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A Phenomenological Study: Police Officers' Lived Experiences with the Use of CEDs

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Abstract

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by

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MPA, University of Central Florida, 2017

BBA, University of Central Florida, 2014

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Abstract

The use of conducted energy devices (CEDs; e.g., TASER) in the U.S. has increased significantly since their endorsement by the police in the 1990s. Police administrators have struggled with CED placement in use of force continuums, and citizens have voiced concerns regarding their disproportionate use and health effects. An increase in understanding of the value of CEDs, specifically the devices' role when used as a threat only, provides police administrators with more significant insights regarding their appropriate placement in department policies, which leads to more proportionate use by police officers. This phenomenological study explored police officers' lived experiences involving displaying and threatening the use of CEDs on noncompliant individuals. The theoretical foundation of this study was prospect theory. Participants consisted of a purposive sample of five police officers from a municipal police department in Florida who used CEDs. Data were collected from semi structured interviews. The data were coded and analyzed by using a modification of the Van Kaam method of analysis as presented in Moustakas. Findings were presented in the form of five themes. Findings showed police officers perceived the TASER to be an effective tool in achieving compliance when used as a threat. Recommendations include developing further studies involving the inclusion of a warning stage in use of force continuums. The findings advance positive social change by providing policymakers additional insights into the value of CEDs and assisting them with determining their proper placement in the departments' use of force policies. Proper CED placements in force continuums could result in a more balanced use of the devices and to a decrease in injuries to citizens.

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Dedication

To Paula, my Eternal Companion.

Acknowledgement

Thank you, Heavenly Father, the Creator of all things for giving me the opportunity and the ability to accomplish this task.

I could not have accomplished this work without the help of my family. Thank you, Paula, Alex, Emma, Sofia, and Peter, for your encouragement and support.

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Chapter 1: Introduction to the Study

Introduction

Law enforcement officers in the United States (U.S.) have at their discretion the ability to use a vast array of less-lethal weapons. One category of less-lethal weapon is the conducted energy device (CED). The most popular and commonly used CED is the Thomas A. Swift Electronic Rifle (TASER; Brandl & Stroshine, 2017). Studies regarding the use of CEDs have covered a vast array of topics. Topics include their use during mental health emergencies, their health effects, their impact on cognitive functions, and the outcome of their use as a result of police departments' policy changes. Furthermore, studies revolve mainly on the deployment of the devices.

There is a lack of research in the field of CEDs regarding the impact of threatening people with a TASER. The focus of this study was to explore police officers' lived experiences with their use of CEDs and ascertain their perceptions of the devices' effectiveness when used as a threat. The findings of this research supplies policymakers with unique perspectives and information regarding the value of CEDs, thus assisting them when deciding how to incorporate the devices in the use of force continuums. The findings from this study promotes positive social change by supporting the implementation of informed CED policies aimed at decreasing the rates of injuries to police officers and civilians.

There are 12 sections in Chapter 1. The study's background contains a summary of the research literature, a description of the gap in knowledge, reasons this study was needed, the problem statement, and evidence that indicates the problem is current,

relevant, and significant. Chapter 1 also presents the gap in research that this study filled. It also contains the purpose of the study which includes the research paradigm, the intent of the study, the phenomenon of interest, and the research question. This chapter also includes the theoretical framework, which includes the propositions of prospect theory and their relevance to the approach of this study and to the research question. The chapter also contains the nature of the study which includes the design's rationale, a brief description of the phenomenon under investigation, and a summary of the methodology. The next section includes concise definitions of key concepts used throughout the study, followed by assumptions that are critical to the meaningfulness of the study and the reasons why they were necessary. The section is followed by the scope and delimitations (which addresses specific aspects of the research problem), boundaries of the study, and potential transferability. The next section includes a description of limitations and reasonable measures to address them. This is followed by the significance of the study, including contributions that will advance knowledge in the discipline. This also involves implications for positive social change. Chapter 1 ends with a summary of the main points of the chapter and a transition to Chapter 2.

Background

Police officers in the U.S. are given authority by law to use physical force during the performance of their duties while attempting to achieve lawful objectives (Clark & Bittner, 1972). Officers at times are required to use force when dealing with noncompliant individuals during situations including but not limited to self-defense, defending others, attempting to overcome someone who is physically resisting lawful

commands, and trying to prevent a person from escaping arrest (Terrill & Manstrofski, 2002). Until recent years, American police officers had only a few less-lethal tools available when using force. These tools included hand maneuvers (e.g., takedowns, pressure points, and strikes), batons or similarly hard objects such as long flashlights, and chemical agents such as pepper spray (Bishopp et al., 2014). In the 1990s, police departments were introduced to and began implementing the use of CEDs as a less-lethal option. The most used CED to date is called the Thomas A. Swift Electric Rifle (TASER; White & Ready, 2010).

CEDs such as TASER are made in the shape of a pistol. When discharged, the device fires two wired and electrically charged stainless steel probes. Upon contacting the individual target, the CED delivers via the probes a low-amperage and a suggested 50,000 volts of electric current in five second increments. The powerful current travels through the person's muscle tissues from one probe to the other, causing muscle contractions and incapacitation. Electricity affects the body's motor skills (White & Ready, 2007). Police officers can also use the device as pain compliance without the need of discharging the probes, by pressing the CED's probes against the person's body and delivering pulsed shocks (drive stun mode). According to Reaves (2015), the number of police departments that adopted CEDs increased dramatically from seven percent in 2000 to 60% in 2013. The increase of CED use has not come without concern, objections, and criticism from the public.

Most concerns, objections, and criticisms of CEDs involve their effects on human health, overuse, and reliability as a less-lethal tool (Smith & Alpert, 2000). Civil rights

organizations have been among the most significant proponents of more robust regulations regarding the use of CEDs (White & Ready, 2007). The American Civil Liberties Union of Northern California published a paper outlining a dramatic increase of CED use by law enforcement and called for more significant restrictions on the use of the device. Amnesty International also published a report outlining an increase of CED's related deaths and indicated that police officers were overusing CEDs on vulnerable groups. The organization requested that the use of CEDs be temporarily suspended. Other criticisms of CEDs include their potential to interfere with cardiac arrests, reliability as a less-lethal tool due to a lack of studies concerning temporary and long-lasting health effects, contributions to in-custody related deaths, and placement by law enforcement departments in policies via force continuums.

Despite criticisms, CED studies have demonstrated the devices to be an overall low-risk less-lethal tool. TASERs are more effective at incapacitating resisting individuals and on obtaining compliance than pepper spray (Brandl & Stroshine, 2017). CEDs are also considered a contributing factor in the reduction of suspects' injuries (MacDonald et al., 2009). Fewer restrictions regarding the use of CEDs has led to a decrease in fatal police shootings and to a decrease in officer injuries (Ferdik et al., 2014). Restrictions to the use of CEDs are regulated by force continuums.

Police departments in the U.S. outline and present their policies regarding the use of force in the form of a continuum (Terrill & Paoline, 2012). Force continuums guide officers in selecting the amount of force necessary to protect themselves, defend others, make arrests, and perform their duties. Continuums also dictate actions that officers can

reasonably take while enforcing laws, according to the noncompliant person's level of resistance (Terrill & Paoline, 2012). As suggested by continuums, an officer should increase resistance to overcome the suspect's aggressiveness and decrease resistance once the individual is subdued. The on-scene command presence of the police officer is considered a form of force, and it is the lowest in a use of force continuum. A force or act which would most likely take the life of another or cause great physical damage to a person is placed highest on a continuum. The use of CEDs is often located somewhere in the middle and varies across police departments (Adams & Jennison, 2007). Location in the force continuum where CEDs are placed is crucial because it dictates under which circumstances and in which instances law enforcement officers can use the devices (Bishopp et al., 2014).

Despite the research available on CEDs (including where they should be placed on the force continuums), information regarding their value when displayed and used as a threat only against noncompliant individuals is deficient. Adams and Jennison (2007) said that aggressive encounters between police officers from the Cincinnati Police Department and community members decreased after the department began using CEDs, and credited the reduction of violent encounters to the deterrence derived from an increase of TASER use. Public policy administrators should consider the role of displaying and threatening the use of TASERs during policy development (Adams & Jennison, 2007). When police officers are chasing suspects and they believe the suspects have a weapon, they tend to choose to use the TASER instead of pepper spray (Brandl & Stroshine, 2017).

Brandl and Stroshine (2017) said TASERs were found to be more effective than pepper spray at stopping suspects. The distance by which officers could deploy the TASER gave them a significant advantage over the pepper spray. Additional research was needed regarding the topic of displaying and threatening resisting subjects with a TASER. Lin and Jones (2010) said that non-White officers displayed CEDs more than white officers. It was essential to find out which factors caused officers to display versus deploy the device, as this knowledge would add valuable information on the decision-making process of law enforcement officers.

This study filled a gap in the literature of CEDs by examining police officers' lived experiences regarding their use. This study documented the perceptions of five police officers from a municipal police department in Florida. The focus of the study was the usefulness of CEDs when displayed or used as a threat against noncompliant individuals. The documentation of the participants' lived experiences regarding their perceived effectiveness of CEDs provide public policymakers new insight into the value of the devices. The information shared by the participants on the perceived effectiveness of CEDs could also help administrators make better decisions about devices' placement on force continuums. Policy modification and proper implementation can lead to fewer injuries to members of the community and police officers. For instance, a policy that suggests to the officer to threaten a person with a CED before deployment could lead to fewer physical encounters.

Problem Statement

Police officers in the U.S. have at their disposal the use of nonlethal tools such as batons, pepper sprays, and CEDs. The most used CED is the TASER (Brandl & Stroshine, 2017). Endorsement of CEDs by law enforcement agencies has increased from seven percent in 2000 to 81% in 2013 (Reaves, 2010, 2015). This increase has not come without voiced concerns and criticisms from the public.

Community members' objections to the use of CEDs range from health-related complaints to their disproportionate use during encounters with minorities. Controversies and criticisms from citizens regarding the use of CEDs have led to police departments placing more significant restrictions on their use (Thomas et al., 2010). However, fewer restrictions regarding the use of CEDs have been linked to fewer officer-involved fatal shootings (Ferdik et al., 2014). The use of CEDs has also been associated to a decrease in the rate of police officers' injuries and injuries of resisting individuals (DeLone & Thompson, 2009). Bulman (2011), in a publication of the National Institute of Justice documented that the odds of a suspect being injured during a confrontation with a police officer decreased by 48% when a TASER was used. Police administrators have an important decision to make when dictating under which circumstances police officers should use CEDs and when balancing between the public's criticism of the devices and their usefulness.

Since the development of CEDs, public policymakers have struggled with their placement in the force continuum and deciding how the devices should be used. Numerous studies have been conducted regarding the use of CEDs which have helped

public policymakers make informed decisions. One area which has not been thoroughly examined, however, is the use of CEDs as a threat only. This phenomenological study examined police officers' perspectives regarding their use of CEDs to threaten noncompliant individuals. The study relied on officers' lived experiences with CEDs. Findings from this study provide public policymakers with additional insights regarding the usefulness of the devices. Increased knowledge help administrators in the criminal justice system make better decisions about the devices' placement on force continuums. Policy modification and implementation regarding the use of CEDs could lead to a substantial decrease in injuries to residents of this country that come in contact with the police and also to police officials.

Purpose of the Study

The purpose of this phenomenological study was to explore police officers' lived experiences regarding displaying and threatening noncompliant individuals with CEDs. Considering their benefits, criticisms by citizens, and increased use by law enforcement, police administrators would benefit from an increased in knowledge regarding the value of CEDs and to what extent officers should display and threaten the use of a CED on noncompliant individuals. Lived experiences were documented via one-on-one interviews with five police officers from a municipal police department in Florida who were assigned, trained, and used TASERs.

Research Question

The research question under investigation was: What are police officers' lived experiences regarding displaying and threatening the use of CEDs on noncompliant individuals?

Theoretical Foundation

The theoretical foundation which grounded this research was prospect theory. Although prospect theory is an economics theory, criminal justice professionals have used it to describe rationales used by individuals when making decisions that include a gain and a loss. Prospect theory demonstrates how people, through the principle of cognitive bias, make decisions based on their own understanding of reality. This principle assisted in capturing the choices made by the police officer participants in this study. This type of cognitive bias is called loss aversion in prospect theory's literature and indicates that a person's fear of losing (a police officer's fear of the perpetrator getting away or overpowering the officer) is greater than the desire of winning (the officer making the arrest). The person is therefore expected to act on the greater emotion, fear of losing (Tversky & Kahneman, 1992). A more detailed explanation of prospect theory is included in Chapter 2 of this study.

By showing how people make decisions when faced with two alternatives, prospect theory helped capture the law enforcement officer participants' decision-making regarding their use of TASERs. When faced with decision making under adverse circumstances, people add more weight to the potential of a reward than the cost of losing (Tversky & Kahneman, 1992). This study explored, among other things, police officers'

choices made under adverse circumstances. The information gained about their decision making involving the use of TASERs could help public policy administrators when deciding the correct placement of CEDs on the force continuum.

Nature of the Study

The nature of this study was qualitative with a phenomenological approach. I chose this approach because its focus involves the study and description of the lived experiences of participants. The nature of this study aided in the objective of obtaining police officers' lived experiences regarding their use of CEDs. By providing direction of obtaining detailed description of experiences directly from the participants, this approach was ideal for documenting the participants' perceived effects of displaying or threatening to use CEDs on noncompliant individuals. The experiences shared by the participants provided me with the information necessary to answer the research question of this study and to accomplish the purpose of this study.

The participants were five purposely selected police officers from one municipal police department in Florida. The police officers were equipped with TASERs and had experience using the devices. Data for this phenomenological study consisted of the officers' views, experiences, opinions, and perceptions of CEDs and was obtained through in-depth interviews. The interviews were collected in less than one month. To analyze the data, I first transcribed the audio recordings of interviews verbatim into a Microsoft Word document. I then read the transcripts and reviewed them by comparing them with the recorded interviews to ensure the transcriptions were accurate. As a secondary measure of accuracy, I provided copies of the transcriptions to the officers for

their own review. None of the participants indicated they found issues with the interview transcriptions.

Definitions

This study explored the lived experiences of police officers regarding their use of TASERs. The study documented the officer's perceptions of CEDs when used as a threat only. The following are definitions of standard terms used in this study:

Conducted Energy Device (CED): A less-lethal weapon system that discharges an electrical current that affects a person's neuromuscular system. The police officers in this study used CEDs.

Display: Refers to the officer touching his or her CED during a confrontation with the intent of letting the individual know that the officer could use the device. Display includes the officer retrieving the CED from its holster (but not aiming the device).

Effectiveness/Usefulness: Refers to the degree by which displaying or threatening with a CED deescalated a confrontation with the noncompliant individual.

Lived Experience: Refers to life events experienced by officers involving the use of CEDs.

Force continuum: Also referred to as use of force continuum, is a guideline that outlines various levels of resistance that officers could encounter and how they should react to the resistance. Force continuums are based on legal standards.

Thomas A. Swift Electric Rifle (TASER): The most used CED by police departments in the United States. The TASER was used by the police officers who participated in this study.

Threat: Signifies pointing a CED at an individual. The threat may or may not include a verbalization, and the CED may or may not be turned on.

Assumptions

I had six main assumptions in this study. The first assumption was that the police officers who agreed to participate in this study would show interest in the study's aim and were willing to openly discuss their encounters involving CEDs. Secondly, I assumed the officers were able to remember and describe their experiences. I also assumed I would be able to comprehend the officers' perceptions and explanations of their experiences. Fourth, I assumed the officers were open to discussion and would answer questions honestly. To facilitate open discussions, I reminded the participants that their answers would remain anonymous. My fifth assumption was that the officers' experiences were similar to the experiences of other officers who used CEDs. Lastly, I assumed I would be able to bracket the experiences that I had during my career as an officer regarding the use of CEDs so I could better understand the participants' perceptions.

Scope and Delimitations

This study's focus was to explore police officers' lived experiences regarding the use of CEDs and obtain their perceptions of their usefulness when displayed and used as a threat. Data from this study was collected from in-depth one-on-one interviews. Interview questions were mostly open-ended to promote the expression of thoughts. Interviews were also audio-recorded and later transcribed.

The study included five participants who were sworn law enforcement officers from a municipal police department in Florida. The participants were assigned, trained,

and had experience with the use of CEDs. Their experience included pointing and threatening of noncompliant individuals with the CEDs. They were willing to participate in one-on-one interviews which were audio-recorded. Each participant provided a signed informed consent before participating in the interview.

This study did not contain limitations on age, gender, ethnicity, or years of service for participants because these criteria were not relevant to the study. Exclusion criteria included non-sworn personnel, sworn personnel who did not have a CED assigned, and sworn personnel who did not have experience with displaying or threatening others with a CED. I worked as a supervisor in the department where the study took place. The small number of personnel I assisted in supervising were also excluded from participating in the study.

The theoretical foundation which grounded this research was prospect theory. Although developed for the study of economic decision making, prospect theory has been used to assist researchers in examining peoples' decision making under adverse circumstances. A theory which was related to the area of decision making, but which I did not use in this study was Cornish and Clarke's, rational choice theory. As noted by Loughran et al. (2016), rational choice theory explains decision-making under adverse circumstances. However, its focus is more on the offender's decisions to reoffend, based on the potential consequences and benefits of committing the crime.

To ensure transferability, I followed the guidelines of Carcary. I described the phenomena and context of the research in such a way that it provided established transferability. By answering open-ended questions, participants provided thick

descriptions of their experiences with CEDs, and I developed an accurate analysis of their perceptions of using CEDs to threaten resisting individuals.

Limitations

A limitation of this study was the few numbers of contributors from just one police department in Florida; the findings were not representative of all police officers in the United States. However, I selected participants through purposive sampling. Purposive sampling provided the means of obtaining enough well-qualified participants to produce a deep understanding of the phenomenon.

To ensure transferability and dependability, I followed the guidelines found in Carcary (2009). During the interviews with the participants, I asked open-ended questions to promote a full description of the phenomena. I also documented precise description of the protocols and methods of the study, and the changes I made as the study progressed. To ensure other researchers could repeat the study by using the same methods and cohort of participants, I detailed how data was collected and how I reached the findings of the study.

Furthermore, I took the time to understand the difference in roles between my profession as a police officer and student researcher. I separated my role as a police officer from my duties as a researcher. During data collection and analysis, I put aside my experiences and opinions regarding the use of TASERs. To control bias, I typed the questions and the protocol for the one-to-one interviews before meeting with participants. I asked the same questions in the same order to all the participants. I kept accountability by keeping notes and documenting my thoughts. I refrained from voicing my opinions

during the interviews. I also refrained from asking leading questions. To further prevent influencing participants' opinions, I was careful not to make any facial expressions that would portray any judgment. I exercised bracketing, which allowed capturing unfiltered and unbiased lived experiences of participants. To prevent conflict of interest, I refrained from interviewing any participants whom I assisted with supervising or worked with daily.

Significance

In this study, I collected and analyzed police officers' lived experiences regarding the use of CEDs as a threat. The results of this study supports the fields of Criminal Justice and Public Administration by providing relevant information about the perceived effectiveness of the TASER when used as a threat and its potential placement in the use of force continuums. These insights add unique information pertaining to the value and usefulness of CEDs. The new insights could help policymakers while implementing CED-related policies. The findings of this research promote positive social change by providing additional information to public policy administrators involving applying and implementing policies that could decrease injuries to officers and civilians, and thus increase the wellbeing of people.

Summary and Transition

The literature of CEDs presented a gap in research involving police officers' lived experiences regarding using CEDs as a threat. This project was unique because it attempted to capture those experiences. The qualitative with a phenomenological approach nature of this study allowed the obtaining a description of the phenomenon

directly from the participants. This study provides administrators additional insights regarding the potential of CED being used as a threat before being deployed. The results support professional policing practices by providing public policymakers valuable and relevant information that will assist them when deciding on CED-related policy implications.

Chapter 2 restates the problem, purpose of the study, and a brief synopsis of current literature. It also includes a list of library resources, such as search engines and databases that I used. The chapter presents critical search terms and a description of the literature search process. The comprehensive literature review consists of an overview of effects and controversies involving CEDs. Chapter 3 consists of the research design, rationale, methodology, and appropriate role of the researcher. In Chapter 4, I outline the setting, demographics, collection and analysis of data, evidence of trustworthiness, and results of the research. In Chapter 5, I interpret the findings and explain limitations of the study. I also provide recommendations for application and document the study's contributions to social change.

Chapter 2: Literature Review

Introduction

Police officers in the U.S. have authority by law to use force (including deadly force) to protect the public, defend themselves, and detain resisting subjects (Bittner 1970). Officers have at their disposal nonlethal tools such as batons, pepper sprays, and CEDs). Other names of CEDs include conducted energy weapons (CEWs) and electronic control devices (ECDs). The most used CED in North America is the TASER.

Over 2.37 million people have received TASER deployments from police officers, and deployments occurred over 904 times per day (TASER International, Inc., 2015). These numbers signify that in the U.S. alone, a person is shocked with the device approximately every 2 minutes (TASER International, Inc., 2015). There was no available data regarding the times that TASERS were used to threaten a person, or if threats alone were successful in achieving peaceful resolutions without the need for deployment. The use of CEDs by law enforcement increased significantly from seven percent in 2000 to 81% in 2013 (Reaves, 2010, 2015). The increase usage did not come without voiced concerns and criticism from citizens regarding the disproportionate use of CEDs by law enforcement and the negative health effects related to TASER deployment.

Objections to CED usage were also due to injuries to civilians, cardiac arrests, use against mentally ill persons, cognitive function effects, and disproportionally use during encounters with minorities (Adams & Jennison, 2007). Controversy and criticism from the public regarding the use of CEDs have led to police departments placing significant restrictions on their use. However, fewer restrictions regarding the use of CEDs have been linked to fewer officer-involved fatal shootings (Ferdik et al., 2014). The use of CEDs has also been linked to a decreased rate of injuries to police officers, and to a 48% decrease in injuries of resisting individuals (Burlan, 2011). The decrease of injuries is achieved because the use of CEDs diminishes hand-to-hand altercations between police officers and citizens (DeLone & Thompson, 2009). Placing the CED low in the force continuum where officers would be allowed to use it more frequently increases the chances that the device will be used disproportionally (Adams & Jennison, 2007).

Police administrators have an important decision to make when dictating under which circumstances police officers can use the device and how they should use it. They must balance the public's criticism of CEDs and the usefulness of the devices. They must also make informed decisions regarding the devices' placement in department continuums. Policymakers can make better decisions when equipped with more information regarding the value of CEDs.

Since the development of CEDs, policymakers have struggled with their placement in the force continuum (National Institute of Justice, 2011). Adams and Jennison (2007) said that the TASER was the only less-lethal weapon which had been placed practically in every level of the force continuum of police departments. One area of studies which lacked examination and would assist policymakers with decision making involved obtaining police officers' perceptions of the deterrence effects of the devices when used as a threat. This study was the first to examine police officers' use of CEDs from a phenomenological perspective, using police officers' lived experiences.

Considering their benefits, criticisms by the public, and increased use by law enforcement, public administrators in the Criminal Justice profession are in need for a greater understanding of the usefulness of CEDs. Added knowledge regarding using the devices as threat obtained from the officers' experiences is valuable to policymakers and administrators in the criminal justice system. The findings support decision-making regarding CED placement in continuums. It also supports training of police officers regarding the use of CEDs. If police officers' perceptions indicate the act of threatening alone achieves compliance, policymakers could consider the possibility of adding a threat

step in the continuum. This step could prevent injuries as a result of CED deployment and possibly reduce citizen's concerns and criticism.

Adams and Jennison (2007) said that Cincinnati Police Department officials encountered fewer physical interactions with community members after officers began using TASERS. Adams and Jennison (2007) credited the reduction of violent encounters to deterrence derived from an increase of TASER use. More people complied with the officers' lawful orders because they knew the officers were equipped with TASERs. Obtaining compliance is one reason why police officers tend to favor using a TASER over pepper spray while chasing a suspect and when they believe the suspect has a weapon (Brandl & Stroshine, 2017). Due to their increase usage, policy administrators should consider the role of displaying and threatening the use of TASERS during policy development.

Brandl and Stroshine (2017) asserted TASERS were found to be effective at stopping suspects. The distance by which the officers can deploy the device gives the officers a significant advantage over pepper spray. Brandl and Stroshine (2017) also noted additional research was needed regarding the topic of displaying and threatening resisting subjects with a TASER. A study on the topic of displaying and threatening with CEDs would add more significant insight into the devices' potential to be used as a threat. Additionally, Lin and Jones (2010) indicated that non-White officers displayed CEDs more than White officers, which suggested it was essential to find out which factors caused officers to display versus deploy the device.

Adang et al. (2006) assessed the effectiveness of pepper spray during physical altercations between law enforcement and the public. They noted that pepper spray was less effective at incapacitating resisting persons when the officers warned the individuals that they were going to be sprayed. Adang et al. (2006) also indicated that warning individuals affected the process of arresting the person and that warnings had little effect when the person had already become physically violent. They also noted that giving warnings increased the aggressiveness of individuals (Adang et al., 2006). McCluskey et al. (1999) stated that threatening individuals with force increased the likelihood of resistance. This information is significant for law enforcement professionals because it provides insight on the topic of threatening with pepper spray. Similar studies involving the use of CEDs as a threat has not been completed.

Mesloh et al. (2005) inquired into the effectiveness of the TASER and other less-lethal weapons and noted that an area of research involving TASER that had not been studied so far was displaying the device to gain compliance. Mesloh et al. (2005) stated that some less-lethal weapons (such as pepper spray) were more effective than others (such as a baton) at gaining suspects' compliance, by only displaying and threatening with the weapon. Mesloh et al. (2005) asserted that numerous officers implied that the actions of threatening with a CEDs had achieved positive results and suggested it was worthwhile to study the deterrent effects of TASERs.

Adang and Mensink (2004) said 49% of individuals who were threatened with pepper spray complied with the officer's request. They also analyzed the deterrence level of pepper spray and indicated that 61% of those who were sprayed stated they would

comply with the officer's command if they encounter a similar situation in the future. Adang and Mensink documented that some officers chose not to warn suspects before using pepper spray because officers believed the spray would have a lesser effect due to the suspects covering their faces. The authors also indicated there was a national guideline in place suggesting officers should warn suspects before deploying pepper spray. Adang and Mensink considered the action of not informing suspects disproportionate and a tactical imperfection because warning to use the spray achieved compliance over half the time (Adang & Mensink, 2004). There is currently no similar study involving TASERS, and there is currently no national guideline suggesting officers should warn a suspect before deploying CEDs such as TASERS.

Through the review of literature, police reports, and other publications, Adams and Jennison (2007) examined problems with the TASER. They concluded that the research on TASER was still limited, and there was a lack of agreement and inconsistencies among police departments on policies governing the training, regulations, applications, and placement of TASER on department policies via the continuum. Adams and Jennison indicated there was an absence of understanding of how officers used TASERS during the performance of their duties and noted it was unknown how often or if officers chose TASER deployment without considering other tools such as verbal de-escalation. Adams and Jennison also stated that the International Association of Chiefs of Police recommended police officials to include a policy that captured police officers' decision making regarding CEDs (Adams & Jennison, 2007).

This study filled a literature gap by obtaining police officers' perceptions regarding the role of CEDs in deterring further confrontation when the devices were displayed or used as threats. The new information regarding using CEDs as threat provided policymakers additional insight into the value of the devices. This knowledge could help police administrators make better decisions on the devices' placement on the force continuum and could assist in training implementations. Through policy modification, it can also lead to fewer injuries to law enforcement professionals and members of the public.

Overview of Content

Chapter 2 contains a review of the available and current literature on CEDs that were used to demonstrate the need for this study. The first section contains the literature search strategy, which provides a list of resources that I used, such as search engines, search terms, and databases. It also contains the iterative search process used in this study. The second section outlines the theoretical foundation's name, its origin, propositions, and a rationale for choosing the theory. It also contains an analysis based on literature and research. The analysis indicates how the theory has previously been used in similar studies. The section concludes with the theory's relation to this study. The third section provides the literature review of studies that support the methodology and established interest of this study. The chapter ends with a summary of major themes in the literary studies, with details on the available discipline's knowledge, details on what is not known on the topic of CEDs, and a transition that connects the gap in the literature to the methods outlined in chapter three.

Literature Search Strategy

To address the gap in the present study, I searched peer-reviewed literature and discussion papers in the following databases: Annual Reviews, Brill, Emerald Publishing Limited, International Association for Correctional and Forensic Psychology, Routledge, ScienceDirect, SAGE Publications, Taylor and Francis, Wiley, Springer Science, Springer Science, ProQuest Central, and Human Sciences Press. The key search themes and combinations of terms that I used were: *CEDs, prospect theory, civilian injuries and deaths, police officers' injuries and deaths*, *less-lethal weapons, animal studies involving CEDs, human studies involving CEDs, cardiac arrest involving CEDs, mental illness and CEDs, cognitive functions and CEDs, force continuum, impairment and resistance to police, electronic control devices, conducted energy devices, TASER, CEDs and police use of force, TASER and police use of force, police and decision-making process, CEDs and effectiveness, TASER and effectiveness, CEDs and performance, TASER and performance, police use of force, law enforcement and less-lethal force,* and *less-lethal technology.* Although there have been many studies written since the development and implementation of TASERs, there was a need for additional literature on the role of CEDs from officers' perspective regarding displaying or using them as threats.

To identify studies relative to the topic under consideration, I focused on selecting articles and publications which dealt primarily with the effectiveness and performance of CEDs. Although the focus of this study was not on CEDs' effect on human health, I identified a limited amount of studies in this field that were relevant to the overall discussion of CEDs. I dismissed studies that were not written in English. To save the

articles, I created folders on my computer which were organized by themes such as *police use of force, electronic control devices, less-lethal weapons, decision making,* and *use of force continuum.* I saved each study in the corresponding folders for later use. I also printed some of the research papers and numbered them. I created a list that contained the studies' numbers and the relevant information from each.

Theoretical Foundation

The purpose of this phenomenological research was to explore the lived experiences of law enforcement officers with their use of CEDs to increase knowledge of the officers' perceptions of CEDs when displayed and used as a threat. There are many circumstances in which police officers may feel the need to use a TASER. For instance, the suspect could be attempting to flee, the suspect could be attempting to attack the officer, or the suspect could be attempting to attack another person. Regardless of the circumstances, one of the concepts present in every situation involves a police officer choosing between displaying, threating, or deploying a CED on another person. The resisting person may also choose to resist a police officer who is aiming a TASER. Whichard and Felson (2016) indicated the decision seemed irrational considering police officers are trained to apprehend suspects, resisting arrest results in added criminal charges, and could result in the suspect getting injured. The chance of the suspect succeeding is very minimal.

The theory that helped capture the police officers' decision making in a situation involving aiming and threatening with a CED was prospect theory. Prospect theory originated from Nobel Prize psychologist and behavioral economist Daniel Kahneman

and cognitive and mathematical psychologist, Amos Tversky. Prospect theory presents a cognitive bias called loss aversion. Cognitive bias relates to decisions based on the person's own perceptions without regard for rationality. Loss aversion indicates that a person's fear of losing (in this present study, it would signify the resisting person getting away or overpowering the officer) is greater than the desire of winning (in the present study would signify making the arrest). The person is, therefore, expected to act on the greater emotion (fear of losing) (Tversky & Kahneman, 1992).

As most decision-making theories, prospect theory was first applied in economics to explain the reason people made individual choices involving monetary outcomes. However, Kahneman and Tversky (1979) asserted that the theory was not limited to monetary decisions and could be applied to other, more involved decisions such as decisions made by policymakers about people's lives. In their paper, Kahneman and Tversky criticized the use of expected utility theory to study decision making under risk and to describe economic decisions. They indicated that expected utility was inadequate at describing choices made by individuals (Tversky & Kahneman, 1992).

Tversky and Kahneman (1979) provided in their paper several problems involving choices in which the decisions made by participants contradicted the propositions found in expected utility theory. In 1992, Tversky and Kahneman made changes to their original theory and renamed the theory cumulative prospect theory. Cumulative prospect theory expanded prospect theory to be applied during circumstances involving uncertain and risky decisions. They incorporated the concepts of diminishing sensitivity and loss aversion. Cumulative prospect theory states that when choosing between two options

related to gains, people are more risk-averse. People are also more willing to take risks when loosing is most likely a probability. The theory indicates that people are more willing to take risks for gains and avoid risk for losses of minor probability and are more likely to favor a disinclination to risk when both choices produce gains. They also embrace risk when both choices include a loss (Tversky & Kahneman, 1992).

Kahneman and Tversky (1979) indicated there are two stages to the process of deciding. The first stage entails analyzing the options. During this stage, decision-makers organize the options to simplify the choice. Kahneman and Tversky noted that during this stage, decision-makers also consider the outcome of their decision relative to what they can gain or lose, and they combine prospects. They also discard components found in both options. The second stage entails evaluating the simplified options and choosing the option with the highest value. The value margin decreases most of the time, according to the magnitude of the gain or loss (Kahneman & Tversky, 1979). Prospect theory proposes a phenomenon called the certainty effect. The effect indicates that people overweight outcomes of positive gain results when they have to choose between outcomes resulting in probable wins but less gain, and outcomes whose probability of winnings are minuscule but with grater gain (Kahneman & Tversky, 1979).

If applied to the present study, winning for a police officer with less gain is likened to apprehending the individual with a TASER deployment. TASER deployment relates to lesser gain because of induced stress to the police officer and potential risk of injuries. The principle of certainty effect suggests that an officer would choose outcomes

with a lower probability of winning but with a higher probability of more significant gain (meaning achieving the arrest without a TASER deployment).

A second proposition of the theory is the reflection effect, which explains people's decision to embrace or avoid risks. The effect states that people consider the possibility of gaining or losing while choosing and are prone to risk-seeking when presented with losing something. When individuals are presented with two losses, one greater than the other, they are willing to accept the risk of the more significant loss even when it has a low expectation of success (Kahneman & Tversky, 1979). This proposition might explain why some individuals choose to fight police officers while being threatened with a TASER. Individuals who find themselves being threatened by a police officer must choose between two losses: resisting arrest with the possibility of getting shocked by a TASER (with a minuscule opportunity of getting away) and being apprehended by the officer. According to the propositions of prospect theory, most people will resist the arrest and risk getting shot with a TASER.

Another proposition from prospect theory is the isolation effect. Isolation effect states that when choosing between two alternatives leading to the same outcome, but with different means of achieving the outcome, people will disregard similarities between the two alternatives and focus on the differences (Kahneman & Tversky, 1979). Isolation effect applied to the present study indicates that a police officer who encounters resistance from a person and who is faced with either using the TASER or another less-than-lethal option, would disregard the similarities between the two options and focus on the different outcomes of both.

Prospect theory has been applied in the criminal justice field to explain choices made during stressful situations. Whichard and Felson (2016) examined why suspects chose to resist arrest. They investigated if people resisted because they felt they were of lower-status, because they took risky decisions given the situation, or because of impairment. Whichard and Felson collected data from 17,000 inmates who resisted arrest and concluded that factors such as unemployment and race were not related to resistance. They discovered that impairment relative to mental illness and intoxication contributed to the suspect's resistance. Whichard and Felson also noted that people were prone to resist when they were carrying drugs or weapons or were on probation or parole. Whichard and Felson relied on prospect theory to explain why people would take the risk of resisting while knowing the probability of escaping was very low. They concluded that those who were not influenced by drugs or mental illness were desperate individuals who chose to take a risk under dire circumstances (Whichard & Felson, 2016).

Che and Benson (2013) examined decision making by drug smugglers while at risk of being arrested by law enforcement officials. They made their observations through the lens of expected utility maximization, expected value theory, and concept theory. Che and Benson concluded that the expected value theory was not a good model when considering criminal behavior. They asserted that expected utility maximization and prospect theory were consistent in explaining decisions made by drug smugglers while in danger of being apprehended. The authors did not find any evidence to dismiss either theory (Che & Benson, 2013).

Nguyen and McGloin (2013) investigated the role of accomplices in criminal activities and sought to understand the decisions people made to re-offend and take the risk of returning to jail. Although not naming the concept, Nguyen and McGloin relied on the principle of loss aversion to explain that people add more weight to the potential of reward than on cost when making decisions and that under adverse circumstances and uncertainty, people are willing to take higher risks (Nguyen & McGloin, 2013).

Prospect theory related to the present study because it goes beyond the rational choice to explain how a police officer, under a stressful situation, would choose between displaying and threatening with a TASER and deploying the device. The research question of this study helped focus the exploration of police officers' lived experiences with their use of CEDs. The research question related to prospect theory because it provided the a layout involving loss aversion while taking risk. The results of the study led to an increase in understanding officers' perceived effects that displaying and threatening a CED has on noncompliant individuals. Through the officers' accounts, the reader of this study will gain knowledge on how suspects react when threatened with a TASER.

Literature Review

Use of Force

Police officers are given authority by law and have the ability as part of their duties to use force against others (Graham v. Connor, 1989; Bittner, 1970). Graham v. Connor (1989) supports the idea that police officers can use discretion as they perform their duties, and their actions in times of confrontation should be judged by taking into

consideration how a reasonable person in their place would act. Terrill (2003) noted that force by police constituted either verbal threats or physical actions to harm a subject. Law enforcement officers take forceful actions in many circumstances (e.g., domestic batteries, traffic stops, and affrays) when a person displays resistance to lawful authority (Terrill & Mastrofski, 2002). Scenarios in which officers are required to use force would be too many to list, but one common aspect is the threat from a person to perform either violence or resistance.

There are several categories of force an officer may use, such as verbal threats, non-deadly force, and deadly force. A verbal threat is giving a verbal command to someone, along with the consequences of not following the command (Terrill, 2003). Non-deadly force is a type of force not expected to inflict substantial injury or death to a person (Klinger, 1995). Deadly force is force expected or intended to inflict substantial injury or death to a person (Gardner et al., 2002). Considering the many daily instances in which officers interact with community members, the use of force is very minimal, mostly verbal, and in most instances, does not result in injuries to officers or suspects (Klinger, 1995). Studies have indicated that officers use force in approximately one percent of encounters with citizens, and the use of CED takes place in only a fraction of that percentage (White & Ready, 2010).

Since the 1970s, scholars have been studying incidents involving law enforcement officers' forceful actions against the public. Use of force studies are critical to the discipline of criminal justice because the amount of force used by officers against the population affects peoples' behavior, attitude, and trust towards law enforcement

(Friedrich, 1980; Littlejohn et al., 1984). Studies have shown that without the community members' support and trust, police officers have a more difficulty solving crime because complainants and witnesses to crimes are less likely to cooperate with investigations (Murphy et al., 2008; Weitzer et al., 2008). Furthermore, the law enforcement profession has been scrutinized by citizens for the many instances in which force is used. With the advent of technology such as cell phones, the videotaping of police use of force encounters has led to nationwide riots and protests. Municipalities have also had to pay millions of dollars to settle lawsuits related to police use of force on citizens (Brandl & Stroshine, 2017).

Previous research has shown that law enforcement officers tend to use more force on males and on nonwhite individuals (Gau et al., 2010; Terrill 2005). Studies have also shown that police officers take longer to use weapons such as CEDs than other less-lethal tools. Race does not seem to be a predictor of which type of tool officers use to inflict force (Willits & Makin, 2018).

Police officers are equipped with approved department-issued weapons and equipment to aid them in enforcing the laws. Officers can use verbal commands or techniques such as blocking, striking, distracting, and kicking to control a person. They can also use control measures such as restraining devices, takedowns, and transporters to disable a person temporarily. During situations in which police officers believe that there is a possibility the suspect could kill them or cause significant injury; the officers have the option of using tools such as a firearm, that would most likely inflict great bodily harm or death. In between the verbal warnings and the deadly force options, officers have

some less-lethal weapons available for their use. One of those weapons in the TASER. Force is only considered when all practical means available have been exhausted because it can lead to injuries and, in extreme circumstances, to the death of civilians.

Civilians Injuries and Deaths

Researchers have shown concerns relative to the use of CEDs on pregnant women, children, and the elderly due to the electric shocks causing severe medical side effects (Sloane & Vilke, 2006). Campbell and Clark (2018) documented the discharge of a TASER to the face of a 15-year-old boy. One of the TASER's barbs lodged underneath the juvenile's left eye. Doctors removed the barb without causing any damage to the eye or its surrounding. Campbell and Clark suggested avoiding the discharge of a TASER to the face (Campbell & Clark, 2018). Gleason and Ahmed (2015) documented the single incident of a middle-aged male with a history of hypertension and schizophrenia who received three five-second deployments from a TASER X26. Gleason and Ahmed stated that TASER exposure caused acute rhabdomyolysis. Acute rhabdomyolysis occurs when skeletal muscles are damaged to such an extent that breakdown products are released to the bloodstream and could result in kidney failure (Gleason & Ahmad, 2015).

The electric discharge from CEDs has been claimed to be a contributing factor to the deaths of people while detained and under the care of police officers (White & Ready, 2007). Amnesty International (2008) reported that between 2001 and 2008, there were 334 deaths as a result of CED shocks. The organization also reported 210 deaths associated with CED deployments between 2008 and 2013 (Amnesty International, 2013). Amnesty International (2008) documented that between 2001 and 2008, 200

people died as a result of CED deployments, and one of those subjects did not have any drugs in his system or history of heart problems. Eastman et al. (2008) noted one death in 426 incidents involving TASER deployments. The death was not related to the electrical current from the device (Eastman et al., 2008).

Except when used in the dry stun mode, the probes from CEDs cause puncture wounds. When used as a dry stun, there is also a possibility that the probes could burn the immediate area of the person's skin (Mesloh et al., 2005). In contrast to medical and injury concerns, research has indicated that the risk of death as a result of contact with a CED is rare (National Institute of Justice, 2011). Other studies have also demonstrated that people who died after a CED discharge were either intoxicated with illegal narcotics or had a pre-existing heart condition (White & Ready, 2007).

Police Officers Injuries and Deaths

Each year, many law enforcement officers become hurt as a result of physical assaults from civilians. In 2018, 106 law enforcement personnel were killed while performing their jobs, 55 died as a result of criminal acts (Federal Bureau of Investigation, 2019). The Federal Bureau of Investigations (2018) documented that in 2017 approximately 60,211 police officers were assaulted while performing their duties, of which 17,476 were injured. Approximately 32% of the officers assaulted were attacked with personal weapons (e.g., punched or kicked), and 14% were assaulted with a cutting instrument (Federal Bureau of Investigation, 2018). The adverse effects of assaulting a police officer extends beyond the physical injury. Kaminski and Sorensen (1995) noted that assaulting police officers lowers the morale of other officers, lowers an officer's

situational control, and affects the hiring of additional officers. Two significant stressors to police work are physical attacks and having to use force on others (Ellison & Genz, 1983).

Less-Lethal Weapons

Since the early 1960s, law enforcement professionals have used less-lethal or non-lethal tools. Downs (2007) noted that in order for a less-lethal device to be of value, it needs to temporarily immobilize a person for a sufficient amount of time to permit a law enforcement officer to restrain the individual. Although available, most arrests performed by police officers do not require the use of a less-lethal weapon (Kaminski et al., 2004). Less-lethal weapons categories include weapons that fully or partially immobilize individuals (e.g., CEDs), weapons that disrupt the sensory system such as temporary loss of vision (e.g., pepper sprays and tear gases), and weapons that are used for pain compliance (e.g., batons) (Downs, 2007).

Reaves (2010) noted that the majority of police departments in the U.S. allow their officers to use at least one less-lethal tool. They also indicated that the most common tool was pepper spray (Reaves, 2010). Civil rights groups have criticized the use of less-lethal weapons and have called for higher regulations to their use (Downs, 2007). One less-lethal weapon that has increased in use and implementation is the CED, of which the TASER is the most commonly used.

Conducted Energy Devices

CEDs are utilized by 60% of police departments in the USA (Reaves, 2010). From 2000 to 2017, the number of police agencies that have implemented the use of CEDs

grew by 53% (Reaves, 2010). CEDs are tools whose primary purpose is to temporarily disable a person through the discharge of an electric current. The voltage is high enough to promote incapacitation, but its amperage is low enough not to inflict death. Some CEDs can also be used as pain compliance via direct contact (Downs, 2007). Downs (2007) presented three categories of CEDs. The first is a handheld weapon that must be pressed against a body to deliver a voltage of electricity. The second can be discharged, but it does not have cables connecting the probes to the device. The third can discharge electrically charged probes into the individual. The third type of CEDs is fashioned similar to a pistol and is powered by an internal rechargeable battery. When deployed, the device discharges two metal electrodes. The back of the electrodes is attached to the CED via a cable. The points of the electrodes (the part that enters the body) are similar to a fishhook. In order to incapacitate an individual, both probes must connect to the body. The flow of electricity travels from the CED via one probe, through the person's muscles, into the other probe, and then back to the device; thus, completing a full circuit (Downs, 2007).

TASER is the most popular type of CED; the acronym has become synonymous with CED (Downs, 2007). Studies have indicated that since the TASER was introduced to the market, the number of incidents involving suspects being killed by police officers significantly declined (Thomas et al., 2010). Since a CED can be discharged from a distance of up to 25 feet, officers do not have to make direct contact with the resisting suspect and engage in a physical fight. Officers can maintain the distance required to react to the actions of the suspect (Mesloh et al., 2005). CEDs such as TASER are,

depending on the situation, between 50-85% effective at stopping combative individuals and thus preventing further confrontation with law enforcement (Donnelly, 2001). Police departments across the U.S. operate under policies and guidance (based on state and federal laws) relative to the implementation and deployments of CEDs. They do so independently of each other.

TASER

The prototype of what became to be known as the TASER was invented by NASA scientist, Jack Cover, in the 1970s (Johnson, 1981). With Mr. Cover's assistance, in 1993, AIR TASER Incorporated was founded in Arizona by brothers, Rick and Tom Smith. Mr. Tom Smith indicated he was inspired to start the company after losing two high school friends to gun violence. He was motivated to seek new ways by which people could protect themselves without the use of lethal weapons (Axon International, 2018). Axon International (2018) indicated that in 1998, executives of AIR TASER, Inc. changed the company's name to TASER International, Inc. The company became publicly traded on Nasdaq in 2000, and the sale of TASER to American police departments increased significantly. The company's website also indicated that in 2004, the United Kingdom approved the use of TASERs. In 2017, TASER International formally changed its name to Axon, as the company's products extended beyond the TASER to other technologies such as audio/video body-worn recorders, APPS, and an evidence management network. The company's mission centers on the protection of life (Axon International, 2018).

Axon International (2018) states that the company's manufacturing buildings and headquarters are located in Scottdale, Arizona. The company's software engineering department is located in Seattle, Washington, and its artificial intelligence research team is located in New York City, New York. Axon International also has departments in Finland, Vietnam, United Kingdom, and Amsterdam. As of 2018, 47 of the largest city police departments had purchased at least one Axon product (Axon International, 2018).

Mesloh et al. (2005) noted the TASER was effective 69% of the first time being used and was more effective at ending confrontation than other less-lethal weapons. They also noted that TASER was effective at ending a confrontation quickly (Mesloh et al., 2005). Ending confrontation as soon as possible is essential because it decreases the possibility of harm to the officer and the involved party. Published research has indicated that the longer the negative interaction between police and suspects, the higher the possibility that officers will use more force (Willits & Makin, 2018). Mesloh et al. (2005) credited the use of TASER because of their unique ability to be tracked. The electronic components in the TASER allow supervisors to find out when and for how long the device was used, thus reducing the likelihood of inappropriate use. Mesloh et al. (2005) concluded that the TASER is a useful tool and leads to fewer injuries to citizens and officers.

The CED utilized by police officers in this study was the TASER X2. The X2 was introduced into the market in 2011 by Axon. The X2 is a new generation electrical weapon that is set apart from previous models by its ability to discharge two shots without the need to reload the device manually. With the back-up shot, the officer can

quickly take a second shot in the event the first shot did not make a full connection. According to Axon International (2018), the X2 is resistant to climate elements such as rain, humidity, and dust. The device uses dual, vertically aligned lasers for aiming. The device has a fixed upper laser, while the lower laser moves up and down according to the distance between the police officer and the target. As the distance increases, the spread between the two laser points also increases. The dual lasers give the officer visual confirmation of the location where the proves are going to hit (Axon International, 2018). The X2 can also be used as pain compliance without deploying the probes. The dry stun mode does not incapacitate, but delivers a shock when activated and pressed against the body. The X2 provides the user with the ability to switch between cartridges with the push of a button. An LED display on the back shows the cartridge that will deploy first, the reach distance of the probes, and the battery level of the device. The X2 also includes a feature of warning arc, which the user can choose to utilize as a threat to increase voluntary surrender without the need for a discharge (Axon International, 2018b). There is currently no study that has investigated the effectiveness of the warning arc in deterring resistance.

The X2 internally records its performance, and its data can be managed online. Being able to record when the device is used has proven valuable. For instance, in a criminal court case, Garcia v. Contreras (2008), the complainant claimed an officer drew his TASER and deployed it against her, causing her to fall to the ground. The officer indicated he only threatened the complainant with the TASER, but did not deploy the device. A download of the TASER's data supported the officer's claim that the device

was not discharged during the incident (Garcia v. Contreras, 2008). The X2 also has a self-diagnostic feature by which its status can be monitored. Upon deployment, the device is programmed to stop discharging electricity after five seconds. The X2 also automatically connects to Axon cameras so that the encounter could be audio and video saved (Axon International, 2018c).

Animal Studies Involving CEDs

Researchers have performed numerous studies on animals to understand the effects of CEDs on bodily functions, primarily the heart. Lakkireddy et al. (2006) inserted darts into anesthetized pigs and delivered shocks similar to those delivered by a TASER. The authors discovered that the electric output did not capture the heart or create any rhythm-related problems (Lakkireddy et al., 2006). Nanthakumar et al. (2006) also examined the effects of CED shocks on pigs by using the TASER X26. They noted a significant decrease in blood pressure on the animals. The study indicated that 13 of the 16 shocks caused heart captures significant enough to be measured. One of the shocks caused an increase in heart rate, which then returned to a normal rhythm. The study documented another shock that caused a fast heart rate that turned to ventricular fibrillation and concluded in cardiac arrest (Nanthakumar et al., 2006).

Dennis et al. (2007) noted in their study that pigs were shocked with the TASER X26 twice; each deployment lasted 40 seconds. The investigators waited 10 seconds between deployments. Dennis et al. documented that the acid level in the pigs' body fluids significantly increased. They also noted that one pig developed an abnormal heart rate for three minutes, which then turned into ventricular fibrillation (Dennis et al., 2007).

In a study authored by Walter et al. (2008), one pig developed ventricular fibrillation after the first 40 seconds deployment. In another application of a 10-second discharge with a TASER X26, the investigators noted ventricular fibrillation in 2 of 4 pigs and non-sustained ventricular fibrillation in the others. Walter et al. concluded that ventricular fibrillation could occur in humans as a result of TASER and that those who used the device should be trained to recognize the symptoms of ventricular fibrillation, and should know how to perform cardiopulmonary resuscitation (CPR) (Walter et al., 2008).

Koerber et al. (2014) identified factors that contributed to cardiac stimulations during TASER deployments. The researchers anesthetized and paralyzed four Yorkshire pigs and attached echo probes to collect the heart's data. Koerber et al. tested the TASER X26, M26, X3, C2, and Singer S200 AT. They did not observe any cardiac stimulation when the proves were connected to the pigs' abdomens. They observed cardiac stimulation for all TASERs, except the X3 when the proves were connected to a small pig's chest. In large pigs, Koerber et al. only observed cardiac stimulation with the Singer S200 AT. They concluded that CEDs caused cardiac stimulation on pigs, but the stimulation was dependent on the size of the animal, the type of CED used, and the location of the probes on the body (Koerber et al., 2014).

Adamiak et al. (2016) tested the effects of the TASER X26 and X2's discharge on the skin of recently dead pigs. The affected portions of the skins were analyzed using an optical microscope. Adamiak et al. noted the X26 and X2 caused similar burn results to the skins. They observed mechanical damage from electricity to the outer layer of the pigs' skins. Adamiak et al. also noted a separation between the upper and lower layer of

skins in the affected areas. They concluded the same type of skin damage would occur if an officer were to apply the TASER probes directly on the body of a person and use the TASER in the dry stun mode (Adamiak et al., 2016).

Human Studies Involving CEDs

Studies involving humans and CEDs have shown that TASER shocks are relatively safe to the human body. However, they do not take into account the naturalistic settings of a police-suspect encounter since they are conducted in a controlled environment. Researchers Moscati et al. (2010) gave volunteers 15 seconds shocks with the TASER X26 while the volunteers were lying on their backs. The investigators did not fire the darts as a police officer would during a real situation, but taped the darts over the right side of the chest and the right side of the abdomen of the participants. Moscati et al. documented that TASER shocks reduced the pH and bicarbonate levels and increased lactate levels in the body of candidates who had consumed alcohol. They indicated that none of the candidates showed signs of heart issues after TASER deployment (Moscati et al., 2010). In a separate study, Strote et al. (2010) noted that out of 1101 subjects who were shocked by a TASER, none died. A study conducted by Stopyra et al. (2017) achieved similar results. Stopyra el al. exposed four subjects to five seconds of CED shocks. The study showed that the CED deployment did not change the participants' blood pressure, heart rate, or cause any other issues related to the heart (Stopyra et al., 2017).

Dawes et al. (2008) administered 15 seconds shocks with the TASER X26 to volunteers without firing the probes. They noted that the deployments did not affect the

participants' body temperature, and none of the participants showed signs of heart conditions after TASER deployment. Dawes et al. (2008) also administered a five-seconds shock to ten volunteers, again without firing the TASER X26, while the participants' hearts rhythms were being monitored via echocardiography. They noted the shocks did not capture the heart's rhythms; however, the mean heart rates were 91 before the shock, 95.8 during shock, and 85.7 after the shock (Dawes et al., 2008).

Other studies have shown single incidents involving TASER use, which have resulted in electric current from the device capturing the human heart. Cao et al. (2007) documented a unique case involving an older male with a pacemaker. The person was shocked twice with five-seconds deployments to the right side of his chest with a TASER X26. The data from the pacemaker displayed two instances of high current consistent with the two times the TASER was deployed. The person did not show any symptoms (Cao et al., 2007). Another study tested the TASER on volunteers by giving them ten-seconds deployments while their hearts were monitored via echocardiography. The echocardiograms revealed brief high heart rates on the participants. The volunteers did not show any symptoms (Ho et al., 2011). Gardner et al. (2012) conducted 100 TASER deployments on volunteers of young age, which resulted in no injuries. A similar study also documented 1201 cases of TASER deployments in which two subjects died; however, their deaths were not attributed to the TASER, but to underlying conditions such as being under the influence of cocaine, being intoxicated, and being overly combative (Bozeman et al., 2009).

Cardiac Arrests Involving CEDs

Although TASERs are marketed as less-lethal devices (Kornblum & Reddy, 1991), their shocks are a contributing factor to the death of individuals with certain pre-existing health conditions and when misused (Capstick, 2001; Kedir, 2006). Zipes (2012) noted eight incidents of individuals who were hit with TASER probes and died from cardiac arrest. Zipes noted that none of the individuals had a history of cardiac issues. However, several had other health problems such as alcohol abuse (four individuals had a blood alcohol level over the legal limit), attention deficit disorder, depression, and schizophrenia (Zipes, 2012). Brave (2012) noted that the risk of suffering a heart attack from a CED shock was 1 to 100,000. However, the exact number of cardiac-related deaths is unknown for several reasons. First, there is a lack of accurate reporting. For instance, Todak et al. (2015) examined 184 autopsy reports of individuals who had died following TASER exposure and discovered many of the reports did not include the report summaries of law enforcement or information on the CED deployment. Second, there is usually no device recording the hearts when the incidents happen. Lastly, shocks from CEDs would most likely disrupt the readings of an electrocardiogram (Zipes, 2012).

Zipes (2012) also noted that shocks by the TASER X26 had been shown to affect the heart rate by increasing it to levels so high that it could result in ventricular tachycardia (fast, abnormal heart rate) and ventricular fibrillation (the hearts quivers and stops pumping blood). Zipes noted that TASER deployments could elevate the heart rate to over 200 bpm, making it possible for ventricular fibrillation if the candidate had underlying heart conditions or is intoxicated (Zipes, 2012). The TASER darts' location

relative to the person's heart could also affect cardiac rhythm. Rahko (2008) stated that a dart which contacts the body directly on top of the heart could cause ventricular fibrillation. Another study exposed ten law enforcement/correctional officers to ten seconds of a TASER X2 deployment while their vital signs were being monitored. The volunteers' heart rhythms were monitored via a 12-lead electrocardiogram, and their blood samples were also monitored before and after the deployment. The study revealed no changes in the vital signs or potassium levels, but did show an increase in lactic acid and pH levels. The study did not show any evidence of respiratory issues, and the researchers did not observe any evidence of dangerous physiological changes in the volunteers (Ho et al., 2014).

Mental Illness and CEDs

There is minimal research involving the relationship between CED deployment and mentally ill persons. The American Medical Association and the National Alliance on Mental Illness support the use of CEDs on those with mental disorders due to the likelihood that the situation will de-escalate after the CED deployment (American Medical Association, 2011; National Alliance on Mental Illness, 2014). Studies have shown that people with bad demeanors, hostility, and who are on drugs or intoxicated with alcohol tend to receive greater force from a police officer (Alpert et al., 2004; Alpert & Dunham, 1997; Morabito et al., 2012). Other research has demonstrated that individuals with mental health disorders display more hostility, resistance, and violence and their aggressive behavior increases the risk of being part in a use of force situation with law enforcement and being the recipient of CED shocks (El-Mallakh et al., 2008;

Ellison et al., 2006; Marzuk, 1996). The consumption of alcohol among individuals with mental illness is also typical, thus furthering their chances of being shocked by a CED during a conflict with law enforcement (Morabito et al., 2012). Studies have indicated that mentally ill individuals who also drink alcohol or use drugs tend to receive significantly more shocks by CEDs than those not under the influence (Baily et al., 2016). The side effects of some medications used by individuals with mental health disorders contribute to deaths as a result of CED shock (White & Ready, 2010).

Bailey et al. (2016) collected data from law enforcement departments from 2008 to 2009 and reviewed 233 incidents involving the use of CEDs. Thirty-eight of the incidents involved subjects with a mental illness, and 91 involved subjects who were intoxicated with alcohol, stimulants, or other substances. Baily et al. noted that the average number of deployments necessary to control subjects with mental illnesses was significantly higher at 1.92 and significantly higher at 2.55 for persons who were intoxicated, versus subjects without mental illness and who were not intoxicated. The investigators observed that persons with mental health disorders who were also intoxicated were more resistant to CED shocks and were shocked more often than those who were not intoxicated or on drugs. Baily et al. did not observe any other differences between the subjects with mental illness and those who were not mentally disabled (Bailey et al., 2016).

Cognitive Functions and CEDs

Cognitive functions relate to the ability to concentrate, being able to remember, and the speed of learning (White et al., 2014). Some studies have shown that accidental exposure to electricity causes a decrease in cognitive functions (Duff & McCaffrey,

2001; Fish, 2000). Other studies have documented memory loss, loss of attention, and loss of concentration of individuals exposed to electric shocks (Fish 2000). Zia Ul Haq et al. (2008) suggested that electricity shocks could result in the development of depression and illnesses similar to schizophrenia. Pliskin et al. (2006) examined 63 individuals who suffered from electrical injuries and found that nearly half of them reported problems with lack of concentration, slower thinking, and lack of memory, which lasted years after the incident.

Authors White et al. (2014) investigated the consequences of TASER shocks on the performance of the mind. They conducted a randomized controlled trial and exposed twenty-one police recruits to TASER shocks. The recruits completed a series of cognitive tests three to four hours before TASER deployment, immediately after TASER deployment, and 24 hours after TASER deployment. The study showed a statistical decline in the cognitive tests immediately after the TASER deployments. The study revealed that after 24 hours, all of the recruits' cognitive functions had returned to normal levels. White et al. indicated there was only a short-term disruption of cognitive functions resulting from TASER exposure (White et al., 2014).

Kane and White (2015) investigated the outcome of TASER shocks on cognitive functions. One hundred forty-two volunteers were exposed to a five-second TASER shock while resting and then after conducting a vigorous 30 seconds exercise to mimic resistance to law enforcement. The participants completed neurocognitive tests one hour before deployment, immediately after deployment, one hour after deployment, one day after deployment, and one week after deployment. The study indicated that TASER

deployment caused a significant reduction in measures of memory and verbal learning, which lasted less than one hour. The study revealed that other neurocognitive tests were not affected (Kane & White, 2015).

Force continuum

The force continuum is a graduated guideline used by the police department in this study and by many other police departments (Terrill & Paoline, 2012). The force continuum used in the police agency of this study was adopted from standards set by the Florida Department of Law Enforcement. Police departments employ their adaptations of use of force continuums, but all follow guidelines established by legal standards (Gardner et al., 1995). The continuum defines various levels of resistance and their corresponding levels of response by officers. It provides guidelines as to the number of force officers should use (Mesloh et al., 2008).

The person's level of resistance dictates the level of an officer's response (Morrison & Gardner, 2011). Officers increase force only when they are unable to control the suspect with the current force being applied. The officer is instructed to reduce the force after gaining control of the suspect (Williams, 2002).

The continuum which guides the action of the police officers in this study provides a table consisting of six levels of resistance. The first level is the subject indicating by posture that he or she will resist. The second is vocalizing the resistance. The third includes showing signs of unassertive resistance, followed by actively resisting, then aggressively resisting. The last level is aggravated resistance.

The continuum also includes six categories of response options that officers may take to address each level of resistance. They are: officer presence, communication, soft control, hard control, incapacitation, and deadly force. The use of a TASER falls within the hard control category.

The placement of the TASER on the force continuum has created controversy and has been a point of discussion among scholars (Brandl & Stroshine, 2017). A similar debate occurred with the placement of pepper spray in the continuum when pepper spray was first introduced to law enforcement (Smith & Alpert, 2000). Many have opined that less-lethal weapons such as a TASER should only be used against individuals who are actively resisting (Amnesty International, 2007, 2008; MacDonald et al., 2009). The placement of the TASER on the continuum is not the same among police departments (Adams & Jennison, 2007) and many departments allow their officers to use the TASER on people who passively resist, which has caused concern and criticism from citizens (Terrill & Mastrofski, 2002; Thomas et al., 2010).

Placing the CED low on the force continuum could be problematic because it can lead to overuse (Smith & Alpert, 2000). Placing the device high on the continuum can lead to missed opportunities for its use and could potentially lead to an increase in injuries to all parties involved as a result of officers using hand control techniques. Prior studies have shown that when law enforcement personnel use CEDs rather than hand control techniques, the rate of injuries to those involved in the altercation decreases (Jenkinson et al., 2006). Adang and Mensink (2004) stated that allowing police officers to use pepper spray on individuals before the argument turning physical could result in

fewer injuries to those involved. Smith and Alpert (2000) indicated departments that allowed officers to deploy pepper spray before physical contact (during verbal resistance) had shown a decrease in injuries to the suspects and the officers. Brandl and Stroshine (2017) noted that there was a need for additional research that would inform the best place to put TASERs on the force continuum. Proper policy implementation of the TASER is essential because it can result in a more balanced and adequate use, and can prevent harm to involved parties. Studies based on the TASER's proper placement on the continuum can provide an understanding of the circumstances in which the TASER is used and of its perceived effectiveness (Brandl & Stroshine, 2017).

Impairment and Resistance

People who are intoxicated with either drugs and alcohol are more likely to be more aggressive and more resistant to authority (Terrill, 2000). Also, persons who are intoxicated tend to choose aggression rather than surrendering, are more likely to use a firearm, and are less reactive to physical pain (Alpert & Dunham, 2000). The association between mental health illnesses (such as depression, bipolar, and schizophrenia) and violence is well established in the literature (Felson et al., 2012). During the 1960s, hospitals were in charge of treating the majority of individuals with mental illnesses. During that period, there were approximately 563,000 beds available throughout the U.S. The number of beds available dropped significantly to 98,000 during the 1990s due primarily to the deinstitutionalization of mental hospitals (Markowitz, 2006). Deinstitutionalization and other social policies have led to an increased presence of

mentally ill individuals in communities, and an increase of reports with police officers (Engel & Silver, 2001; Markowitz, 2006).

Impaired individuals are also more likely to resist the impact of less-lethal tools due to their high pain tolerance (Kaminski et al., 2004). The possibility of a police officer to encounter someone who is impaired by alcohol, drugs, or who is mentally ill is high. Taylor and Woods (2010) noted that half of the male subject's arrests made by officers in an urban city were impaired. Another study concluded that approximately 38% of arrestees who engaged in forceful resistance with law enforcement had a history of mental disorder (Kesic et al., 2012). Lamb et al. (2004) noted that between 10 to 15% of federal and state prison inmates had a severe mental illness. Psychiatric and emotional disorders such as schizophrenia, in combination with intoxication, contribute to the person's aggression towards the police (Stetser, 2001). Kesic et al. (2012) discovered that mentally ill individuals were more likely to choose the use of a weapon or threatened to use a weapon towards law enforcement than those who were not mentally ill. Mulvey and White (2014) likewise noted that persons with mental disorders resisted law enforcement at a higher rate than those without disorders.

In respect to threats by law enforcement, Kaminski et al. (2004) noted that impaired individuals did not respond well to threats made by police officers. Another study indicated that non-threatening behavior by police decreased acts of aggression from citizens (Piquero & Bouffard, 2003). Another study showed that those who trusted the police's motives were more likely to cooperate without the need of threats (Watson & Bell, 2013). Those who have psychosis are more likely to react with violence as a result

of being threatened (Link et al., 1999), and police officers tend to use threats with weapons towards those who are affected by psychosis (Kesic et al., 2012). Kesic et al. (2012) also documented that impairment increased the likelihood that officers had to use force besides verbal commands. Studies support that persons who are mentally ill display higher levels of resistance against police officers (Mulvey & White, 2014). Even though the use of weapons such as TASERs during every day encounters by law enforcement is uncommon, Mulvey and White (2014) stated that the use of weapons was significantly higher when the suspect had a mental health condition.

Effects of Threatening Suspects

In this study, threatening someone with a CED signified intentionally aiming the device while giving verbal commands to the person. If the device is turned on at the time of the threat, the pointing of the CED could be accompanied by spark warnings and the aiming of its lasers. Although there was a deficiency in the literature on the effects of threatening a suspect with a CED, I located several legal cases regarding the circumstance which provide limited information on the topic. For instance, in a 2013 case, Chatman v. Buller, a police officer observed a pedestrian violate a city ordinance and ordered him to stop. The officer drew his department-issued TASER and threatened the individual, the person complied (Chatman v. Buller, 2013). In a 2008 case, Clark v. Rusk Police Department, a police officer used a TASER to threaten an individual who was refusing to exit his motor vehicle. The suspect complied without the need of a TASER deployment (Clark v. Rusk Police Department, 2008). In a 2012 case, Evans v. Multnomah County, a correctional officer used a TASER against a non-compliant

inmate. The officer drew her TASER, pointed it at the inmate, and threatened him with deployment; the inmate complied with the officer's commands (Evans v. Multnomah County, 2012).

In a study involving the threat of pepper spray, Adang and Mensink (2004) noted that the threat to use pepper spray was capable in de-escalating incidents. Adang and Mensink presented Dutch data, which showed that threatening to use the spray was in itself useful in obtaining cooperation from the suspects in almost half of the incidents. Adang and Mensink mentioned the number of cooperating subjects in the sight of threat with pepper spray was possibly going to rise due to increased awareness of the effects of pepper spray. Adang and Mensink asked 90 individuals who were sprayed if in the future they would cooperate if an officer threatened the use of the spray. Sixty-one percent replied they would cooperate, and 16% replied they would not. Adang and Mensink also documented that some officers did not give a verbal warning before deploying the spray to prevent the suspects from taking evasive actions by covering their faces. They also noted that verbal warnings were effective at gaining compliance in over half of the cases, thus noting a disproportionate use of the spray due to the officers' lack of verbal warnings (Adang & Mensink, 2004). In situations involving the TASER, verbal warnings would be appropriate because the TASER would still be useful even if the person took evasive actions. Unlike the pepper spray, a CED's effectiveness is not dependent on specific parts of the body (such as the face in the case of pepper spray).

In a use of force report covering five years of use of force incidents completed by Hanson and Thorne (2013) of the Mason Police Department, the authors noted there were

23 incidents involving police officers threatening with the TASER. Hanson & Thorne documented that resisting subjects complied 74% of the time. Although the report was not scientific and required further research, it did indicate that threatening with a TASER had some effect on people who resisted (Hanson & Thorne, 2013).

Summary and Transition

Police officers, by law, can use force when required to accomplish their duties. One tool available to officers for the apprehension of noncompliant individuals is the CED. The brand of CED that is most used by police departments across the U.S. is the TASER. The use of CED supplements other methods of physical force. By being able to deploy the device from a distance, officers can avoid going hands-on with a suspect, which results in fewer injuries to all parties involved. CEDs have been shown to reduce injuries, but they have also been the subject of criticisms from citizens.

Most of the studies related to CED focus on the health effects of TASER deployments. Human and animal studies on the effects of CEDs have produced mixed reviews. Some animal studies have indicated that TASER shocks affect heart rate, and some have indicated the heart rhythm is not affected. Likewise, some studies have suggested that TASERs have been linked to human deaths, but most of the studies have found the device is safe enough to be used on humans. People with mental illness and who are also intoxicated with drugs or alcohol are at higher risks of suffering health issues if in contact with a CED. There is evidence to support that CED shocks do not affect long term cognitive functions. Criticism from citizens on the use of CEDs and

health concerns has led police departments to place significant restrictions on their use via use of force continuums.

Police administrators have struggled to decide the ideal place of the CED in the continuum. They have an essential decision to make when dictating under which circumstances police officers can use the device. Placing the device low on the force continuum could be problematic because it can lead to overuse. Placing the device too high could lead to underuse of the device and more hand-to-hand contact between officers and suspects. There is a lack of agreement and inconsistencies among police departments on policies governing the training, regulations, applications, and placement of TASERS on the department's continuum.

Studies that promote the discovery of CED values are essential because the rate of police departments endorsing the device is increasing, community members are voicing concerns, and policymakers will benefit from the added information while deciding policies. One area of the study of CEDs that has not been investigated thoroughly is police officers' perceptions of their effects when used as a threat. Research on threats made with CEDs is limited. The purpose of this phenomenological study was to explore law enforcement officers' lived experiences with the use of CEDs to increase understanding of the perceived value of the devices when displayed and used as a threat against noncompliant individuals. Knowing the officers' perceived effects of threatening someone with a TASER is valuable to policymakers because if the threat achieves compliance, then policymakers could consider adding the step of threatening to the continuum and decrease injuries derived from CED deployments.

The theoretical foundation of this study was based on prospect theory. The theory helped understand why a police officer would choose to either threaten or deploy the device on a resisting subject. Prospect theory presents several concepts that assist in explaining choices made by individuals. These concepts include cognitive biases called loss aversion, reflection effect, and isolation effect.

The use of CEDs against individuals is not injury-free. Investigating the effectiveness of displaying and threatening with the devices without deploying them is necessary, as it could lead to training officers to give threats before deploying, and could provide valuable information to policymakers as they derive policy implementations. The current policies of CEDs focus mainly on when they can be deployed and do not include when they could be unholstered and used as a threat. The findings from this study supplement the area of using the device as a threat to gain compliance. A decrease of CED deployment while still achieving compliance would result in a decrease of injuries, could result in higher acceptance by community members of the device's use, and could foster a better relationship between the public and law enforcement.

Chapter 3: Research Method

Introduction

The purpose of this phenomenological study was to explore police officers' lived experiences with displaying and threatening noncompliant individuals with CEDs. Considering their benefits, criticisms by the public, and increasing use by law enforcement, there is a need in the criminal justice system for added information of the value of CEDs and to what extent displaying and threatening with a CED could be used

during a police officer's confrontation with a noncompliant individual. Lived experiences were documented via interviews with five police officers from a municipal police department in Florida who were assigned, trained, and regularly carried CEDs.

Chapter 3 explains the qualitative design grounded in prospect theory. The chapter contains the research design for this study and the rationale. The chapter also includes my role as a researcher, personal and professional relationships that I have with participants, and how I managed research bias. This section also includes other ethical issues. The chapter covers the methodology, as well as the population, sampling strategies, criteria for participant selection, number of participants, specific procedures for identifying participants, and saturation and sample size. The chapter also addresses the topic of instrumentation, which involves the data collection instrument. The chapter outlines procedures for recruitment, participation, and data collection. It also presents the data analysis plan and issues of trustworthiness, such as credibility, transferability, dependability, confirmability, and reliability. Chapter 3 also presents ethical procedures involving agreements, treatment of human participants, and treatment of data. The chapter concludes with a summary of main points and a transition to Chapter 4.

Research Design and Rationale

The research question under investigation was: What are police officers' lived experience regarding displaying and threatening use of CEDs on noncompliant individuals? The goal of this study was to obtain participants' subjective experiences regarding their use of CEDs. To fulfill that goal, this study adopted a qualitative phenomenological approach. Phenomenology is a practice in which the researcher

attempts to obtain the truth of situations according to the participants' conscious experiences in order to describe the phenomena (Moran, 2000). A phenomenological approach provides an effective way of collecting data directly from participants via in-depth one-on-one interviews. Officers' experiences for this phenomenological study were collected via semi structured interviews which were audio-recorded. Through qualitative analysis, the researcher is able to obtain a detailed comprehension of the participant's experiences.

Reushle (2005) recommended researchers to apply the principles of connectivity, humanness, and empathy (CHE) while interviewing participants. Connectivity refers to the researcher establishing a connection and rapport with the participants. According to Brown and Danaher (2019), connectivity is accomplished by being attentive, by acknowledging participant's answers, by maintaining eye contact, and by using body language suggesting they're open to discussion. Humanness refers to the researcher providing feedback, being engaging in conversation, and expressing his or her humanity. Brown and Danaher (2019) noted that some ways a researcher could include the humanness principle in a conversation is by using informal tone, by sharing a personal story, and by including humor. The last principle of CHE is empathy. Brown and Danaher (2019) stated that a researcher shows empathy by showing humility and by listening to the participants without casting judgement. Reushle (2005) asserted that CHE principles assisted the interviewer in building a relationship with the participant and in making them feel comfortable. In this study, I implemented CHE principles during the interviews with the participants.

Role of the Researcher

My role in this study included conducting interviews and collecting data. I was sensitive to the participant's lived experiences and maintained the view that I did not know their individual experiences to avoid misconceptions. As a responsible researcher, I was conscious of my subjectivities and beliefs. I did not project my values while interacting with the participants. As a trained professional in criminal investigations, I understood the importance of being ethical and open-minded regarding cultural diversity and accepting differences of opinions. I clearly understood that as a researcher, I was to set apart past experiences with the phenomenon to understand the issue better as portrayed by the participants.

As a researcher, I suspended what I knew based on personal experiences with CEDs. Lopez and Willis (2004) said that researchers should practice bracketing to keep personal knowledge away from the study and not contaminate the results. By implementing the principle of bracketing before, during, and throughout the data collection, I was able to document the phenomenon in its purest form based on the officers' descriptions. Paltved and Musaeus (2012) stated that another way to achieve bracketing and check on prejudice was to discuss interpretations of the study with an independent person. In this study, I shared the interpretations of the study with the dissertation chair. Furthermore, I created a written record of my impressions via notes during interviews and data analysis.

There are three ethical areas that I addressed to ensure transparency and dispel ethical conflicts. First, I work as a police officer in the same police department where

participants were located, and I perform similar work duties as participants. Second, I have used the TASER in the line of duty and I have opinions regarding the device. Third, I help supervise a small group of officers in the department where the recruitment took place. Having a professional relationship with some participants and having used the TASER myself creates the perception of bias judgment. It was essential to differentiate between and understand the role between my profession as a police officer and as a researcher. During this study, I acted as a researcher only to capture lived experiences of participants in an unfiltered and unbiased manner, to achieve impartial conclusions during the review and analyzation of the data. For transparency, I refrained from voicing my opinions during the interviews with the participants. I also refrained from asking leading questions, and did not make any facial expressions that would give any judgmental impressions to participants or swayed their viewpoints.

To avoid conflicts of interest with the small group of officers I assist with supervising, I excluded them from the pool of candidates. Before the interviews, I provided written documentation to assure the participants that I was not going to disclose their personal information. I did not document the participants' names or any identifying numbers (badge numbers or employee ID) in the data analysis or report. I assigned the participants a numerical identification for reference. To ensure that I adequately captured the participants' lived experiences according to their understanding, I transcribed the audio recordings verbatim into a Microsoft Word document. I compared the transcripts with the recorded interviews to ensure accuracy. I then provided copies of the transcripts

to the participants for their review and confirmation, and I also shared with them the completed textural-structural descriptions for their review and input.

Methodology

The discipline of phenomenology originated in the 20th century from German philosopher Edmund Husserl. Husserl's focus was to purely describe the participants' experiences. Philosopher Martin Heidegger was also influential in promoting phenomenology. His focus was to interpret the participants' experiences. The methodology that I chose for this study was Husserl's descriptive phenomenology. Descriptive phenomenology provides a method of exploring the phenomenon and focuses on discovering and unveiling realities as perceived by persons who have experienced the phenomenon under investigation (Matua & Van Der Wal, 2015). This method provided an acceptable way of discovering experiences involving the use of CEDs as a threat. It helped me fulfill my responsibility as a researcher in detailing a description of those experiences.

Finlay (2009) indicated that by using phenomenology, a researcher could discover how things appeared through the lived experiences of the participants, and obtain the meaning of the phenomena. Todres and Holloway (2010) stated that phenomenology guides the participants through the remembrance of specific experiences related to the phenomenon, and from those experiences, the researcher could develop themes. There are many ways of obtaining world perspectives, and descriptive phenomenology is one of those ways. This view was relevant to this study because it supported the notion that it was possible to comprehend the phenomenon through the lived experiences of the police

officers. The rationale for choosing descriptive phenomenology for this study was grounded on several concepts that provided me, the researcher, with hidden features of the respondents' lived experiences with their use of CEDs.

Husserl's main philosophy relative to phenomenology's approach of lived experiences was called *Lebenswelt* or Lifeworld and was one which he believed to be necessary for epistemological inquiries (Husserl, 1965). Dahlberg et al. (2008) stated that the purpose of lifeworld research was to gain a more excellent knowledge of the events experienced by the participants. This approach offered philosophical grounding for inquiring about the lived experience of police officers' use of CEDs.

Another concept that made descriptive phenomenology ideal for this project was the allowance of real and irreal features of experiences into the study. Husserl's descriptive phenomenology acknowledged that human experiences contained real and irreal interpretations (Husserl, 1982). Irreal features of experience provide the researcher with a new understanding of how the person sees the phenomenon. Husserl (1982) explained that the difference between real and irreal was that irreal interpretations could not exist by themselves without consciousness. The capture of irreal interpretations from participants provides the researcher with greater depths to the lived experiences and goes beyond what is known (Todores & Wheeler, 2001). This concept provided me with in-depth experiences of the police officers, with minimal limitations.

In phenomenological research, the term *intentionality* is fundamental and considered a central theme (Smith & McIntyre, 1984). Intentionality represents the character of a person's consciousness, as presented in the person's mind (Smith &

McIntyre, 1984). Husserl (1982) noted that intentionality filled the gap between a person's reality and consciousness. Husserl (2001) designated units of consciousness as intentional experiences or acts. Intentionality in the study of lived experiences also relates to the awareness of the participant's natural attitudes and how the participant experiences *meaning* in her or his life (Dahlberg et al., 2008). A description of those meanings is made possible through descriptive phenomenology (Dahlberg et al., 2008).

Descriptive phenomenology also provides a path to a greater understanding of the phenomenon. It captures the *when* and *how* the meaning of the experience was manifested (Langdridge, 2008). Schutz (1972) stated that the meaning of a phenomenon is best discovered through the examination of past situations. Tools such as discussions and remembrance provided by phenomenology provide a way for meaning to be reenacted and discovered by the researcher (Schutz, 1972).

Epoche (Bracketing) in phenomenological research ensures the researcher refrains from describing how the phenomenon appears to her or him. This process is done to capture the phenomenon as experienced by the contributors. Girorgi (2012) indicated a researcher must exercise phenomenological reduction by immersing herself or himself with an open mind while reading the transcripts, by bracketing his or her knowledge of the phenomenon, and by having a sensitive attitude towards the participants. *Reduction and Transformation* are concepts found in phenomenology that give way to the expression and documentation of the phenomenon (Giorgi, 2012). These concepts allow the meaning of the study to appear by transforming the words of the participants into phrases that reveal the attributes of their experiences (Giorgi, 2012).

The researcher in a phenomenology study aims to put the contributor's experience as the primary focus of the study. Although Finlay (2009) suggested it was practically impossible for a researcher to exercise bracketing thoroughly, I suspended to the best of my abilities my opinions and knowledge about the use of CEDs to avoid the influence of preconceived ideas or prejudice (Todres & Holloway, 2010). I also ensured not to take away or add to the words of the participants, but only describe their experiences precisely as presented by them. For transparency, I displayed the process of transformation throughout the data analysis, showing the progression of meanings.

Participant Selection Logic

The goal of sampling is to obtain enough participants to provide information that would produce a deep understanding of the phenomenon (Gentles et al., 2015). In phenomenology studies, explicit sampling strategies are not usually mentioned; the authors instead describe the way they selected the participants (Gentles et al., 2015). Consistent with phenomenological studies, the sampling strategy in this study focused on choosing people who had experience with the use of CEDs and could provide information about the phenomenon. Patton's suggested strategy, purposive sampling, was one of the most popular in qualitative studies. The strategy could be applied to phenomenological studies such as this one. I followed Patton's strategy and applied purposive sampling to this study.

Through purposive sampling, I was able to separate the most suitable participants before starting data collection, by choosing those who had experience with the use of CEDs and could provide cases rich in information (Dale, 2000; Patton, 2002). The role of

purposive sampling is to select cases with the highest amount of information, which can provide the most considerable understanding of the phenomenon (Patton, 2015). Although all the officers in the department where this study took place were assigned TASERs, not all had experienced aiming and threatening with the device. Therefore, to save time and resources, it was imperative to select individuals who had experience with the use of CEDs and dismiss those who did not.

The participants were sworn law enforcement officers from a municipal police department in Florida who were assigned a CED and had experience with the pointing and threatening non-compliant individuals with the device. The officers were willing to participate in an interview, which was audio-recorded. This study did not put limitations on the age, gender, ethnicity, or the years of service of the participants, as these criteria were not relevant to the research. The exclusion criteria consisted of non-sworn personnel, sworn personnel that did not have a CED assigned, sworn personnel that did not have experience with threatening others with a CED, and the small number of personnel that I assisted in supervising.

The number of participants in phenomenological studies varies significantly. For instance, Giorgi (2008) suggested three or more participants, Morse (1994) suggested six or more participants, Colaizzi (1978) recommended 12, and another indicated between five and 25 (Creswell & Poth, 1994). Studies have suggested that researchers of phenomenological studies should focus on the quality of sampling based on the participant's experiences rather than on the number of participants (Todres, 2005). Sample sizes for qualitative research are smaller than quantitative studies, and they are

collected purposely and not randomly as in quantitative studies (Patton, 2002). Sample sizes on qualitative studies are collected to provide information on the phenomenon, not to represent a population (Gentles et al., 2015).

Saturation occurs when the information provided by the participants becomes repetitive, and it is not contributing any new data to the research (Gentles et al., 2015). Several authors have indicated that data saturation does not occur in phenomenology studies because each individual has his or her unique experience to share and sees the phenomenon according to his or her unique understanding (Cohen et al., 2000; Van Manen, 2014). Furthermore, Patton (2002) noted that one study could provide enough depth to the phenomenon, as long as the participants are purposely chosen.

For this study, I strived to interview at least five participants. I analyzed the quality of information obtained and determined the data provided the desired depth of information. If it would have not, I would have requested authorization from the Institutional Review Board (IRB) to increase the sample size and obtain additional data. To recruit participants, I sent an email to a representative of the police department requesting authorization to post a flyer in the department's break room. I attached a copy of the flyer for the representative's review. I also provided the representative an invitation letter and asked him to forward it to all qualifying participants. If I would have been unable to obtain enough participants via these two methods, I would have sought IRB authorization and expand my recruiting efforts to other agencies in the region. However, I was able to obtain enough officers that were willing to participate.

Instrumentation

Husserl (1982) discussed the importance of the process of obtaining knowledge and stated that knowledge is gained through experience. The officer participants shared their knowledge of the use of a CED as a threat by providing detailed accounts of their lived experiences. I conducted semi-structured one-to-one interviews consisting mostly of open-ended questions focused on answering the research question: What are police officers' lived experience with displaying and threatening the use of a CED on noncompliant individuals? I also asked the police officers probing follow up questions such as "Can you provide an example of…?" or "Can you further describe what you meant by feeling…?" or "Can you tell me more about (a particular point of interest)" to encourage the participants to describe their experiences and extract more detailed and in-depth information from them.

For consistency, I designed the interview questions and used the same order and line of questions with all participants. I also ensured not to ask any leading questions that could lead the interview in a particular direction. I asked probing open-ended questions such as the ones listed above to obtain in-depth descriptions. The open-ended questions allowed the officers to describe their experiences widely. I took brief notes of the participants' answers. I recorded my impressions of the interactions with the participants after the conclusion of the interviews. Fraenkel and Wallen (2006) asserted that semi-structured one-to-one interviews were useful tools for collecting information. One-to-one interviews are also the primary method of collecting experiences in the field of phenomenology (Finlay, 2009). I recorded the interviews with a smartphone app called

Voice Recorder and secured them in a password protected Samsung Android phone. I then transferred all the recordings to a password-protected personal computer for transcription into Microsoft Word.

Procedures for Recruitment, Participation, and Data Collection

I collected the data through one-on-one interviews with five officers who worked in a municipal police department in Florida. I did not use any published sources. I drafted an email with brief information on the study, with information on how to contact me, and requested the officers' participation. I sent a copy of the email to the supervisor in charge and requested him to distribute the petition to the officers via email. I also requested permission to post a recruitment flyer in the department's breakroom.

Upon receiving notification from a participant of her or his desire to assist with the research, I reached out and scheduled a time for the interview according to the participant's availability. The interviews were not conducted while the officers were on duty. I informed the participants the interview could take up to one hour, depending on follow-up questions and the participants' narratives. I strived, to the best of my ability, to schedule and conduct all the interviews within one month. I audio recorded the interviews with a smartphone app called Voice Recorder and secured the recordings in a password protected Samsung Android device.

If recruitment efforts were to result in fewer than five officers, I was going to request permission from the IRB and expand the recruitment to surrounding agencies, until I obtained the desired number of participants. However, this effort was not needed because enough officers expressed interest in participating. Before beginning the

interviews, I briefed the participants on the interview questions, provided the participants with a consent form, and invited them to express any concerns and ask me any questions. Before concluding our meeting, I asked the participants if they had any questions, concluding remarks or if there was anything else they wished to discuss. I also informed the participants that I was going to make a transcript of the interviews available for their review. I provided each participant a copy of the textural-structural description of their respective interview for their review. For this study, I did not need to conduct any follow-up interviews with the participants.

Data Analysis Plan

Through the analysis of data, I identified meaningful insights relative to officers' experiences with using CEDs as threat. I also obtained valuable information regarding the relationships between the participants and the phenomenon. I explored patterns between the experiences and the connections among topics. Proper data analysis is crucial to the development of accurate, usable, and authentic conclusions. The first step I took in data analysis was to transcribe the interviews verbatim into Microsoft Word. After the transcription, I compared the transcripts with the audio recordings to ensure accuracy. I also read the transcripts several times to become familiar with its content and made an initial determination to what extent its content answered the research question. I then coded the data and identified themes and patterns.

The techniques that I used to analyze the data in this study were obtained from Van Kaam method of analysis as outlined in Moustakas (1994). I first implemented listing and preliminary grouping, what Moustakas (1994) calls *horizontalization*; that is, I

highlighted relevant statements collected from the interviews and separated them from irrelevant statements into a single document. I then completed a reduction and elimination to find the invariant constituents. During this process, I removed unnecessary expressions such as those which were vague and repetitive. The next step included clustering the invariant constituents, which concluded with a thematization of the invariant constituents. Moustakas (1994) referred to this step as *clusters of meanings*.

As instructed by Moustakas (1994), I validated the data by reviewing the themes and invariant constituents. I then examined the data, and by relying on *textual* and *structural descriptions*, I annotated the different ways officers described their experiences involving their use of CEDs. I completed a *textural-structural description* outlining the participant's experiences. I then clustered the various ways into recurring themes as a whole. Lastly, I analyzed the clusters of themes, and by relying on *the synthesis of meaning and essence*, I developed a synopsis representing the overall and unifying expression of the participants' experiences.

Issues of Trustworthiness

The qualitative nature of this study called for my direct involvement with participants to grasp the context and the meaning of the phenomena (Kvale, 1996; Ritchie et al., 2013). Because of my involvement as a researcher in the study, I exercised sound reflection and critical thinking in order to assess the statements made by the participants. To promote trustworthiness, I challenged my assumptions and bias. Trustworthiness in qualitative work is closely related to rigor (Morse et al., 2002).

Guba and Lincoln (1981) defined and proposed four criteria to ensure a study was trustworthy. The first was related to internal validity, called *truth value.* The second focused on generalizability and external validity, named *applicability.* The third objective was reliability, named *consistency*; and the last was related to an objective researcher, called *neutrality.* Guba and Lincoln (1989) further modified the four criteria. The first criteria related to internal validity, *credibility.* The second criteria related to generalizability and external validity, *transferability.* The third was related to reliability and consistency, *dependability.* The last one related to neutrality and the researcher's objectivity, *confirmability* (Guba & Lincoln, 1989). As a researcher, I was flexible and presented a convincing document that was credible, transferable, dependable, and confirmable.

Credibility

Mason (2002) indicated that a study must have internal validity in order to fulfill its intended goal. Mason (2002) also suggested that the research must provide validity of the researcher's interpretation and data gathering. Validity refers to research authenticity and transparency (Lincoln, 2001). Credibility implies that those who read the study feel confident the results are accurate, believable, and authentic. To establish creditability in this study, I included the practice of member checking. As previously discussed, I provided the participants copies of the transcripts and their corresponding textural-structural description to ensure their accuracy.

Furthermore, as a measure of triangulation, I collected enough quality of data to fulfill the intention of the study and to achieve an acceptable level of saturation. I ensured

I had enough participants to receive a vast amount of perspectives to validate the research. Lastly, I shared the transcripts of the interviews as well as the data analysis with my dissertation chair, an experienced doctoral researcher, for peer review.

Transferability

To ensure transferability, the author of a qualitative study should provide a thorough explanation of the process that led to the conclusions of the study (Golafshani, 2003). The concept of transferability can also be achieved through independent actions taken by those who read the study, as they are the final recipients of the product and will decide what to do with the information. As put forth by Shenton (2004), the transferability of a study can be proven by the reader when he or she applies the discoveries of the research to other studies. The reader can promote transferability if the author of the study provides a true generalization of the results and takes terminological precautions throughout the study. Delmar (2010) indicated that when an author provides thick information about the phenomena being investigated, the author contributes to transferability.

To emphasize the importance of transferability or external validity in qualitative research, Carminati (2018) noted that transferability takes precedence over theoretical generalizability. According to Carcary (2009), external validity is achieved through the participant's validation, and through triangulation. Validation and triangulation are two measures that I took in this study. To ensure transferability, I followed the guidelines of Carcary (2009) by describing the phenomena and context of the research in such a way that it provided an established transferability. By answering the open-ended questions,

the participants provided thick descriptions of their experiences with CEDs, and I developed an accurate analysis of their perceptions of using CEDs to threaten resisting individuals.

Dependability

A qualitative study that projects dependability is one that details the process and findings in such a way that another researcher could repeat the research by utilizing the same methods and the same cohort of participants (Forero et al., 2018). I followed several strategies to ensure this study was dependable. The first strategy involved providing a precise description of the protocols and methods of the study (Forero et al., 2018). The second was to implement an audit trail. To promote dependability, I prepared and made available a comprehensive account of the study's methods and protocols. I also kept a record of the process I took to collect the data.

Confirmability

The purpose of confirmability in a qualitative study is to ensure readers that other researchers could corroborate and confirm the results of the research if they would embark on duplicating the study (Forero et al., 2018). Two strategies that promote confirmability in a study is reflexivity and triangulation. I maintained a reflexive journal that recorded my impressions during the study. As previously noted, I also took the necessary steps in this study to ensure triangulation. I also used my notes and my reflexive journal to corroborate with the data.

Intra and Intercoder Reliability

In this phenomenological study, I was the primary researcher. I recruited the participants, conducted the interviews, and analyzed the data. Because I was the only individual who assumed these responsibilities, I adopted an intra coding approach. The approach preserved the reliability of the coding and assured that by following the same procedures of this study, the results could be duplicated. To ensure that the index or coding remained reliable, I performed a second revision of the coding to ensure the results were the same (Frankfort-Nachmias et al., 2014).

Ethical Procedures

Maintaining ethical procedures and high standards in research is essential to preserving uniformity among research and developing high-quality studies (Jaspers et al., 2013). For this study, I obtained authorization from Walden University's IRB to conduct the research and ensured the study met all the required ethical procedures. Per IRB instructions, I first completed the Description of Data Sources and Partner Sites form to obtain guidance relative to which forms I was going to need. I then completed the documents requested by the IRB and waited for feedback. I completed and provided the certification number of the form that assured the protection of human participants. After obtaining the agreement(s) to gain access to participants, I immediately began the recruitment by placing a flyer at the police department and via email through a department's representative. I completed the data collection by interviewing five participants. All interviews were audio recorded.

It is of utmost importance to ensure the treatment of participants is done according to established guidelines. Mortense and Kirsch (1996) shared three priorities to protect the participants of a study. First, the participants' wellbeing must be maintained. Second, the participants must be aware and informed of all risks related to the study. Lastly, the study must have a well-maintained balance between danger and profit (Mortense & Kirsch, 1996). I obtained the required institutional permission to interact with the participants, and I ensured their wellbeing was maintained. I disclosed to the participants the purpose of the study and all associated risks before beginning the interviews. I revealed to the participants that they were not going to receive any tangible benefits for their cooperation. I made sure that the participants understood they could refuse participation at any time during their involvement. All participants received an informed consent form. I included in this study the actual documentation from the IRB applications.

Through the informed consent, the participants were informed about the scope of the study. I also invited them to ask any questions. Although it did not occur in this study, in the event a participant would have refused to participate or decided to withdraw his or her participation after starting the interview, I would have immediately ended the interview. I was going to thank the participant, and she or he would have been free to leave the interview room without any further questions asked. In regards to the treatment of data, I assured the participants that identifying information such as their names, along with the audio recording of the interviews and other documentation, were going to be kept confidential. The audio recording of the discussions and the documentations were

held secure in a password-protected computer and smartphone. No other person besides me had access to the phone and computer where the data was stored. I kept the documentation locked in a file cabinet in my residence. Upon concluding the study, I discarded the information according to IRB's guidelines.

Although the participants of this study were chosen from the police department where I work, I did not include in the participant pool those who worked directly with me. Also, I did not conduct the interviews while the officers were on duty. I decided to not include the officers to avoid conflict of interest and to avoid the appearance of bias.

Summary and Transition

This chapter covered the research design, a qualitative with a phenomenological approach that assisted in answering the research question. Chapter 3 also disclosed my role as the researcher and ethical areas that needed to be addressed to dispel ethical concerns. I also discussed the methodology, how the participants were chosen, and the instrumentation of semi-structured interviews. This section of the study also covered the procedures I took to recruit the participants, the process of participation, and how the data was collected.

In Chapter 3, I also discussed the data analysis plan, along with multiple trustworthiness' related matters. The chapter covered the importance of developing a credible study and a study whose results could be transferred. Chapter 3 also covered the need for a study to be dependable, and the topic of confirmability. I also discussed in this chapter the intra coding approach. The chapter concluded with ethical procedures and their importance.

The topics that are covered in chapter 4 include the setting and participant demographics. Chapter 4 also includes a section that discusses the collection and analysis of the data, as well as the evidence that supports trustworthiness. The chapter concludes with the results and a summary.

Chapter 4: Results

Introduction

The purpose of this phenomenological study was to explore police officers' lived experiences regarding displaying and threatening noncompliant individuals with CEDs. Considering their benefits, criticisms by the public, and increasing use by law enforcement, there is a need in the criminal justice system for added information of the value of CEDs, and to what extent officers should display and threaten the use of CEDs on noncompliant individuals. I documented the participant's lived experiences via interviews with police officers who were assigned, trained, and regularly carried CEDs. The research question under investigation was: What are police officers' lived experiences with displaying and threatening the use of CEDs on noncompliant individuals?

Chapter 4 contains the results of the study. The first item of discussion is the setting. The setting is followed by a description of demographics and characteristics of participants. The third item of discussion is data collection, which includes number of participants and the location, frequency, and duration of data collection. This section also includes information regarding the recording of data, any variations in data collection from the plan presented in Chapter 3, and any unusual circumstances during the process

of data collection. The fourth item of discussion is data analysis, including how I used coding to move inductively from coded units to broader representation. Data analysis is followed by evidence of trustworthiness, which includes the topics of credibility, transferability, dependability, and confirmability. I then presented the results of the study, followed by a summary answer to the research question and a transition to Chapter 5.

Setting

Participant recruitment for this study took place during March of 2020. Immediately after receiving approval from Walden's IRB, I sent an email to a representative of the department that employed possible participants. I requested from the representative authorization to post a recruitment flyer in the department's breakroom and asked the representative to send an invitation letter via email to all officers from the department who met the criteria. I attached in the email a copy of the flyer and the invitation letter for the representative to review. The representative permitted me to post the flyer the same day I made the request. The representative also emailed the invitation letter to all qualifying participants that same day.

Seven qualifying officers expressed interest in participating in the study; however, only five committed to meet with me for a face-to-face interview. The interviews were audio-recorded with an app called Voice Recorder. There were no personal or organizational conditions that influenced participants or their experience at the time of the study, or which could have affected interpretation of the study's results.

Demographics

The five participants in this study were males, and their ages ranged from 26 to 55. They were all sworn law enforcement officers from a municipal police department in Florida. They were also assigned CEDs and had experience with the pointing and threatening of noncompliant individuals with the device. Their experience as police officers ranged from one to 25 years. Inclusion criteria consisted of at least five officers who were willing to participate in one-on-one interviews which were audio-recorded.

Before beginning the interview, I obtained signed informed consent forms from each officer. Participant parameters did not involve limitations in terms of age, gender, ethnicity, or years of service because these criteria were not relevant to the study. The exclusion criteria included non-sworn personnel, sworn personnel who did not have a CED assigned, sworn personnel who did not have experience with displaying or threatening others with a CED, and personnel that I assisted in supervising. Table 1 contains demographics of the study participants.

Characteristics of Participants

Table 1

Demographic of Participants

Demographic	Number of participants (n=5)
Gender	
Male	5
Female	0
Age range (y)	
18-25	0
26-35	3

(table continues)

36-45	1
46-55	1
56 or greater	0
Years of experience as police officers	
1-5	3
6-10	1
11-15	0
16-20	0
21-25	1
25 or greater	0
Experience with CED	
Yes	5
No	0

Data Collection

The process of data collection began shortly after receiving approval from Walden University's IRB on March 25, 2020. The IRB provided approval #03-25-20-0747812. As previously indicated, I sent a letter via email to the department's representative requesting authorization to display a recruitment flyer and asking the representative to send my invitation letter to all eligible participants (see Appendix A). The email to the department's representative contained information such as the title of the study, the participant criteria, and information regarding the face-to-face interview. The invitation letter to the participants contained my name and contact information, the purpose of the study, participant criteria, and the means of data collection (see Appendix B).

After receiving authorization from the department's representative, I posted a flyer in the department's breakroom (see Appendix C). The flyer contained information about the goal of the study, participant criteria, researcher information, the participant

expectations, and the results of the study. I completed a protocol for the initial communication with the participants, which described the process of engaging with them (see Appendix D). I also completed an interview protocol which included directions for me to follow before recording the interview and during the introduction and closing statement (see Appendix E).

Participants

Seven officers indicated through email that they were interested in participating in the study. However, I was only able to schedule a meeting date for the interview with five. Interviews were conducted during March of 2020. Before beginning the interview, I provided the participants with a demographic form which collected the participants' age range, gender, and years of law enforcement experience. I also inquired in the form if they had used a CED to threaten a noncompliant individual (see Appendix F). I provided the participant a consent form that contained background information regarding the study, the procedures, the voluntary nature of the study, the risks and benefits, the payment, and privacy information.

During the interviews, I interacted with the participants by nodding my head to let them know I understood their point of view, I also asked follow-up questions when I did not understand precisely what they meant. All participants engaged in discussions. Most used their hands to express their communication.

Location, Frequency, and Duration of Data Collection

The interview consisted of preplanned and open-ended questions regarding officers' experiences with CEDs and their overall perceptions (see Appendix G). Open-

ended questions assisted in obtaining the participants' experiences without deviations. I asked the participants to think about an incident in which they had to use a TASER as a threat, and then asked them to share experiences with me. To obtain further details, I asked them how they were feeling at the time they decided to draw the TASER. I also asked them to describe the factors that prompted them to draw and point their TASER, and the factors that influenced them to choose to threaten rather than deploy.

One interview question inquired how the experiences the participants shared affected their future TASER use. I inquired from the participants what their objectives were when deciding to draw their TASER, and how effective they felt the TASER was when used as a threat. I inquired about the role of a person's characteristics when deciding to use a TASER, and how they would use a TASER if they knew the suspect was armed. All interviews were conducted face-to-face, which allowed me to observe the participant's body and facial expression and demeanor while they answered the questions. I took brief notes during some of the interviews.

In my reflective journal, I documented my thoughts and feelings as I observed the participants' emotional responses and body language during the interviews. The audio recordings were obtained and saved via the phone app, Voice Recorder, and stored in a password protected Samsung Android device. The recordings were later used to transcribe verbatim the officers' statements into a Microsoft Word document. The document was kept secured in a password protected laptop in my residence. All associated paperwork was also secured in a locked file cabinet in my residence. To ensure accuracy, I emailed each participant the transcript of his interview as well as the

textural-structural description for review. None of the participants indicated there was anything inaccurate in the transcript or textural-structural description.

Variations in Data Collection

Regarding variations in data collection, in the consent form, I indicated the interviews would take place in a private room at either a public library or public building, whichever was more convenient to the participants. However, three participants expressed it was more convenient for them if I was to travel to their residence to conduct the interviews, and I complied with their requests. Although the interviews were conducted in the participant's individual homes, I made sure we met in a private setting and away from distractions. The first interview was conducted in the participant's living room, as family members were at a different location. The second interview was conducted on a back patio, while family members were inside the residence. The third interview was conducted in the participant's garage, and family members were not at the residence. The participant's responses were not overheard by others.

Data Analysis

Coding Process

The process that I used to move inductively from coded units to broader representation began by transcribing verbatim the interviews into a Microsoft Word document. I reviewed each transcription to ensure they were accurately transcribed. After reviewing the interviews, I first completed what Moustakas (1994) refers to as horizontalization. That is, I retrieved and outlined the expressions relative to the individual experiences. I then determined the invariant constituents by removing any

expressions from the horizontalization step that were vague, repetitive, or could not be labeled (Moustakas, 1994). During the next step, I clustered the invariant constituents according to their relationship. I then thematized the invariant constituents and validated them by double-checking them against the transcript, to ensure accuracy. During this stage, I reorganized some of the themes and their corresponding codes. After validation, I completed individual textural descriptions for each participant. The descriptions contained examples from the transcripts and were supported by the information obtained from the invariant constituents and themes. I followed the textural descriptions by also completing individual structural descriptions to include imaginative variations, as described in Moustakas (1994). I then completed a textural-structural description that contained the invariant constituents and themes.

The interview questions were constructed to achieve the purpose of the study, which was to obtain the participants' subjective experiences with their use of CEDs, specifically with displaying and threatening the use of a CED on noncompliant individuals. I asked each participant the same questions. I numbered each participant and the corresponding interview transcripts from one to five. After completing the textural-structural description, I once again reviewed the codes obtained from each interview transcript. As indicated by Moustakas (1994), the codes were written in the form of one word or a short phrase. I revisited each of the interviews and typed the descriptive codes into a Microsoft Word document. I also documented, through further review of the transcripts, interpretive codes, and entered them into the Word document. I typed each question into the Word document with the answers from each participant. I also obtained

commonalities for each question, which led to the creation of the five themes and corresponding codes. The answers the participants provided were of sufficient quality and led to saturation and the development of five themes shared among them and their corresponding codes (See Figure 1, Table 2). The last step in the analysis was the completion of a composite description that was representative of the group as a whole and contained the meaning and essences of the participant's combined experiences. The participants shared experiences also led to the answering of the research question: What are police officers' lived experiences with displaying and threatening the use of a CED on noncompliant individuals?

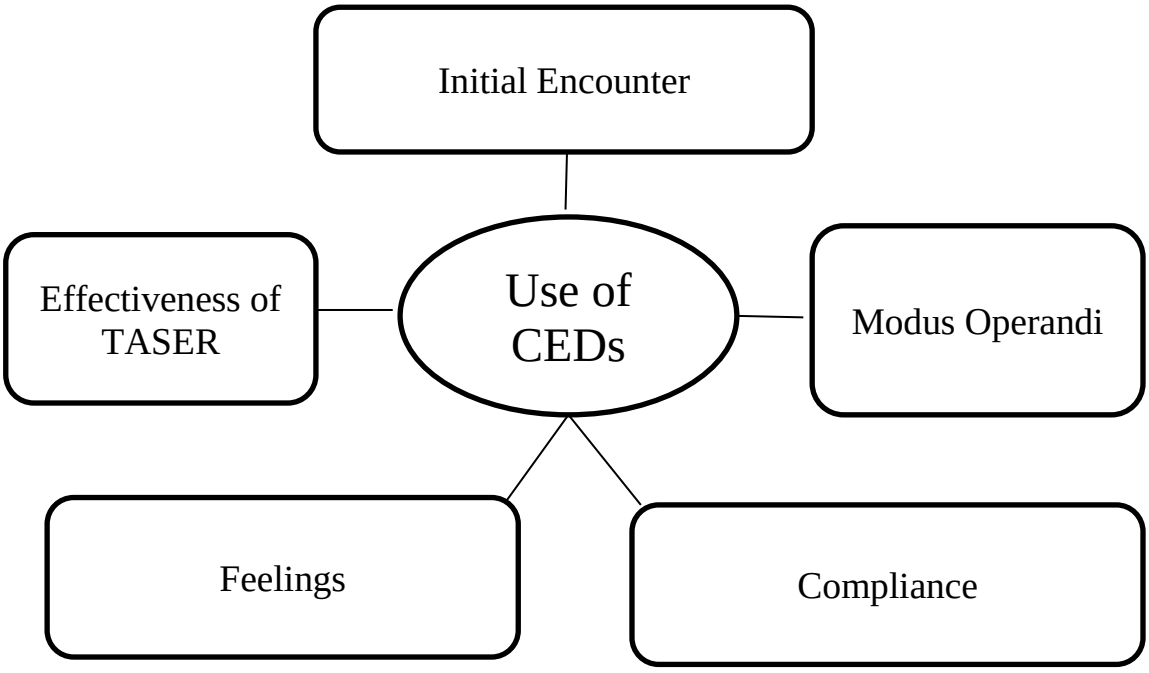

Figure 1. Common themes.

Table 2

List of themes, corresponding codes, and supporting excerpts samples

Themes	**Codes**	**Excerpts**
Initial Encounter	Uncompliant person	**P1**: "The subject was not compliant, he did not want to get out of a certain area." **P2**: "He fled on the bicycle. We pursue him until he finally bailed out of the bicycle."
Modus Operandi	Mission focused, verbal commands first, step plan, officer uses the TASER when justified	**P1**: "I always have that checklist that you go through in your head when you're in front of a situation." **P4**: "So, I felt like brandish the Taser and see how he cooperates at that point and take it from there."
Compliance	Compliance is the objective, display TASER to achieve compliance, cooperation prevented deployment	**P3**: "The main objective is to gain compliance." **P4**: "To gain a compliant person is my number one goal."
Effectiveness of TASER	TASER is effective as threat, laser dots achieved compliance, effectiveness depends on the suspect	**P3**: "So now the hope is that when I pull it out and they see the Taser they heard or spoke with someone, they know something about it, they've seen a YouTube video, they know they hurt, and therefore they go ahead and say 'alright this is going to hurt, I don't want this' and they comply." **P5:** "So, once he saw the dots on him, he then complied really quick."
Feelings	Officer's feelings	**P3:** "Just like with any critical incident, you blood pressure goes up, your tunnel vision kicks in, your muscle tightens. You're in that fight or flight, of which I was in the fight mode chasing him to stop that threat."

The interviews provided enough data to reach thematic saturation. Table 2 depicts the specific themes, corresponding codes that emerged from the data, and samples of supporting excerpts from the participants. The officer participants recounted a specific story each of a time in which they responded to a call for service and were placed in a situation in which the person was, at first, not willing to cooperate. For instance, Participant #4 said about the person he encountered, "He was refusing to listen to us. At some point, he backed up himself from the door as if he was preparing to charge at the door." Each participant also described the process they used to determine what type of action to take. For example, Participant #1 stated, "I always have that checklist that I go through in my head when in a situation, and hope to be able to check all those points in my head quickly enough to make the correct decision before harm or anything happens to me." Each participant also expressed that their main objective was to gain compliance as safely as possible. Participant #5 stated that his goal was to "get them to comply with what I need them to do." The participants also recounted their emotional feelings at the time of the incident. Participant #3 described what he felt, "Your blood pressure goes up, your tunnel vision kicks in, your muscle tightens, you're in that fight or flight mode, of which I was in the fight mode." Lastly, the participants expressed their perceptions about the effectiveness of the TASER. Participant #2 noted, "The TASER is good for usually ending incidents peacefully."

In the notes and reflexive journal, I documented my reflections on the phenomenon, and the potential interpretations of the participants' lived experiences. For instance, just like Participant #1, I also had several experiences in which I had to deploy

the TASER. I also had experiences in which I did not deploy the TASER and used the device as a threat only. Dealing with individuals with mental illnesses who are also aggressive is difficult because the individual might not be as responsive to your commands. Participant #1 noted relying on backup officers. Backup assistance offers comfort to the officer. For me, it allows me to think more clearly because I'm not as anxious due to having the additional help. Participant #1 stated that the first technique on the use of force is the "strength in numbers." But to me, the first technique is the officer's command presence, which can be strengthened by the number of officers. Participant #1 also indicated that he first used verbal techniques to get the individual to comply with his requests. I would also try to use verbal commands as a first resource.

Participant #1 noticed that as soon as he pointed the TASER's lasers on the individual, the person became compliant. I had had several instances in which the person has complied when I point the TASER's lasers. For example, I responded to a scene in which a person who committed a retail theft ran from the store. Officers located the person hiding in a tent not too far from the incident location. When he came out of the tent, I pointed my TASER at him, the TASER was on, and the lasers were aimed at the person's body. I instructed him not to move, and he complied. On a different occasion, several officers and I responded to a 911 hang-up call. Upon arrival, I observed an individual standing near a large knife on the ground. I observed another individual across the street with blood on his shirt. At one point during our investigation, the individual who was previously standing by the knife attempted to walk away from the scene when he realized we were going to arrest him. I pulled my TASER and pointed the lasers on his

torso and told him not to move. The individual complied, and another officer was able to detain him without incident.

Participant #1 indicated he was feeling apprehensive at the time of his encounter with the non-compliant subject. I could relate to that type of feeling. He indicated he hoped the threat with the TASER worked to prevent taking additional and more aggressive measures, and I have felt the same way. Whenever I have to point the TASER at someone else, I feel a sense of apprehension, especially if I am alone. Participant #1 also used the word *strategy* to describe his approach, and I also use a form of strategy when I choose to threaten with the TASER. I try to introduce the TASER ahead of time to prevent an escalation.

In the interview with Participant #2, he indicated he did not feel anger when apprehending a subject. I often feel like him as well. I also feel a rush of adrenaline as he did, especially after running after a non-compliant person as the participant did. Participant #2 also stated the experience of threatening someone did not affect him. But I feel that every use of force experience affects us at some level, even when we do not realize it, especially when it involves using a device such as a TASER. I feel the more an officer uses the tool, the more comfortable he or she becomes with its use, and if the tool is useful, the more confident the user becomes. My objectives and Participant # 2's objectives are the same, ending the incident peacefully with little resistance. Participant #2 also noted that introducing the TASER is dependent on different factors, and I agree with him. If the person seems compliant with verbal commands, then there is no need to introduce the TASER. However, if the person is not compliant with verbal commands, I

feel introducing the TASER would be appropriate to motivate the person into compliance.

Participant #3 indicated every time he drew his TASER it was at the point where he needed to use it. I disagree with the participant's use of the TASER, as he had not considered using it to threaten a person. I believe if the participant would use it as a threat, it could prevent future hands-on confrontation with individuals and TASER deployments. I felt the participant was missing out on the value of the TASER since he was not considering using it as a threat. He also indicated he was in more physical fights than he "could remember," perhaps introducing the TASER as a threat could have prevented some of those physical fights. The participant also described feeling "amp" when apprehending the subject. I can relate to his feeling, as I have felt like that before while apprehending a person. The "amp" feeling is a similitude to an adrenaline rush.

I agree with the viewpoint of Participant #3 about "word of mouth" spreading about the TASER. Both positive and negative perspectives regarding the TASER are spread among community members who have experienced the device. The participant stated he would consider using the TASER even if the subject was armed, but not including armed with a firearm. I agree with his point of view. I would consider using the TASER, even if the person was armed with anything but a firearm.

Participant #4 stated he was feeling calm and collective while threatening with the TASER. I can relate to that feeling, as I have experienced it, especially during incidents where I have a backup. The participant indicated he tried several methods during the confrontation to see what worked in resolving the incident. I agreed with his point of

view. Sometimes introducing the TASER as a threat to see if it resolves an incident is a valuable option. The participant also indicated that gaining compliance was his main objective during a confrontation with a subject. I have the same thoughts and beliefs in this area. Participant #4 stated he would introduce the TASER during a confrontation at the stage of the commission of a crime, and I disagreed with his point of view. I feel the TASER should be introduced at least as a threat before the commission of a crime, as a preemptive measure.

Participant #5 indicated during his confrontation with the non-compliant person, his heart rate was up, and he was "zoned in" with "tunnel vision." I have felt as the participant in several occasions, and had felt the feelings he was describing. He also stated when the person defied his orders to comply, he decided to introduce the TASER. I agree with his method of operation. The participant indicated the experience he had did not affect his future TASER use, but I believed it did, even to a minuscule amount. The situation the participant experienced added to his "experience bucket." Even if the participant did not realize it, I believe it affected future behavior. The participant also noted the TASER was effective 60-70% of the time. I questioned how he was able to come up with such an exact percentage. I agree with the participant that a TASER should be introduced before the confrontation becomes physical.

In an overall perception of the interviews, participants, and my emotions, I felt I was able to present the questions in an organized and accurate manner, and was able to stay on track with the pre-planned format. I caught myself a few times agreeing with the participant, and reminded myself I was acting as a researcher at that time. I interacted

with the participants by nodding my head to let them know I understood their points of view. I asked follow up questions when I did not understand precisely what they meant. All participants were engaged in the discussions and were able to describe their feelings. They used eye contact, and most used their hands to communicate.

In my notes, I included that I found it peculiar that all participants had backup assistance while the TASER was utilized. I wondered if there was a relationship between having a backup officer and the decision to utilize the TASER as a threat. Also, all but one of the subjects complied with the officers after the TASER threat. I wondered if having the additional backup officers made the difference. None of the participants were required to document via report when they used the TASER as a threat only. This lack of documentation makes it difficult to obtain data on how often the phenomenon occurs.

Evidence of Trustworthiness

In this study, I exercised reflection and critical thinking to ensure that evidence of trustworthiness was present. Following criteria of trustworthiness is important in a study because it assures the reader that the data collected, the methodology used, and the interpretation of data were properly conducted. The four criteria that I followed to ensure this study was trustworthy were credibility, transferability, dependability, and confirmability.

Credibility

Lincoln (2001) indicated that credibility was achieved by creating an authentic and transparent study. To ensure that this study contained credibility, I implemented the practices of member checking, peer review, triangulation, and reflective journalism. I

first emailed each participant the transcript of the interview and their corresponding textural-structural description. None of the participants indicated there were errors. I then sent the transcripts and the complete data analysis to my dissertation chair for review. My dissertation chair is an experienced doctoral researcher and is knowledgeable in the field of qualitative studies. Furthermore, the five participants provided a vast amount of quality data, which allowed me to collect a full description of the phenomenon and achieve an acceptable level of saturation. Lastly, I completed journal entries after each interview and documented my thoughts and feelings to ensure transparency.

Transferability

To establish transferability, I followed the suggestions found on a study by Carcary (2009) and described the results of the research and the phenomenon in a clear and concise manner. The form of the description presented provided others the opportunity to generalize the results if they wished. The study also supported transferability via the manner by which the interview questions were structured and presented to the participants. The questions were mostly open-ended and gave the participants a way to provide thick descriptions of their experiences and their feelings.

Dependability

To ensure that others could repeat the study by using the same methods and the same cohort of participants, I provided a detailed description of the protocols and methods that were used. I also annotated the changes that were made to the study's protocol. Furthermore, I completed an audit trail of the interviews via a detailed coding procedure and maintained a record of the data collection process. Lastly, I ensured

triangulation by completing journal entries outlining my observations of the participants, insights into the interviews, and my thoughts.

Confirmability

To ensure that other readers could corroborate and confirm the results of the study, I applied the strategies of reflexivity, triangulation, and audit trail. The reflexive journal that I kept contained my impressions of each interview and included documentation of the observations I made of each participant. As previously noted, I took several steps to ensure triangulation. I used the reflexive journal documentation along with notes in the form of an audit trail to corroborate with the data and ensure there were no contradictions. This form of corroboration assisted in data analysis and solidified the results of the study.

Results

The coding process led to the development of five themes shared by the participants. The themes were present in the participants' accounts and were relevant to the study's research question. The themes were: initial encounter, feelings, modus operandi, compliance, and effectiveness of TASER.

Initial Encounter

The Participants' experiences began with and were shaped in part by their initial encounter with the persons they were confronting. The persons were all noncompliant. Participant #1 described the person he was dealing with as one who was offering "passive resistance," whereas the individual from Participant #2 was running away and attempting to jump a fence. The person from Participant #3 was running away from the officers,

whereas the person from Participant # 4's encounter was trying to "charge at the door." The person in Participant # 5's experience was refusing to stop and was possibly armed. These non-compliant individuals presented a significant amount of stress to the participants, and the non-compliant persons' actions influenced the decisions made by the participants. Participant #3 stated, "Whether I have to actually deploy or not, would be based upon the suspect's actions." In their experiences, the participants appeared to be reactive to the non-compliant individual's behavior.

Feelings

The high-paced encounters with non-compliant individuals and the seriousness of pulling a TASER as a threat were described by the participants as an increase of adrenaline. For instance, Participant #3 stated, "Your blood pressure goes up, your tunnel vision kicks in, your muscle tightens, you're in that fight or flight mode, of which I was in the fight mode." By tunnel vision, the participant meant being focused on what he perceived to be a threat at the time. Koch et al. (2017) asserted that the fight or flight mode is an automatic response to persons presented with a threatening situation, and it is triggered by stress. Koch et al. (2017) also stated the reactions could present a problem for professionals in the field of law enforcement because it affects split-second decisions and increased the risk of developing posttraumatic stress disorder. Participant #5 presented a similar feeling when he stated, "Any time you pull any of your weapons, I think your heart rate increases. Not necessarily a shortness of breath, but you're just kind of zoned in, get that tunnel vision a little bit because you're about to use one of the weapons on your belt." Novy (2012) noted that tunnel vision was a form of cognitive

visual distortion present during high-stress situations. Tunnel vision can present a problem to police officers because the officers will only focus their sight on a single threat area, and dismisses the rest of his or her surroundings.

Modus Operandi

The participants' modus operandi displayed characteristics of being focused on their mission. For instance, Participant #2 noted, "It was like I needed to get this guy on the ground as soon as I could." Participant #3 stated, "I remember thinking I just wanted to get him secured." Their attempt to gain compliance included verbal warnings early in their encounter. The giving of verbal commands either before or after the TASER display was part of every experience. Participant #1 shared, "to a certain point, we used every amount of verbal communication." Participant #4 noted, "give them as much verbal warnings as possible." The verbal warning was given in an attempt to end the conflict peacefully without the need for escalation and TASER deployment.

The participants' modus operandi also included step planning their reactions. Participant #1 stated he always had a checklist that he thought through in every situation and hoped he checked all the points quickly enough to make the correct decision "before harm or anything happens to me." He also thought of the TASER as a "force multiplier" and an "extra bump without being so physical." Participant #3 expressed taking "next step" from a verbal warning to displaying, to deploying; whereas Participant #4 noted brandishing the TASER first and then "take it from there." The participants recognized during certain situations, they had to choose between pulling their guns or their TASERs.

Participant #5 stated, "But it can also change at a split second, where you have to put your TASER up and grab your gun."

The last step in their modus operandi before deployment was introducing the TASERs when it was justified. Participant #1 mentioned drawing the TASER when he had legal reasons to be out with the person, and when the person was resisting either verbally or passively. Verbal resistance is present when the person indicates verbally that he or she will not comply. Passive resistance is present when the person stays firm and does not want to move. For Participant #2, displaying the TASER was justified when he already tried to use his hands to stop the person, when the person ran from him, or when the person had shoved him. The participants considered factors such as if the person was physically resisting before introducing the TASER. For example, Participant #4 noted, "Possibly in the commission of a crime, depending on what is happening." He also considered, "Depends on what weapons he has as well, what's on him, the totality of the circumstances." The term *totality of the circumstances* is derived from the Fourth Amendment. It refers to a reasonable standard of judgments that must include all the facts of the situation, both inculpatory and exculpatory (Sullivan, 2020).

Compliance

All the participants shared the common objective of gaining compliance from the non-compliant individuals. Participant #2 stated, "My objective is for myself and the suspect or offender to leave that incident relatively unscathed. I'm not out there to hurt anyone." Participant #1 expressed his desire for displaying his TASER as deterrence and hoping of not having to deploy. Likewise, Participant #3 said the suspect's action

determined if he deployed the TASER or not, but that his main objective was to gain compliance. Participant #4 noted, "To gain a compliant person is my number one goal. If I'm going to brandish the TASER out of my holster, is to hopefully gain a compliant person."

The participants drew their TASER with the hopes of achieving compliance. Participant #1 expressed using his TASER to "get the guy to move, while keeping everyone else safe." Participant # 2's hope was that the non-compliant subject "would lay on the ground and let us handcuff him." Likewise, Participant #5 indicated that pulling the TASER helped him get the person to comply with his commands. Participant #1 associated compliance with achieving his mission. Compliance from the persons prevented TASER deployment. Participant #1 stated, "At the time, the TASER was not deployed because the subject immediately became compliant upon seeing two laser dots and upon him seeing the little flashlight underneath the TASER." Participant #2 said, "I threatened him at first, and if he would have remained uncompliant or would have become aggressive or advanced on me, then most certainly I would have deployed the TASER." Likewise, Participant #5 expressed, "You know pulling the TASER I think now I think it helps us to get the subject to comply with what we needed to."

Effectiveness of TASER

The participants perceived the TASER was effective when used as a threat. Participant #1 stated, "I think it's very effective," and perceived people were more likely to comply "once you bring out all these weapons such as an electrical weapon." Participant #2 said, "The TASER is good for usually ending incidents peacefully."

Participant #4 also indicated he had used the TASER many times and noted, "so far so good for me; I haven't had to deploy it yet." One aspect of the TASER that the participants found useful was their lasers. Participant #1 said, "I believe it was those laser dots on him, which he saw while he was looking down, that made him to *immediately* become compliant." Participant #4 stated, "When we pointed our TASERs on him, he saw the lasers, and that's when he started to cooperate." Moreover, Participant #5 expressed, "Once he saw the dots on him, he *quickly* complied. That was one time where I was able to really see the power of the TASER."

However, the Participants also expressed they perceived some people they encountered knew the participants did not have ground to use the TASER. For those types of people, the TASER was ineffective. Regarding some of the persons they encountered, Participant #2 said, "They also know policy; they've dealt with enough officers who don't necessarily like to go hands-on and use the TASER more than they probably should." Participant #3 expressed that if the TASER was deployed inappropriately and failed, then "that person now goes back to his friends and brags it didn't work. That now turns the table, and people fear it less." Other factors that could make the TASER ineffective were the person's perceptions of the TASER, their knowledge about the TASER, their experiences with the TASER, and their level of intoxication. As indicated by Participant #2, "It varies with the situation, not everyone is going to just succumb to the threat of the TASER."

Summary

The research question on this study was: What are police officers' lived experiences with displaying and threatening the use of a CED on noncompliant individuals? Through the interviews and the development of five themes, the participants were able to provide an answer to the research question. The police officer participants shared very similar emotions when faced with situations involving noncompliant individuals. All of the participants shared an experience in which they encountered a person who was not compliant at the time of their arrival on scene. All of the participants utilized the TASER to achieve compliance.

Regarding the effectiveness of the TASER when used as a threat, the participants indicated it was effective most of the time when used as a threat. However, the participants stated that some factors involving the person they were confronting affected its effectiveness. For example, if the person had prior history with the use of CEDs and knew he could not legally be tased; or, if the person was intoxicated or mentally unstable. They specifically credited the TASER's laser dots in achieving compliance. The officer participants shared that they were focused on stopping the noncompliant person and took specific steps of escalation. The first step was to issue the person verbal commands. The second step was to display the TASER, followed by additional verbal commands. The last measure was to deploy the TASER. However, in only one of the incidents did the participant deployed his TASER to achieve compliance. All participants indicated their objective was to gain compliance and solve the situation as peacefully as possible.

Chapter 4 detailed the results of the study, beginning with the setting. The setting included the demographics and characteristics of the participants. The chapter also annotated the details of the data collection, the participants, the location, the frequency of the study, and the duration of the collection. Also covered was the validation of data collection, and coding. Also covered was the evidence of trustworthiness, which included credibility, transferability, dependability, and confirmability. The last section of the chapter covered the results, which detailed five shared themes that answered the research question. Chapter 5 includes the discussion and conclusion of the study. The chapter includes the interpretation of the findings, the limitations of the study, the recommendations, the implications, and the conclusion of the study.

Chapter 5: Discussion, Conclusion, and Recommendations

Introduction

The purpose of this phenomenological study was to explore police officers' lived experiences regarding displaying and threatening noncompliant individuals with CEDs. Police officers are equipped with approved department-issued weapons and equipment to aid them in enforcing the laws. Officers can use verbal commands or techniques such as blocking, striking, distracting, and kicking to control a person. They can also use control measures such as restraining devices, takedowns, and transporters to temporarily disable a person. During situations in which police officers believe that there is a possibility the suspect could kill them or cause significant injury, officers have the option of using tools such as a firearm, which have the potential of inflicting great bodily harm or death.

In between verbal warnings and the deadly force options, officers have less-lethal weapons available for their use, one of which is the CED. Considering their benefits, criticisms by the public, and increased use by law enforcement, there is a need in the criminal justice system for added information of the value of CEDs and to what extent displaying and threatening with a CED could be used during a police officer's confrontation with a noncompliant individual. To fulfill this need, the lived experiences of five police officers from a municipal police department in Florida were documented via one-on-one in-depth interviews. The officers were assigned, trained, and regularly used CEDs.

The nature of this study was qualitative with a phenomenological approach. I chose this approach because its focus involves the study and description of the lived

experiences of participants. The nature of this study aided in the objective of obtaining police officers' lived experiences regarding their use of CEDs. By providing direction of obtaining detailed description of experiences directly from the participants, this approach was ideal for documenting the participants' perceived effects of displaying or threatening to use CEDs on noncompliant individuals. The experiences shared by the participants provided me with the information necessary to answer the research question of this study and to accomplish the purpose of this study.

To analyze the data, I first transcribed the audio recordings of interviews verbatim into a Microsoft Word document. I then read the transcripts and reviewed them by comparing them with the recorded interviews to ensure the transcriptions were accurate. As a secondary measure of accuracy, I provided copies of the transcriptions to the officers for their own review. None of the participants indicated they found issues with the interview transcriptions. Lastly, I analyzed the data by following a modification of the Van Kaam method of analysis outlined by Moustakas (1994).

As part of analyzation, I conducted a preliminary grouping of the data. I then completed a step termed by Moustakas (1994) as reduction and elimination. During this process, I removed unnecessary expressions from the officers' narratives such as those which were vague and repetitive. The process of reduction and elimination produced the invariant constituents, which are the information provided by the officers without vague and repetitive expressions. I then clustered and grouped into themes the invariant constituents. I double-checked the themes using the interview transcripts as reference to ensure they were accurate and matched the officers' statements. I completed a textural

and structural description of the officers' experiences with CEDs using the developed themes. Lastly, I completed a composite description of the officers' experiences, which was a single narrative that incorporated all the themes and was representative of the group as a whole. The composite description contained the meaning and essences of the participants' combined experiences.

To ensure accuracy, I provided the participants a copy of their individual textural-structural descriptions of their experiences for their review. Analyzation led me to identify five core themes involving the lived experience of police officers. The themes provided an overall description of the participants' experiences involving their use of CEDs, specifically displaying and threatening the use of a CED on noncompliant individuals.

Interpretation of the Findings

The police officer participants in this study were able to share their experiences regarding the use of CEDs as a threat. DeLone and Thompson (2009) indicated that the use of CEDs by the police was linked to a decrease in the rate of injuries to police officers and resisting individuals because it prevented hand-to-hand confrontations. In a publication of the National Institute of Justice, Bulman (2011) documented that the odds of a suspect being injured during a confrontation with a police officer decreased by 48% when a TASER was used. These assertions were supported by this study. Participant #3 stated that one of the reasons his department endorsed the TASER was to prevent "the least amount of actual physical confrontation between an officer and a suspect." Since the TASER can be deployed from up to 25 feet away, the officer can maintain a safe

distance. Furthermore, all participants in this study credited the TASER with helping to subdue resisting persons without having to use hand-to-hand confrontations.

Adams and Jennison (2007) stated that officers from municipal police departments encounter fewer physical altercations with community members after they began using TASERs. Fewer physical altercations were achieved through deterrence derived from an increase in TASER use. Community members complied with the officers' lawful orders because they knew the officers were equipped with a TASER (Adams & Jennison, 2007). The findings of Adams and Jennison (2007) were also supported by this study. Participant #3 expressed since the "TASER has been around now for quite some time," the people he encountered would cooperate because they knew getting hit with the TASER probes would hurt. He added, "The guys that have seen these [YouTube] videos and have seen that it hurts, you're gonna get that compliance." However, he said that the effects of threats tended to be less reliable when the person was on drugs, under the influence of alcohol, or had a mental disability. Participant #3 noted he must then "Rely back on the actual effects of the [TASER] itself, not the threat."

Adams and Jennison (2007) also noted that in the field of less lethal weapons, there was a lack of information regarding how officers used TASERs during the performance of their duties. Adams and Jennison (2007) stated it was unknown how often or if officers chose TASER deployment without considering other tools such as verbal de-escalation. The participants in this study did not disclose how often they chose to use the TASER. However, officers noted they considered and chose to use verbal de-escalation whenever possible. Participant #2 said, "I threaten him at first, and if he would

have rained uncompliant or would have become aggressive or advanced on me, then most certainly I would have deployed the TASER."

The use of TASERs as a threat appears to have a different effect on non-compliant subjects than the use of pepper spray. In this study, all participants gave warnings before deploying the TASER, and only one person did not comply with the warnings and was therefore shot with a TASER. Whereas in a study conducted by Adang et al. (2006), the researchers noted that pepper spray was less effective at incapacitating resisting persons when officers warned individuals that they were going to be sprayed, and that giving warnings increased the aggressiveness of the individuals. Likewise, McCluskey et al. (1999) said threatening individuals with force increased the likelihood of resistance. However, in this study all participants perceived the TASER was effective at decreasing the aggressiveness of the individuals. Participant #1 said, "I believe it was those laser dots on him, which he saw while he was looking down, that made him to immediately become compliant." Participant #4 said, "When we pointed our TASERs on him, he saw the lasers, and that's when he started to cooperate."

Mesloh et al. (2005) indicated the topic of drawing, displaying, and activating the TASER as a threat against a combative person had not been researched. In this study, the participants shared their experiences with drawing, displaying, and activating the TASER against a noncompliant person. The participant officers perceived the TASER to be a useful tool in deterring noncompliant subjects from continuing their behavior. Participant #5 said, "Once he saw the dots on him, he quickly complied. That was one time where I was able to really see the power of the TASER."

Adang and Mensink (2004) said that some officers chose not to warn suspects before using pepper spray because officers believed the spray would have a lesser effect due to the suspects covering their faces. Adang and Mensink (2004) also indicated there was a national guideline in place suggesting officers should warn suspects before deploying pepper spray. They considered the action of not warning suspects disproportionate and a tactical imperfection because warning to use the spray achieved compliance over half the time. There is currently no similar study involving TASERs, and there is currently no national guideline suggesting officers should warn a suspect before deploying CEDs such as TASERs. In contrast to Adang and Mensink's findings, in this study the participants expressed they chose to give warnings to the non-compliant persons. Based on the participant's perceptions, threatening was effective at achieving compliance from the subjects. Participant #1 stated, "I think it's very effective," and he perceived people were more likely to comply "Once you bring out all these weapons such as an electrical weapon."

In the process of completing the literature review, I located several legal cases involving threatening with a CED. In Chatman v. Buller (2013), Clark v. Rusk Police Department (2008), and Evans v. Multnomah County (2012), officers drew their department-issued TASERS and threatened non-compliant individuals. The individuals complied with the officers' requests. Likewise, in a non-scientific study conducted by the Manson Police Department, authors, Hanson and Thorne (2013) stated that resisting subjects complied 74% of the time when threatened with a TASER. The perceptions of the participants in this study agreed with the conclusion of the above cases and with the

findings from the Manson Police Department. The participants in this study perceived the TASER was effective when used as a threat. Participant #2 said, "The TASER is good for usually ending incidents peacefully." However, the participants noted they believed that several factors sometimes made the TASER ineffective. The factors were the person's perceptions of the TASER, their knowledge about the TASER, their experiences with the TASER, and their level of intoxication. As indicated by Participant #2, "It varies with the situation, not everyone is going to just succumb to the threat of the TASER."

The theoretical background which guided this study was prospect theory. Kahneman and Tversky (1979) indicated there were two stages to the process of deciding. The first stage entailed analyzing the options. During the first stage, decision-makers organize the options to simplify the choice. Kahneman and Tversky (1979) noted decision makers also consider the outcome of their decision relative to what they could gain or lose, and they also combine the prospects. Kahneman and Tversky (1979) noted decision makers also discard components found in both options.

The second stage of decision making entailed evaluating the simplified options and choosing the option with the highest value (Kahneman & Tversky, 1979). Prospect theory supported statements made by the participants of this study on their decision to act against non-compliant subjects. Participant #1 stated he always had a checklist that he thought through in every situation and hoped he checked all the points quickly enough to make the correct decision "before harm or anything happens to me." Participant #3 expressed taking "next step" from a verbal warning, to displaying, to deploying. Whereas

Participant #4 noted he would brandish the TASER first and then "take it from there."

Prospect theory also presented a cognitive bias called loss aversion. It indicated that a person's fear of losing (in this present study, it would signify the resisting person getting away or overpowering the officer) was greater than the desire of winning (in the present study would signify making the arrest). The person was, therefore, expected to act on the greater emotion (fear of losing) (Tversky & Kahneman, 1992). Cognitive bias supported the decisions made by the participants while confronting non-compliant subjects. Participant #2 stated, "It was just like I needed to get this guy on the ground as soon as I could." Participant #3 said, "I remember thinking I just wanted to get him secured. I wanted to stop the chase because if I could get the chase to stop, then everything else would slow down as well." Moreover, Participant #1 noted, "We couldn't stay in a stand-off for the safety of the patients and the medical staff we had to get this done."

Regarding the placement of CEDs in the use of force continuums, placing them low on the force continuum is problematic because it can lead to overuse (Smith & Alpert, 2000). Placing the device high on the continuum can lead to missed opportunities of its use. High placement of CEDs on the continuum could also lead to an increase in injuries to all parties involved as a result of officers using hand control techniques instead. There were several instances in which officers alluded to the influence of the continuum in their decision to use their TASERs. For example, Participant #1, who was the oldest participant and was among the first officers in the police department who was

issued a TASER, indicated in his experience that he gave chase to a person and because "at that time the policy was a little lenient," he deployed the TASER. During the time of his experience, TASER usage was placed low in the use of force continuum and the participant was allowed to deploy the TASER just because the person ran from him. In contrast, Participant #2 had but a few years of experience. He encountered a similar situation in which a person ran from him. The participant noted, "Could I've used the TASER on him at that time? Not necessarily, because all he did was run from me." At that time, the use of a TASER had been placed higher in the force continuum. These two experiences demonstrate the importance of balancing the placement of the CED to prevent the device from being overused and underused.

Limitations of the study

This study contained several limitations that must be disclosed. The first was the few numbers of contributors from just one police department. Although I implemented purposive sampling to select qualified participants, and purposive sampling is a proven technique for choosing participants, their experiences are not representative of the experiences of all police officers in the nation. As such, the findings in this study may not be representative of a larger-scale study. Secondly, as with the nature of qualitative research, there is always a possibility of the researcher introducing bias into the study. I strived to the best of my ability to abstain from introducing bias into the study. I am a full-time police officer, and I have experienced many incidents involving the use of a TASER. My feelings were potentially infiltrated during the process of the interviews and data analysis.

As suggested by Finlay (2009), it is practically impossible for a researcher to exercise bracketing thoroughly. I suspended to the best of my abilities, my opinions, and knowledge about the use of CEDs to avoid the influence of preconceived ideas or prejudice. I did complete, however, a reflexive journal and notes which I included in the study. I also shared with my dissertation chair a transcript of the interviews and the data analysis. I shared with the participants the transcript of the interviews and their corresponding textural-structural description for their review. Lastly, I work in the same police department as the participants, and the knowledge of my employment could have influenced the interactions and answers provided by the participants. I purposely avoided including officers whom I worked directly with into the participant pool.

Recommendations

I completed this study to obtain the participants' subjective experiences with their use of CEDs, specifically with displaying and threatening the use of a CED on noncompliant individuals. In the Criminal Justice profession, the topic of threatening with a CED is minimal, and the value of the device when used as a threat still needs further examination. Regulations on the use of CEDs vary tremendously among police departments (Adams & Jennison, 2007). Regulations include policies governing the training, applications, and placement of CEDs on the department's continuum. The perceptions of the participants in this study suggest that warning with a CED achieves compliance from the person most of the time.

Since the participants in this study perceived the CED was effective in de-escalating conflicts, further studies should be conducted focusing on a "warning stage"

being included on the use of force continuum. The studies should analyze how the step affects the officers' use of CEDs. These types of studies could assist with a more balanced placement of the CED in the use of force continuum. I further recommend conducting the study using a larger population of police departments and participants throughout the nation to obtain a more vibrant representation. The studies should not be limited to face-to-face interviews, but should also include other qualitative methods such as surveys, experiments, and observations to obtain different perspectives of the use of CEDs as a threat, considering the lack of literature on the use of CEDs as a threat. Based on the results from the data analysis, the recommendations include further studies involving the inclusion of a warning stage in the use of force continuum, a larger scale and similar research involving interviewing officers throughout the nation to validate the findings of this study; and additional studies involving the use of CEDs as a threat that are not limited to interviewing, but that may include qualitative methods such as surveys, experiments, and observations, to obtain different perspectives.

Implications

The uniqueness of this study was the addressing of the under-researched area of displaying or threatening to use a CED on noncompliant persons from a police officer's lived experience. The results of this study were presented in the form of five common themes: Initial encounter, Modus Operandi, Compliance, Feelings, and Effectiveness of TASER. These findings support the professional practice in Criminal Justice by increasing knowledge regarding outcomes of use of force encounters involving threatening with a CED. The participants' perceptions indicated that TASERs were

effective when used as threats. This added information is of relevance to the Criminal Justice profession and to public administrators because it increases public policy administrators' understanding of the value and usefulness of CEDs. Furthermore, this study promotes positive social change at the policy level by providing added information to policymakers, who can take the findings into consideration when developing policies involving the placement of CEDs use on use of force continuums. Promoting the use of TASER as a threat and implementing appropriate policies could lead to a decrease in injuries to not only police officers, but to members of the community.

Conclusion

Literature in the field of less-lethal weapons has suggested additional research was needed regarding the topic of displaying and threatening resisting subjects with a TASER. Brandl and Stroshine (2017) emphasized that such a study would add more significant insight into the device's value. This study examined the experiences of police officers confronting noncompliant persons and threatening them with a CED. The perceptions of the officers were carefully obtained and annotated. This study provides new insights on the value of CEDs and promotes positive social change by educating policymakers who seek to modify the use of force continuums. A more balanced placement of the TASERs on the force continuum can lead to a decrease of injuries to members of the community and law enforcement officers.

The police officer participants indicated through their experiences that they perceived the act of threatening with CEDs achieved compliance during dangerous confrontations. If policymakers consider the possibility of modifying the use of force

continuums, and train officers in using the CED more often as a threat, then these steps could possibly reduce the deployment rate of CEDs and physical confrontations between officers and citizens. Reducing CED deployments could lead to less injuries and thus lower citizen's concerns and criticism. Perhaps the relationship between police officers and members of the community could also be improved. A better working relationship between police officers and members of the community leads to an overall decrease in crimes and to safer neighborhoods.

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Appendix A: Authorization Request

Authorization Request to Display Recruitment Flyers and Emailing the Participants an Invitation Letter

Date:

Captain _____.

Patrol Operations Commander

Subject: Authorization Request to Display Recruitment Flyers and Emailing the Participants an Invitation Letter

Dear Captain_____.

As you know, I'm in the process of completing my doctoral dissertation with Walden University. The title of my study is, A Phenomenological Study: Police Officers' Lived Experiences with the Use of CEDs. My study requires interviewing at least five police officers from the department. The officers must have prior experience with displaying and using the TASER as a threat. I'm requesting your authorization to display in the department's breakroom a copy of the attached flyer, and for you to email all officers from the department the attached participant invitation letter for the purpose of recruiting the needed participants.

I will conduct the interviews with the candidates during their off-duty time. The interviews will take no more than one hour and will be audio recorded. This study will not publish the name of the department or any personal information of the police officers. The participants will not be compensated.

I greatly appreciate your assistance. If you have any questions, please email me at XXXX or you can call my cell phone. Thank you.

Sincerely,

Gus Escalante

Attachments: Participants Recruitment Flyer and Participants Invitation Letter

Appendix B: Invitation for Participant Collaboration

Fellow Police Officer,

My name is Gus Escalante, and I have embarked in the completion of a PhD related to our field of work. I cannot complete this task alone. I'm reaching out to you to invite you to participate in my study. I am independently conducting this research, without the assistance of any organization.

The purpose of this study is to explore police officer's lived experiences with displaying and threatening noncompliant individuals with CEDs. As a participant, you will be able to contribute to an increased in understanding of the value of CEDs and to what extent displaying and threatening with a CED could be used during a police officer's confrontation with noncompliant individuals. As a police officer, you will be able to provide the unique experiences you've had with the device.

Your input could help promote positive social change in our community by assisting administrators in designing and applying policies regarding the use of CEDs that could decrease injuries to police officers and civilians. To participate in this study, you must be a sworn law enforcement officer in the state of Florida, have a CED assigned to you, must have experience with pointing and threatening the device, must not be a member of my squad, and must be willing to participate in a face-to-face interview. The interview will not last longer than one hour and will be audio recorded.

Your contributions to this study are voluntary and you will not receive any payment. Your information will be confidential. I will provide you with a consent form for your review and acknowledgement prior to the interview. I will also provide you with a brief demographic survey to complete. You can conclude your participation in this study at any time during the interview.

If interested, please email me at XXXX. I look forward to setting up a day and time to meet with you. My dissertation committee chair is Dr. Ross Alexander and he can be reached via email at XXXX. Thank you for taking your time to read this email and for considering participating in this study.

Sincerely,

Gus Escalante

Appendix C: Participant Recruitment Flyer

A GREAT OPPORTUNITY TO ADVANCE THE LAW ENFORCEMENT PROFESSION

I invite you to be part of a study involving the use of CEDs

Goal of The Study:

To explore police officer's lived experiences with displaying and threatening noncompliant individuals with CEDs.

Participants Must:

- Be worn law enforcement officer
- Have assigned CEDs
- Have experience with the pointing and threatening non-compliant individuals with a CED
- Must not be a member of the researcher's squad
- Be willing to participate in a one-on-one interview which will be audio recorded.

Researcher:

This study is the cornerstone of a PhD study being conducted by Gus Escalante, a student with Walden University.

Participant's Expectations:

If you meet the above criteria, please send an email to XXXX, or you can call or text me at XXXX. I will then schedule a time to meet with you for a one-on-one interview which will be audio recorded and will not last no more than one hour.

Our Correspondences Will Be Confidential

The Results of The Study:

This dissertation study will be reviewed by university staff, will be publish, and could be used during professional conferences. The study will not include the personal information of participants or their place of employment.

Appendix D: Protocol for Initial Communication with the Participants

1. Set up a date and time to meet with the participant.

2. Inform the participants that the purpose of my study is to obtain details of their experiences with the use of CEDs. Specifically using the device to threaten non-compliant individuals.

3. Ensure the participants that their personal information will be kept confidential.

4. Inform the participant that the one-on-one interview will be audio recorded and will last no more than one hour.

5. Inform the participants that the researcher will ask follow-up questions to clarify the participants answers.

6. Inform the participant that he or she can terminate the interview at any time, even after the interview has commence.

7. Provide the participants with the potential benefits to positive social change.

8. Provide the participants the informed consent for their review prior to the interview.

Appendix E: Interview Protocol

Before the Recording of The Interview

Thank you for giving me the opportunity to have an interview with you. I'm Gus Escalante and I'm currently seeking a PhD in Public Policy and Administration with a concentration in Criminal Justice from Walden University. The purpose of this interview is to document the experiences you've had with the use of CEDs. My purpose is to comprehend those experiences and will do so via data analyzation. Your willingness to participate will further the goal of this study of promoting positive social change. This study will inform policy makers of additional values of CEDs and assist them in creating and implementing policies that could prevent injuries to civilians and law enforcement personnel.

As a reminder, I'm going to audio record our interactions. I need the record our interview in order to capture your statements and make an accurate transcript of the description of your experiences. I will store the recording in a password protected Android cell phone and the transcripts in a password protected Lenovo computer. I will destroy the audio recording after the completion of my study, according to Walden University's guidelines. Pertaining to the interview, I'm not anticipating it will last more than one hour.

Introduction

Thank you for being a participant in this study. You have indicated you meet the criteria for this study, and your input is valuable. The purpose of this study is to explore the lived experiences of police officers with their use of CEDs. As a police officer who is equipped with CEDs and who has experience with the device, you can provide unique opinions, perceptions, and experiences that will enhance knowledge about the value of CEDs, especially when they are used as threat.

As previously indicated, please do not feel like you have to respond if the question makes you feel uncomfortable. You will not be compensated for this interview. You are free to stop the interview at any time, even after we begin. Being part of this interview will not put you in any adverse risk. After I complete the transcript of our interactions, I will be happy to share it with you for your review, if you so desire. I will also share the transcript and analysis of the study with Walden University faculty, but your information will be redacted. I will now share with you a form called Participant Consent Form and would like for you to read it. If you understand what it says and if you agree, please sign at the bottom. Do you have any questions at this time?

Closing Statement

Thank you very much for sharing your experiences with me. Before closing this meeting and stopping the audio recording, do you have any questions that I may answer?

Appendix F: Participant Demographic Form

A Phenomenological Study: Police Officers' Lived Experiences with the Use of CEDs

(Confidential Participant Demographic Form)

Age Range:

- **18-25**
- **26-35**
- **36-45**
- **46-55**
- **56 or greater**

Gender:

- **Female**
- **Male**

Years of Law Enforcement Experience

- **1-5**
- **6-10**
- **11-15**
- **16-20**
- **21-25**
- **26 or greater**

Have you used a CED to threaten a non-compliant individual?

- **Yes**
- **No**

Appendix G: Interview Questions

SPECIFIC TASER EXPERIENCE

1. Think about an incident in which you had to use the TASER as a threat. Can you share with me your experience?
2. How were you feeling at the time you decided to draw your TASER?
3. Please describe the factors that prompted you to draw and point your TASER?
4. Please describe the factors that influence you to choose to threat rather than deploy?

    Probe: To the best of your recollection, could you describe the person's demeanor?

5. How was the incident resolved?

6. How did that experience affect your future TASER use?

OVERALL PERCEPTIONS OF THE TASER

1. What are your objectives when you decide to draw your TASER?
2. How effective do you feel the TASER is when used as a threat?
3. Would you describe at which stage of a confrontation with a non-compliant subject would you choose to introduce the TASER as a threat?
4. How would you use the TASER if you though the subject was armed?
5. What role does a person's characteristics (e.g., race, gender, age, intoxication, mental state) play in your decision to threaten with the TASER?

Additional probing questions:

Can you provide an example of…?

Can you further describe what you meant by feeling…?

Can you tell me more about…?

CONCLUSION

1. Is there anything else you would like to add that I haven't addressed in this interview?
2. Do you have any questions for me?