37)

Moreover, the interviewees engaged in their first offense with experienced burglars in more than one-third of cases ($n = 32$) when they were in a group. Evidence from the transcripts points to the convergence in time and space between younger offenders and older, more experienced offenders –a tenant of differential opportunity theory discussed by Cloward and Ohlin.

Following the lead of older and experienced burglars. Furthermore, the richness of the narratives allowed for a deeper look at the subjects' initial involvement in burglary rather than just a simple count or description of who one was with. When committing their first residential burglaries with other people, participants often ($n = 40$) used words like "followed" and "went along with," indicating that they were neither the one with the idea nor were they in charge of planning the crime.

> They knew 'bout it. I was always a follower, not a leader. (No. 1)

> Well at that particular time I was just following somebody, so I just went along with them. (No. 41)

Sometimes, subjects even articulated that they had "looked up to" the older and/or more experienced residential burglars with whom they were interacting.

> Yeah. I was running with a little crowd. This one little guy had just gotten out of Boonesville (Juvenile Correctional Center). He taught us. That's how it first got started. He had been doing time, and he influenced us real good. We looked up to him. (No. 24)

> I wanted to hang out with the big guys like I said. (No. 104)

Lastly, there were also a handful of instances ($n = 7$) where interviewees touched on elements of peer pressure by others, usually from older and/or experienced offenders, prior to their first burglary.

> I kind of got talked into it; I had talked to people who said, oh it's your first offense, nothing will happen, nothing will go wrong, don't worry about it, we'll get in, we'll get out. (No. 72)

> Oh yeah, and oh I didn't really want to, but they kinda talked me into it. (No. 76)

These quotes shed some light on the concept of co-offending, particularly as it relates to the subjects' initial involvement in burglary. They suggest that differences in age, with younger individuals being influenced by people who are older and more experienced, might be worthy of further study.

Mentoring and Learning

Taking it a step further than simply following one's lead, a portion ($n = 21$) of the subjects explicitly acknowledged being mentored by older and/or more experienced offenders –a topic introduced by Sutherland and elaborated on by Cloward and Ohlin in their discussion of illegitimate means. The interview narratives display that these participants had access to a criminal learning environment, specifically "front-end" opportunities both before and during the commission of the crime. They talked about learning from others who taught them how to carry out the actual burglary. Topics included target selection and steps to take pre-burglary.

Yeah. He showed me how to pick it out and what was good about the houses. (No. 31)

Well, my brother had told me what to do. You sit in front of a house, and you watch the people and see how many people you see comin' in and out of the house. (No. 46)

Interviewees also commented on being schooled in the best way to gain entry into a dwelling.

Yeah. He just showed me how it won't make so much noise. Take a wet newspaper and put it on the window and hit it. (No. 29)

And they told me it was best to pry it in between the door and the lock and just push in on the door and the door will come open. So that's what I did. (No. 46)

I watched him and see how he would get in, and I would go right in behind him. That's how I started learning how to get in the majority of the houses, following him. (No. 55)

In addition, participants discussed learning about search techniques once inside the residence.

I would say he had the experience more so than I did. He was the one that taught me instead of going through the whole house to just hit the bedroom and get out. (No. 35)

Others commented on learning and mentoring in a more general sense.

They were still doing stuff like that, and I was learning from them and learning from them. It was like I had a book of knowledge on this crap. (No. 72)

They gave me all this information. They gave me enough information for me to write a book. (No. 80)

There was also a learning/mentoring quality regarding how to get rid of stolen items once the burglary was completed –what have been termed and proposed as "back-end" opportunities.

He was older than us so he knew more about this stuff. Where to take it to and all that. (No. 64)

He knew right where to sell it at. He had good connections and stuff too. Later on, I got good connections, and I learned how to do all this. (No. 83)

Criminal Connections

As previously discussed, illegitimate opportunities are socially structured (Cloward & Ohlin, 1960; Schaefer, Rodriguez, & Decker, 2014). Not everyone who decides to engage in a criminal lifestyle is going to be successful. Success in these illegitimate markets, similar to conventional employment, requires "connections" and key relationships with others. By far, the strongest theme that surfaced throughout the qualitative interviews was the importance of and reliance on "connections" to carry out residential burglaries. Almost three-quarters of the active offenders in the sample ($n = 74$) explicitly discussed connections or working relationships with people that they associated with, whether it be with a fence, a lax pawn shop that did not require identification or receipts, or a person that tipped them off to vulnerable occupancies.

Connections and the disposal of stolen goods. Connections were fundamental to the disposal of stolen goods once items were removed from a residency. After all, the burglary process is generally not fully complete until the stolen items are discarded and the offender has cash (or drugs) in hand. The majority ($n = 74$) of the subjects sold stolen property to people that they knew personally, compared to random strangers on the street ($n = 26$).

No. You go to the people you know. (No. 31)

Nah, I'm not like that. I sell it basically to people who know me and know that I can get something that they need. (No. 59)

I just sell them to the people I know. (No. 74)

In a non-trivial portion of cases (n = 17), respondents articulated that their established connections referred them to or set up buys with other people who wanted to purchase stolen goods (i.e., third-party go-betweens).

When the interviewees discussed disposing of goods through connections or known buyers, they usually talked about the legal risk involved with selling stolen property to people that they did not know. Often, these narratives included sub-themes of trust and risk. Burglars, generally, do not need to worry about selling stolen items to an undercover cop or being set up by a police informant when they have already established working relationships with the people they dispose their goods to.

If you sell it to somebody you don't know, you don't know what they might be a cop. (No. 74)

People you know. You never sell it to people you don't know. (No. 92)

Cause it's easier, and it's people I know and people I know that's you know that's not gonna snitch me out. People I know that aren't gonna bring heat around the house, cause I don't need that, you know, who does. (No. 95)

Specific types of connections for the disposal of stolen goods. Participants provided more specific information about how they got rid of stolen items. It is important to note that many of the active offenders in the sample used a variety of methods/connections for discarding goods, further showcasing how deep their criminal networks ran. Over one-third of the subjects ($n = 39$) expressed going through known fences. In fact, some respondents discussed having a number of fence connections that they trusted. This allowed them to shop around for the best payout.

> If you are going to do it all the time, you have to have a fence. You need more than just one too. If one won't give you the right price, what you want for it, you can go see three or four different ones and they know that so they are all going to give you a decent price and they are going to buy what they can. (No. 83)

Pawnshops were another popular venue for disposing of stolen goods ($n = 47$), although there were some interviewees (n = 17) who avoided pawnshops due to risk perceptions and fear of getting caught. The participants who did utilize pawnshops often commented on personal connections and lax conditions that put them at ease.

> Well, (pawnshop name removed) knows me and his workers know me too. So I bring it in, and he knows that I ain't gon' snitch on him. (No. 10)

> They don't care where you got it from. It's certain pawn shops in St. Louis that won't ask
> you no questions and no I.D. They don't even take pictures of you. (No. 64)

Because the interviewers picked up on recurring names of pawnshops listed by the interviewees, they began asking the offenders about those specific businesses.

> You know about (pawnshop name removed) don't you? (Pawnshop name removed) might give you the money for it and he won't ask no questions. And you don't need no ID. (No. 11)

It appears as though some of the pawnshops with lax conditions facilitated residential burglary by providing respondents with a risk-free avenue to shed their stolen property for quick cash.

Connections and the pre-ordering of items. Another theme that emerged was that of known buyers putting in requests and essentially "pre-ordering" certain items. Slightly one-third of the subjects ($n = 30$) indicated that they had engaged in this type of relationship with prospective buyers. Such a relationship is significant for a number of reasons, and each is illustrated by quotes from the active residential burglars in the sample. First, having these connections of known buyers placing orders/requests for items seemed to provide an impetus for the respondents to go out and commit burglaries.

> I usually have certain people that tell me that they need something. And then I get it going, you know. (No. 38)

> But this is what I'm sayin'. A lot of people put in an order, and then I get it. (No. 45)

Well, some people I know. That was one of the reasons why I wanted to get it because they said they could use one. (No. 63)

Having a connection to a buyer and knowing that they already wanted a specific item (e.g., jewelry, television) assists the offender in quickly disposing of that item. This greatly reduces the risk involved in holding on to stolen property for too long; the more time a burglar has a stolen item increases the chances of law enforcement officials catching the offender.

Hey you want a diamond ring, give me 200 dollars, I'll have it tomorrow. I get back tomorrow with the diamond ring and get my 200 dollars. (No. 12)

Normally, somebody be already askin' me for them. Then if I cross it, I take it right to 'em. (No. 15)

Once I know somebody that wants one I might be able to get a hold of one for them. I just go get it and bring it back to the person. (No. 40)

At times, knowing people who put in a specific request caused members of the sample to "offend switch," changing from robbery and drug dealing to burglary. The next conversation highlights this point.

Q: Why do you sort of mix it up? Why do you do all three (drug dealing, robbery, and burglary) instead of just doing one of them?

INT: Because on a burglary, when I get something, it mostly be a TV or VCR or jewelry. But on a robbery, I'm lookin' for some money. I ain't lookin' for really nothing else but some money.

Q: So burglary because you know somebody who wants something.

INT: Right.

Q: But with robberies, that's more of your day to day living.

INT: Right. (No. 50)

Neighborhood Influence

Another broad theme that appeared was how neighborhoods influenced residential burglary. It relates back to some of the previously discussed findings regarding co-offending during one's first residential burglary and knowing people/having connections to fences and other offenders from the "hood" or "block." For example, this participant commented on how he knew the experienced offender he committed his first burglary with.

We all just grew up in the neighborhood as kids; we grew up together. He was a burglar at heart. (No. 84)

In regard to connections, the following quotes were responses to questions about how the subjects knew the fences they did business with.

> That's another crook. That's a known criminal in the neighborhood. He been a known criminal all his life. And I asked him were I could get rid of it at. So he took me to this dude. And he took it and gave me money for it. (No. 11)

> He was in the neighborhood, so everybody in the neighborhood knew him. (No. 38)

Several other sub-themes also emerged. They include risk perceptions of police presence or the lack thereof, the importance of drug dealers and the drug trade, and the overall ease with which burglars could dispose of stolen items in some neighborhoods.

> *Risk perceptions of police presence or lack thereof.* As discussed, recent quantitative
research has found burglary to be more "attractive," comparatively, in disadvantaged neighborhoods. Yet, scholars have been left to speculate about these patterns, where they propose that such findings might be related to offenders' perceptions of risk. The qualitative data used here can speak to this issue, and they provide more detail than past studies that have examined target selection in the immediate environment (i.e., occupied vs. unoccupied, containing something of value; see Mullins & Wright, 2003; Wright & Decker, 1994). It appears that certain neighborhoods may be more conducive to residential burglary due to actual and/or perceived levels of police presence or the lack thereof. Many active residential burglars discussed how the visibility of police officers varied by neighborhood context. The following exchange highlights the perceived disparities in law enforcement intensity on the part of offenders.

> Q: The police don't come by?

> INT: No. That's why it's so easy. I bet you this, in my home, you can call the police and call Pantera's pizza and see which one get there first. The pizza people will get there in thirty minutes the police will get there in two hours.
> Q: I guess out in (name removed) where I live it's a little different.

> INT: Yeah they work different in different areas. (No. 37)

Subjects brought up levels of police vigilance ($n = 16$) while conversing about the topic of risk. Burglars tended to avoid areas/neighborhoods with a heavy police presence. Here is quick conversation outlining these perceptions of risk.

> INT: I got about two or three friends that do burglary. So it's like he'll come and ask me if I want to do this with him. I'll say it depends on where it's at. Like somewhere in Jennings (a St. Louis suburb), I wouldn't go.

> Q: How come?

> INT: Cause the police ride real tough out there. (No. 58)

A few other examples of excerpts include:

>I avoid an area where more than two police patrol within a half an hour. (No. 44)

>Yeah, that's a big influence. If the police patrol is like the cops ride up and down the neighborhood all the time, then I will not mess with it. (No. 88)

Conversely, participants made mention ($n = 12$) that in some areas there was a lack of or even a nonexistent police presence. These observations reduced subjects' perceived level of risk and affected their decisions to select/target that specific neighborhood.

>And by it bein' a predominantly black neighborhood, police don't patrol as much as they do a white neighborhood. (No. 44)

>Because police are very scarce. Well, it's a quiet neighborhood really. They don't really pay attention and watch out for each other's house. (No. 48)

>Yeah, I might sit for like two hours and say just sit for a while and see how many and see just sit here and if I don't see no cop coming past I say let's go. (No. 78)

All of the aforementioned exchanges and quotes seem to support the hypotheses outlined by previous scholars (e.g., Chamberlain & Boggess, 2016) regarding why burglars select more economically disadvantaged neighborhoods to offend in.

Concentration of drug dealers and the prevalence of the drug trade. Neighborhoods differ in opportunities for legitimate employment. In areas where opportunities for conventional employment are limited, illegitimate methods such as drug dealing become much more viable. One sub-theme that emerged regarding neighborhood influence on burglary involved the salience of drug dealers. Drug dealers seemed to contribute to residential burglary in a few different ways. For one, drug dealers or the "dope man" as they were commonly referred to were popular recipients/buyers of stolen property. Close to one-third ($n = 31$) of the participants indicated that they disposed of goods to the dope man. Drug dealers tended to buy guns, jewelry, and clothes – items associated with street credibility (e.g., Anderson, 1999).

>First stop is the dope houses. If no dope man want any of my items, I would get on the phone and make some calls and ask who need what. (No. 14)

>Soon as I get the stuff and I'm out the house, I'm going straight to the dope man. He buys it off the back. (No. 20)

>The dope man. We would always sell it to the dope man. (No. 36)

A large number of the offenders in the sample heavily abused drugs (see Wright & Decker, 1994). Frequently, the subjects engaged in residential burglary to "keep the party going" and would use the money made from disposing of stolen goods to purchase drugs. Some members of the sample cut out unnecessary steps and sold their goods to the dope man in a direct exchange for drugs.

>Or most of the time I want to buy drugs, so I take the stuff to the drug man instead of giving me money he don't wont to give out money cause he's making money. So

he'll trade you the merchandise for his merchandise. Color TV, uh, say about 20 or 21 inch, might run you $3 or $4 hundred dollars, I'm a give it to him for 125 dollars. Just trade it and get me a 16 (an ounce) for it. 16 will run you 125 dollars. That's what I'm goin' do with the money anyway is buy drugs. So I might as well check with the drug man first to make a trade. So nine out of times he takes it all. (No. 9)

Drug man. Get some of his products. (No. 21)

Oh, we take it to the dope man, and he buys it off us for dope. (No. 87)

But drug dealers played another role in contributing to residential burglary aside from just being an outlet to sell stolen property. The dope man offered an additional opportunity for offenders to take advantage of. Interviewees saw little legal risk in burgling drug dealers because of the perception that this population could not go to the police.

Because the type of burglary we doing man…Here is this drug dealer and who can he tell? So he ain't gone call the police. (No. 24)

Yeh. They can't call the cops either. (No. 89)

On a few occasions, participants expressed that they burgled drug dealers and subsequently sold the stolen product (i.e., narcotics) to other drug dealers.

We divide it up among us. Find us another drug dealer and sell the (expletive removed) jewelry to his little (expletive removed). Until he pisses off and go back and take it back. So it's just a 360-degree circle. From drug dealer to drug dealer to drug dealer. (No. 24)

Yeah, this was the dope man. All we did was stole his stuff and sold it to another dope dealer. (No. 36)

Overall, neighborhoods with a large number of drug dealers may be conducive to and actually facilitate residential burglary for a number of reasons.

Strangers/street buyers. Felson and Boba (2010) have described how markets for stolen goods contribute to property crime such as residential burglary. The following excerpts display a neighborhood component of these markets. An adequate number of active burglars in the sample expressed not using connections or known buyers to discard stolen goods. Instead, approximately one-quarter of the subjects ($n = 26$) sold stolen items to strangers and random people on the street.

Sold it to anybody that came along. You know, I don't quite remember, but uhm, he offered a good price, and I sold it to him. (No. 2)

Nah, just you know, you want to buy a TV or sell it to anybody that want to buy it. (No. 6)

Basically just about anybody that was looking for it. (No. 102)

A number of participants were a bit clearer about dealing stolen goods on the street in specific neighborhoods.

> Just basically go around the neighborhood and ask different people. (No. 52)

> Cause they're easy to get rid of in the neighborhood. (No. 86)

> I take them down to (area name removed) and sell em. (No. 90)

> Take them to my partner, and he sells them. He goes to the (area name removed). (No. 97)

The ability of the offenders to dispose of stolen property on the street may be a function of neighborhood context and social structure. It might be easier to find random or stranger buyers on the street in some areas compared to others. Most of the participants in the sample resided in disadvantaged inner-city communities. As a result, they came into contact and interacted with others from the lower rungs of the socioeconomic ladder.

Ease of selling stolen items and the demand for bargains. Picking up from the previous section, most of the respondents who sold their stolen goods to random buyers on the street discussed the relative ease it took to do so and how quickly it could be done. It is important to recall that the quick disposal of items, as it relates to legal risk perceptions, was a theme that ran throughout the entire sample. Often, interviewee quotes about the ease of sale and quick disposal were coupled with phrases like "bargain." There appeared to an interest in cheap goods from members of these communities.

> Because it's easy and everybody's lookin' for a bargain, and I know if I go and sell this 300 dollar TV for 75 dollars, I know they gon' jump on this. Cause everybody's lookin' for a bargain. (No. 13)

> Well growing up in my part of the neighborhood, it wasn't hard to get rid of stuff.

> Because everybody had a little money. Whatever you had that they see they can buy from you, they'll get. So it wasn't hard. I just figured hey, I'll take it around the neighborhood and ask people if they would buy it. So it wasn't hard to get rid of. No problem. (No. 32)

The demand for stolen goods and the relative ease with which they were sold appears to be a function, at least in part, of the social structure and neighborhood context.

DISCUSSION/CONCLUSION

The current paper was an attempt to return scholarly attention to differential opportunity theory. Despite being more than fifty years old, the theory has not received much in the way of testing of its core hypotheses. Cloward and Ohlin (1960), influenced by the work of Sutherland (1937) and the Chicago school, made significant contributions to the field with their clarification and further articulation of concepts like illegitimate means and criminal connections. Aside from a small number of perspectives such as routine activity theory (Cohen & Felson, 1979) and situational crime prevention (Clarke, 1997), most criminological theories take the element of

opportunity for granted and treat it as a constant (see Tittle, 1995). Illegitimate means and opportunities are not distributed evenly throughout neighborhoods and the larger social structure. The interview transcripts provided a theoretical lens into the neighborhood contexts in which residential burglary seemed to flourish.

Overall, the qualitative analyses found support for differential opportunity theory across a number of different areas –including the proposed front-end and back-end illegitimate opportunity structures. Such support reinforces the central message that Cloward and Ohlin (1960) delivered more than 50 years ago: that illegitimate means/opportunity, rather than strain, is integral to understanding deviant adaptations and involvement in crime (see also Cullen, 1988). The findings also suggest that any discussion of the pressures to engage in crime, specifically financial strain/frustration (Agnew, 1992), or criminal motivation due to differential association/social learning might be incomplete without the inclusion of opportunity. Much of the initial involvement in residential burglary could be linked to co-offenders who were older and/or more experienced with that specific crime type. Access to criminal learning networks and receiving mentoring in the areas of target selection, gaining entry, search tactics, and the disposal of stolen property were found to play a substantial role. The importance of criminal connections, particularly regarding ties to income-producing outlets (e.g., fences), was another major theme running throughout the interviews. Neighborhood context appeared to influence all of these aforementioned illegitimate means, while also contributing to legal risk perceptions and providing unique opportunities for offenders to carry out residential burglaries successfully.

The interview data yielded important information, and they present potential suggestions for practical implications, especially from a crime-prevention standpoint. For one, the active burglars in the study displayed perceptual concerns for legal risks. One finding briefly mentioned in the results section but not elaborated on was that of seventeen respondents expressing that they avoided disposing of stolen property at pawn shops for fear of getting caught. These subjects were frightened at the prospect of walking into a place of business with cameras and being made to show personal identification. On the other hand, a large number of interviewees preferred selling stolen property to pawn shops because of lax conditions (e.g., not having to fill out paperwork or show identification). Stricter, more consistent, and better-enforced requirements/regulations might be able to increase perceptions of legal risk, thus reducing the belief that pawnshops are viable avenues for discarding hot items. Given that nearly half of the burglars in the study utilized pawnshops at some point, such actions may put a dent into available markets for stolen goods.

Relatedly, the participants seemed to consider police presence or the lack thereof when calculating risk and making decisions about whether to perform a burglary; they avoided neighborhoods with a strong and consistent police presence. These findings point to the fact the burglars might be deterrable and more responsive to police visibility, compared to offenders considering other types of crime. Recent quantitative research has come to a similar conclusion (e.g., Fagan & MacDonald, 2014; Zimring, 2012). For example, Fagan and MacDonald (2014), using a quasi-experimental design, examined crime in New York City before and after the NYPD placed extra officers into certain "impact zones" (compared to similarly matched control areas without more police). They discovered that burglary was reduced in the impact zones after extra police were added; however, there were no such reductions in overall crime or violent

crime. Tactics like hot spots policing might be of particular utility to crimes of burglary, particularly where officers make a show of being present and visible.

Some may view the time period covered in the study as a limitation. However, while the data were collected over twenty years ago, most of the same neighborhood and social structural conditions from 1989-1990 are present today. Communities still differ in both legitimate and illegitimate opportunities, levels of police presence, poverty, etc. There may be some slight differences in terms of the CRAVED (concealable, removable, available, valuable, enjoyable, and disposable) items (Clarke, 1999) over time. The most popularly burgled item throughout the interview transcripts was the VCR. Currently, small electronic devices like digital cameras, iPADs, cell phones, and laptops might be the more desired products. The core elements of the theory (e.g., mentoring/learning environments and criminal connections), however, should be impervious to changes across time periods.

A number of directions for future research exist. Because it has largely gone untested, Cloward and Ohlin's (1960) theory is ripe with scholarly opportunity, both qualitatively and quantitatively, as well as further theoretical development. In terms of theoretical contributions, criminologists should continue to ponder the similarities between differential opportunity theory and Akers' (1998) Social Structure Social learning Theory –which has received more empirical attention and far greater support (e.g., Bellair, Rosciago, & Velez, 2003; Jensen, 2003; Jensen & Akers, 2003), particularly in recent decades. However, differential opportunity theory has, arguably, a higher degree of theoretical comprehensiveness (see Tittle, 1995) due to its inclusion and focus on criminal opportunity (i.e., illegitimate means) in addition to motivation. If there were room for theoretical integration between the two perspectives, the addition of such components to the social learning framework would be a worthwhile improvement.

More active offender research has the potential to uncover valuable insight into co-offending (see Moule, 2014, for a discussion), especially since co-offenders were integral to getting involved in a first burglary for the subjects in this study. Next, there is little scholarship on mentorship in the context of criminal careers (DeLisi & Piquero, 2011; Morselli, Tremblay, & McCarthy, 2006). As a result, there remains much to learn about the role of criminal mentors and how these relationships influence learning, risk perceptions, and other illegitimate opportunities. Last, there appears to be a role for qualitative research in gaining insight into neighborhoods and how this type of context influences illegitimate means and opportunities for offending. The data here were able to elucidate the patterns found in recent quantitative work regarding neighborhood context and residential burglary (Chamberlain & Boggess, 2016; Nobles et al., 2016). According to the narratives, it was evident that neighborhood characteristics affected illegitimate opportunity structures, particularly through offenders' perceptions of lower risk generated by the lack of police visibility. Future work should continue to examine how offenders view certain places and how the characteristics of an area, such as disorder or the percentage of minority residents, influence what individuals think about said place. After all, neighborhood context represents something much more complex than a number of Census indicators in a concentrated disadvantage index.

REFERENCES

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, *30*(1), 47-88.

Akers, R.L. (1998). *Social learning and social structure: A general theory of crime and deviance.* Boston: Northeastern University Press.

Akers, R.L., & Jensen, G.F. (2008). The empirical status of social learning theory of crime and deviance: The past, present, and future. In F.T. Cullen, J.P. Wright, & K.R. Blevins (Eds.), *Taking stock: The status of criminological theory* (15th ed. pp. 37-76). New Brunswick: Transaction Publishers.

Anderson, E. (1999). *Code of the street: Decency, violence, and the moral life of the inner city*. New York: W.W. Norton & Company.

Andresen, M. A., & Felson, M. (2010). The impact of co-offending. *British Journal of Criminology*, *50*(1), 66-81.

Andresen, M. A., & Felson, M. (2012). Co-offending and the diversification of crime types. *International Journal of Offender Therapy and Comparative Criminology*, *56*(5), 811-829.

Barker, M. (2000). The criminal range of small-town burglars. In D. Canter & L. J. Alison (Eds.), *Profiling property crime* (pp. 57-73). Aldershot, UK: Ashgate.

Bellair, P. E., Rosciago, V. J., & Velez, M. B. (2003). Occupational structure, social learning, and adolescent violence. In R. L. Akers & G. F. Jensen (Eds.), *Social learning theory and the explanation of crime: A guide for the new century, advances in criminological theory* (vol. 11; pp. 197-226). New Brunswick, NJ: Transaction Publishers.

Bernasco, Johnson, S. D., & Ruiter, S. (2015). Learning where to offend: Effects of past on future burglary locations. *Applied Geography*, *60*, 120-29.

Bernasco, W., & Luykx, F. (2003). Effects of attractiveness, opportunity and accessibility to burglars on residential burglary rates of urban neighborhoods. *Criminology*, *41*(3), 981-1001.

Bernasco, W., & Nieuwbeerta, P. (2005). How do residential burglars select target areas? A new approach to the analysis of criminal location choice. *British Journal of Criminology*, *45*(3), 296-315.

Breckenridge, S. P., & Abbott, E. (1912). *The delinquent child and the home*. New York, NY: Russell Sage.

Bursik, R. J., & Grasmick, H. G. (1993). *Neighborhoods and crime: The dimensions of effective community control*. New York: Macmillan.

Carrington, P. J. (2009). Co-offending and the development of the delinquent career. *Criminology*, *47*(4), 1295-1329.

Chamberlain, A. W., & Boggess, L. N. (2016). Relative difference and burglary location: Can ecological characteristics of a burglar's home neighborhood predict offense location? *Journal of Research in Crime and Delinquency*, *53*(6), 872-906.

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis.* Thousand Oaks, CA: Sage.

Clarke, R. V. (1997). *Situational crime prevention*. Monsey, NY: Criminal Justice Press.

Clarke, R. V. (1999). *Hot products: Understanding, anticipating and reducing Demand for Stolen Goods.* Police Research Series, Paper 112. Policing and Reducing Crime Unit, Research Development and Statistics Directorate. London: Home Office.

Cloward, R.A., & Ohlin, L.E. (1960). *Delinquency and opportunity: A theory of delinquent gangs*. New York: Free Press.

Cohen, A. K. (1955). *Delinquent boys: The culture of the gang*. New York, NY: Free Press.

Cohen, L.E., & Felson, M. (1979). Social change and crime rate trends: A routine activities approach. *American Sociological Review, 44*, 588-608.

Cromwell, P. F., Olson, J. N., & Avary, D. W. (1991). *Breaking and entering: An ethnographic analysis of burglary.* Newbury Park, CA: Sage.

Cullen, F.T. (1988). Were Cloward and Ohlin strain theorists? Delinquency and opportunity revisited. *Journal of Research in Crime and Delinquency, 25*(3), 214-241.

Decker, S. H., & Smith, D. L. (2015). A conversation with street daddy: Pulling back the curtain on 20 years of ethnography. In M.D. Maltz & S. K. Rice (Eds.), *Envisioning criminology* (pp. 9-25). Springer International Publishing.

DeLisi, M., & Piquero, A. R. (2011). New frontiers in criminal careers research, 2000–2011: A state-of-the-art review. *Journal of Criminal Justice, 39*(4), 289-301.

Fagan, J., & MacDonald, J. M. (2014). *Order maintenance in hot spots: The effects of local police surges on crime in New York City*. Paper presented at the annual meeting of the American Society of Criminology, San Francisco, CA.

Felson, M., & Boba, R. (2010). *Crime and everyday life* (4th ed.). Thousand Oaks, CA: Sage.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory.* Chicago: Aldine.

Hirschi, T. (1969). *Causes of delinquency*. New Brunswick: Transaction.

Jensen, G. F. (2003). Gender variation in delinquency: Self-images, beliefs, and peers as mediating mechanisms. In R. L. Akers & G. F. Jensen (Eds.), *Social learning theory and the explanation of crime: A guide for the new century, advances in criminological theory* (vol. 11; pp. 151-178). New Brunswick, NJ: Transaction Publishers.

Jensen, G. F., & Akers, R. L. (2003). Taking social learning global: Micro-macro transitions in criminological theory. In R. L. Akers & G. F. Jensen (Eds.), *Social learning theory and the explanation of crime: A guide for the new century, advances in criminological theory* (vol. 11; pp. 9-38). New Brunswick, NJ: Transaction Publishers.

Johns, T., & Hayes, R. (2003). Behind the fence: Buying and selling stolen merchandise. *Security Journal, 16*(4), 29-44.

Klockars, C. B. (1974). *The professional fence.* New York: Free Press.

Kornhauser, R. R. (1978). *Social sources of delinquency: An appraisal of analytic models*. Chicago: University of Chicago Press.

McCarthy, B. (1996). The attitudes and actions of others: Tutelage and Sutherland's theory of differential association. *British Journal of Criminology, 36*(1), 135-147.

McFadden, D. (1973). Conditional logit Analysis of qualitative choice behavior. In P. Zarembka (Ed.), *Frontiers in econometrics* (pp. 105-142). New York: Academic Press.

Merton, R. K. (1938). Social structure and anomie. *American Sociological Review, 3*, 672-682.

Messner, S. F., & Rosenfeld, R. (1994). *Crime and the American dream*. Belmont, CA: Wadsworth.

Morselli, C., Tremblay, P., & McCarthy, B. (2006). Mentors and criminal achievement. *Criminology, 44*(1), 17-43.

Moule Jr., R. K. (2014). A view from the street: Active offenders, the life-course, technology, and implications for security. In M. Gill (Ed.), *Handbook of security* (2nd ed.; pp. 516-545). New York: Palgrave Macmillan.

Mullins, C. W., & Wright, R. (2003). Gender, social networks, and residential burglary. *Criminology*, *41*(3), 813-840.

Nobles, M. R., Ward, J. T., & Tillyer, R. (2016). The impact of neighborhood context on spatiotemporal patterns of burglary. *Journal of Research in Crime and Delinquency*, *53*(5), 711-740.

Pratt, T. C., Cullen, F. T., Sellers, C. S., Thomas Winfree Jr, L., Madensen, T. D., Daigle, L. E., & Gau, J. M. (2010). The empirical status of social learning theory: A meta-analysis. *Justice Quarterly*, *27*(6), 765-802.

Reiss, A. J., Jr. (1980). Understanding changes in crime rates. In S. E. Fienberg & A. J. Reiss Jr.

(Eds.), *Indicators of crime and criminal justice: Quantitative studies* (pp. 11-17). Washington, DC: Bureau of Justice Statistics.

Rengert, G. F., Piquero, A. R., & Jones, P. R. (1999). Distance decay reexamined. *Criminology*, *37*(2), 427-445.

Sampson, R. J. (2013). The place of context: A theory and strategy for criminology's hard problems. *Criminology, 51*(1), 1-31.

Sampson, R. J., & Groves, W. B. (1989). Community structure and crime: Testing social disorganization theory. *American Journal of Sociology, 94*(4), 774-802.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 227*, 916-924.

Sarnecki, J. (2001). *Delinquent networks: Youth co-offending in Stockholm*. Cambridge University Press.

Schaefer, D. R., Rodriguez, N., & Decker, S. H. (2014). The role of neighborhood context in youth co-offending. *Criminology, 52*(1), 117-139.

Shaw, C. R. (1966). *The jack-roller: A delinquent boy's own story*. Chicago: University of Chicago Press.

Shaw, C. R., & McKay, H. D. (1942). *Juvenile delinquency and urban areas*. Chicago: University of Chicago Press.

Shover, N. (1972). Structures and careers in burglary. *Journal of Criminal Law, Criminology, and Police Science*, *63*(4), 540-549.

Steffensmeier, D. J. (1983). Organization properties and sex-segregation in the underworld: Building a sociological theory of sex differences in crime. *Social Forces*, *61*(4), 1010-1032.

Stolzenberg, L., & D'Alessio, S. J. (2008). Co-offending and the age-crime curve. *Journal of Research in Crime and Delinquency*, *45*(1), 65-86.

Sudman, S. (1976). *Applied sampling.* New York: Academic Press.

Sullivan, M. L. (1989). *Getting paid: Youth crime and work in the inner city*. Ithaca, NY: Cornell University Press.

Sutherland, E. H. (1937). *The professional thief*. Chicago: University of Chicago Press.

Sutherland, E. H. (1939). *Principles of criminology* (3rd ed.). Philadelphia: Lippincott.

Sutton, M. (1998). *Handling stolen goods and theft: A market reduction approach.* (Home Office Research Study No. 178). London: British Home Office Research Publications.

Tittle, C.R. (1995). *Control balance: Toward a general theory of deviance*. Boulder, CO: Westview.

van Mastrigt, S. B., & Farrington, D. P. (2009). Co-offending, age, gender and crime type: Implications for criminal justice policy. *British Journal of Criminology*, *49*(4), 552-573.

Warr, M. (1993). Age, peers, and delinquency. *Criminology*, *31*(1), 17-40.

Warr, M., & Stafford, M. (1991). The influence of delinquent peers: What they think or what they do? *Criminology*, *29*(4), 851-866.

Watters, J., & Biernacki, P. (1989). Targeted sampling: Options for the study of hidden populations. *Social Problem, 36*(4), 416-430.

Wheeler, A. (2012). The moving home effect: A quasi-experiment assessing effect of home location on offense location. *Journal of Quantitative Criminology*, *28*(4), 587-606.

Wright, R. T., & Decker, S. (1994). *Burglars on the job: Streetlife and residential break-ins*. Boston: Northeastern University Press.

Wright, R., Decker, S. H., Smith, D. L., & Redfern, A. (1992). A snowball's chance in hell: Doing fieldwork with active residential burglars. *Journal of Research in Crime and Delinquency, 29*(2), 148-161.

Wright, R., Logie, R. H., & Decker, S. H. (1995). Criminal expertise and offender decision making: An experimental study of the target selection process in residential burglary. *Journal of Research in Crime and Delinquency*, *32*(1), 39-53.

Zimring, F. E. (2012). *The city that became safe: New York's lessons for urban crime and its control*. New York: Oxford University Press.

John A. Shjarback is an assistant professor in the Department of Criminal Justice at the University of Texas at El Paso. He earned his Ph.D. in Criminology and Criminal Justice from Arizona State University in 2016. His research interests center around policing and criminological theory. His recent work has been featured in *Crime & Delinquency*, *Journal of Criminal Justice*, *Police Quarterly*, and *Policing: An International Journal.*