Cadet Perceptions of Learning Using Police Video Simulators

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The topic for this study was police cadet perceptions of learning using video simulators. The main research question for this project was: “How are video simulators perceived by police cadets as a learning method at the police academy?” The participants for this qualitative study were 16 recently graduated police cadets from an anonymous midwestern suburban police academy. They were chosen using purposive sampling based on their relevance as recently graduated cadets. The cadets were interviewed and the results of the study show the perceptions towards the use of simulators as a learning strategy were generally positive and the cadets thought the experience was meaningful and allowed for critical thought under stressful situations. They related that their use-of-force discretion skills improved through learning new strategies with hands-on experience and debriefing with instructors. They also offered many ideas on how to improve the simulators and the learning experience of using police video simulators. Recommendations were made to continue using police video simulators and increase access for cadets.
CADET PERCEPTIONS OF LEARNING USING POLICE VIDEO SIMULATORS

BY

STEPHEN MIKO
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The goal of this dissertation project was to study the perceptions of cadets about learning using police video simulators. This case study incorporated interviews of 16 recently graduated police cadets of a suburban police academy in the Midwest of the United States. Observations of current academy cadets at a Midwest police academy were also conducted. The following three chapters describe this study from the proposal stage to an overview of the findings with a discussion and a scholarly reflection of the entire process.

Chapter One is about all of the aspects of the proposal for this study. The proposal was defended in February of 2021, and it discusses the plans to conduct the research. The framework for the study is experiential and adult learning with emphasis on Kolb’s (2015) experiential learning cycle. This chapter discusses the interview and observation processes as well as data analysis procedures.

Chapter Two is a report of the findings using an article model. The chapter outlines the research conducted in the summer of 2021. It incorporates the interviews and observations that took place and discusses the findings. The findings focus on answering several aspects of the overall research question, which is: How are video simulators perceived by police cadets as a learning method at the police academy?

Chapter Three is a scholarly reflection on the process of conducting research and what was learned. It discusses the obstacles, successes, and perseverance that is often needed to
complete a study. It also discusses the importance of the findings and how I will incorporate this research in the field and my professional career moving forward.
CHAPTER I
CADET PERCEPTIONS OF LEARNING USING VIDEO SIMULATORS

Introduction

A police officer’s legal authority to use force in the course of their duty is one of the most controversial and debated topics in the United States (Garner et al., 2018). Negative nationwide media attention involving the police and use of force has resulted in devastating consequences for police officers and the communities they serve across the United States (Nix & Wolfe, 2017). After many of these incidents, communities did not trust the police departments that served them, which hurts community relations with law enforcement agencies (Aymer, 2016; White et al., 2018). Reducing harm to citizens, even when it is deemed to be justified, is a common goal of police agencies in the United States (O’Brien et al., 2020). Proper training of police officers is critical in reaching this goal (Blumberg et al., 2019).

Police officers have a necessary role in society, which includes making arrests using reasonable force, and treating all members of society fairly at all times (Owens et al., 2018). This task has been characterized as very difficult by researchers, but society demands it from peace officers (Owens et al., 2018). Police officers often have varying roles in society (Stephens, 2015). They may need to be a social worker in one situation and an investigator in the next situation, all while communicating effectively with a multicultural community (Stephens, 2015). To prepare a police officer for the various roles they will serve requires adequate initial and ongoing training. A properly trained police officer is one of the best ways to fill society’s expectations for proper police services, including using force correctly (Makin, 2015).
Recommendations have been made for greater police accountability for their actions and improved training on use-of-force techniques and using proper discretion when choosing to use force. When realistic police training was implemented, it improved job performance, particularly in stressful situations (Arnetz et al., 2009). Many of the cases that caused nationwide media attention can be characterized as stressful and rapidly evolving and so training for these types of encounters is important. Training that focuses on negotiation and conflict mediation, as well as cultural and racial sensitivities, helps to avoid the use of excessive force (Fielding, 2018). The opposite view may also be valid, in that poor training can lead to excessive force. The Department of Justice (2017) declared that deficiencies in training, including de-escalation techniques, led to avoidable and unneeded use of force by officers in the Chicago Police Department. In response to the findings, the Chicago Police Department committed to a variety of reforms, including intensive training. The need for proper police training is great in the United States, and it often begins at a police academy.

Technology and innovation will be a crucial component to the future of training and adult learning (Bass, 2018). The goal of educational technology is often improved access to learning while solving deficiencies in curriculums and programs (Bass, 2018). There can be barriers to adopting new technologies. The proposed learning technology could be exceptional but will not have any value if it is not organized and implemented properly or does not have anyone to teach it (Feldstein, 2018). Instructors may be resistant to change their established methods of teaching and they may not have the ability or desire to readily adopt technology into their classrooms and training programs (Vovk et al., 2019; Ziegenfuss et al., 2019). Advocating for the necessary resources to make changes in learning technology should be embraced by educators (Walker, 2019). Even with these barriers, using new educational technology may be
the best way to raise the learner’s level of proficiency and potentially create a better future for everyone (Bass, 2018; Kellman & Krasne, 2018).

The purpose of this qualitative case study was to examine police cadets’ perceptions towards police video simulators as a learning method at the police academy. This study was guided by the following research questions:

Q1: How are video simulators perceived by police cadets as a learning method at the police academy?

Q1a: How are video simulators perceived by police cadets in regard to effectiveness as a learning method compared to other types of learning strategies that are used at the police academy?

Q1b: How are video simulators perceived by police cadets as a learning method for developing use-of-force discretion?

Q1c: What suggestions do police academy cadets have to improve the effectiveness of simulators as a learning strategy?

**Problem Statement**

Police departments have to find ways to properly train officers with limited and often dwindling budgets. Large states like Illinois and New York are feeling the pressure. As of 2020, police officers in Illinois had less funding for training and instruction due to fee restructuring and state law changes (“Groups: Laws”, 2020). The New York City Police Department recently announced that they would be cutting one billion dollars from the police budget, and there have been demands to defund the police department further (“New York”, 2020). One way to
maximize limited resources is to make sure the training of police officers is efficient and meaningful (Bartel, 2018).

Because of this, police academies should consider and incorporate adult learning strategies that are thought to be most beneficial into their curriculums. Academies can identify learning strategies that are available and choose the most effective. Adult learning principles have been incorporated into police training curriculums in the past and have seen success (Werth, 2011). The concept of learning through experience has been studied specifically in relation to police training and it can be used to cover a variety of police topics, including critical decision making and personal communication with members of the public (Cleveland & Saville, 2007; Werth, 2011).

Training techniques can vary, but one training tool that is available at police academies across the United States is police video simulators (Bartel, 2018). Officers are more likely to use effective strategies when they are properly trained (Makin, 2015). Police video simulators are immersive and simulate real-world experiences that may occur when cadets become police officers. Training that involves practice and experiences is more effective than classroom teaching alone (Kolb, 2015). Advanced simulators incorporate an almost 360-degree view of the learning environment and include realistic sounds and situations that can test cadets’ problem-solving skills. These simulators create a unique experience, and it is important that police training is modern and innovative (Fielding, 2018). Kolb (2015) extensively studied experiential learning and created a model that mirrors the training received at police academies that incorporate police simulators. His model was used as the theoretical framework for this study and will be discussed at length as a background to the main concepts.
This study was conducted with 16 police cadets from a suburban police academy located in the Midwest of the United States. This particular academy curriculum incorporates a video simulator that has a variety of programmed scenarios, including traffic stops, building searches, domestic violence situations, and many others that are accurate and consistent with what a police officer may encounter in their career. The simulator is made up of several computer-linked screens, a laser pistol, an advanced sound system, and dedicated instructors who are able to manipulate the scenario based on the cadets’ interactions with the presented situation. There is also a debriefing and instruction phase of the training process, where there is interaction between the cadet and the instructor. Because the perceptions of police academy cadets toward the use of police simulators is unknown, further study is needed to determine the perceptions of the cadets in order to establish the efficacy of simulation as a teaching and learning strategy.

**Literature Review**

There is a large amount of research that can be applied to this study, and there is a rich history of scholarly work on adult learning. It is important to discuss the foundations of adult learning and then transition to how experiential learning applies to the learning process for police academy cadets.

**Adult Learning**

When facilitating a study of adults and training, it is important to understand the research and base of knowledge regarding how adults learn. Adult learning is not a new concept. The term “andragogy” was first used in 1833 by Alexander Kapp, but it was expanded upon by Malcom Knowles in 1959. Andragogy in simplest terms is the art and science of helping adults learn (Henschke, 2016; Knowles, 1980). Knowles (1980) developed the following six assumptions about adult learning: 1) Self-concept is the idea that, depending on the situation, adults have a
need to be self-directed learners and adults want to manage their own lives (Akyıldız, 2019; Knowles, 1980). 2) Adults acquire useful experiences throughout their lives that can be shared with others as a resource for learning (Knowles, 1980). 3) A readiness to learn refers to the concept that the need to learn is directly related to solving a problem that the adult is facing at that time or may face in the future (Boz & Dagli, 2017; Knowles, 1980). 4) Adults become problem centered, as opposed to subject centered, as they mature (Knowles, 1980; Merriam et al., 2007). Knowles (1980) discussed how 5) internal motivations become stronger than external reasons for learning. Lastly, 6) adults need to know the reason why the topic they are learning about has value or meaning.

Learning does not stop as adolescence ends and there are differences in how adults attain knowledge compared to how children learn (Kerka, 2000). Studying how adults learn, specifically adults who may be returning to school after an absence, is important (Tovar, 2008). It directly relates to this study, as police cadets can be from a variety of backgrounds and education levels. Some may be coming directly from college while others are changing careers and may only have a high school diploma. Some police agencies do not require a degree or any form of higher education, so the police academy may be the first experience with adult education for some cadets. Research suggests that using the best adult learning strategies provides better training for officers to meet the challenges of their position when they graduate (Gilmore, 2012).

Adults also look for ways of understanding and using their experiences to help them in their careers and personal lives (Goffman, 1959). This idea by Goffman appears to correspond to police officers learning valuable skills at the police academy that they will use when they are on their own and are serving their communities.
The general goal of many police academies is to provide training that serves as a foundation for a successful career in law enforcement (Suburban Law Enforcement Academy [SLEA], n.d.). The general idea is to transform the incoming cadet into someone who has a basic knowledge that they can build upon to become a police officer. Transformation learning theory was developed by Jack Mezirow, and it requires several components (Mezirow, 1994; Yarbrough, 2018). It involves reflection and analysis in problem solving and it requires student engagement. The process involves looking at the premise of the problem, the process of problem solving, and the content of the issue (Mezirow, 1994). This type of learning directly relates to various types of learning strategies that occur at the police academy, including the use of scenario-based training and the use of police simulators. Mezirow (1994) has thoroughly studied adult learning and development, and he described it as “the progressive realization of an adult’s capacity to fully and freely participate in rational dialogue to achieve a broader, more discriminating, permeable and integrative understanding of his/her experience as a guide to action” (p. 226). The idea of learning from experience is important to the effectiveness of adult learning and leads to the next component of this study: experiential learning.

Experiential Learning

Early researchers defined experience as an interaction between a person, a time and place, and a particular event (Dewey, 1938). Learners make connections from experiences and the outcomes can be either rewarding or negative consequences (Dewey, 1916). Adult learners will learn from an experience and either repeat the process based on some type of reward or avoid it based on a negative outcome. The act of experiential learning, or learning by doing, is an important part of the literature on adult learning. Merriam and Brockett (2007) wrote about the
idea that experience is a fundamental part of learning theory, and it is difficult to locate learning concepts that do not incorporate the value of experience.

Adults often learn from their mistakes and avoid making them in the future. They may take that prior knowledge and apply it to other new circumstances that they encounter. Bigge and Shermis (1992) related that every experience uses information from previous experiences and modifies that information for use in future situations. It may be possible that if an experience has been had before in a training simulator, it can be recalled later and behavior can be modified. Even though the experience is manufactured, it may still have value and could be recalled for future experiences. That experience may act as a guide for future encounters.

Many scholars differ on exactly what constitutes experiential learning, and it can be very difficult to accurately define. Malinen (2000), for example, explained that “adult experiential learning is a complex, vague and ambiguous phenomenon, which is still inadequately defined, conceptually suspect – and even poorly researched” (p.15). Beard and Wilson (2013), however, summarized prior scholarship and developed a definition: “Experiential Learning is the sense-making process of active engagement between the inner world of the person and the outer world of the environment.” (p. 26). This definition is clear, concise, and focuses on the person and the environment. The interaction between the person and the environment creates the experience. Ultimately, the person learns through that experience.

**Police Academies and the Use of Simulators**

Traditional police academy instruction includes the use of lectures, expert testimony, assigned readings, and films (Birzer & Tannehill, 2001). Also included in the training is going to the firing range and learning defensive tactics like handcuffing (Perry, 2012). Most recently, police academies have begun to include new technologies in training in the form of police
simulators (Regehr & Leblanc, 2017). Police officer training has also recently shifted to include training about reducing officer deaths, avoiding implicit bias, and reducing the use of excessive force (Blumberg et al., 2016).

Police academies cover a wide variety of topics: civil liability, criminal law, handcuffing, defensive tactics, firearm proficiency, dealing with the mentally ill, CPR, report writing, investigation, constitutional and criminal law, and studying for the state certification test (Rossler & Suttmoeller, 2017). Most states mandate a required number of hours in the above subjects, and the governing body is the Peace Officer Training and Standards Board (POST; Blumberg et al., 2016). In Illinois there is a standardized test with a required passing score of 66% to become a certified police officer. At most police academies, training is three months long, but the Chicago Police Department and the Illinois State Police have six-month academies. Those academies generally consist of bringing in expert speakers as guest lecturers to share advice. They also generally include firearms training, defensive tactics, and some scenario training. Scenario training involving role players and may include situations that deal with basic crimes such as theft from a department store or traffic stops. They also may include domestic violence and high-risk encounters like bank robberies.

A common criticism is that police academies in the United States are slow to change and continue to use the traditional way of teaching. Werth (2011) discussed that many educators do not understand the advantages to teaching using key concepts of adult learning theories and they often revert to traditional modes of instruction. Not using methods of experiential learning can have negative effects. With traditional modes of teaching, learning can be viewed as superficial and focused solely on the information coming from the instructor and going to the student with no room for any collaboration (Wilson et al., 2018). It is important that the best methods are in
place to give the cadets the best experience possible in which to learn. The information that
cadets learn at the academy could be crucial to the citizens that they will serve.

Police work in general can be very dangerous depending on the situations that officers
encounter. Part of that danger involves confrontations with residents. One very important
concept to note is that the environment of experiential learning is safe. The goal of the training is
that they will use what they learn and apply it to future situations. Training should feel as real as
possible to give the trainee the closest thing to an actual encounter without there being any real
danger. Police simulators offer the ability to create a realistic atmosphere for cadets to learn.
When the environment is realistic, it raises the chances that the learner will be more attentive and
open to learning specific ideas, as opposed to an instructor-centered lecture where participation is
minimal (Wilson et al., 2018). The quality of the teaching is just as important as the method that
is used (Wilson et al., 2018).

Cadets will be actively involved in a variety of learning strategies at the police academy
including the use of video simulators (Perry, 2012; Regehr et al., 2017). The recruits will
potentially gain experience from which they can draw later to help them throughout the course of
their careers. Police agencies will need to maximize their training resources, and a likely method
to do that is to use advanced use-of-force simulators which will allow for efficient and effective
training sessions without the need for extra training personnel (Bartel, 2018). The cadets who use
simulators at the academy are engrossed in an activity where they learn by doing something
similar to what they will be doing on the street.

Technology advances at a fast pace and it is important to utilize these advances in all
fields, including police academies. “As use of force simulator technology continues to advance
and become further validated with science-based research, there will be even more sophisticated
learning opportunities for law enforcement to ensure they receive the best training possible” (Bartel, 2018, p. 3). If society is demanding the best trained police officers, then technology-based simulators should be a part of well-rounded training curriculum.

Theoretical Framework

A central theme of this study was that experiential learning is a valuable learning strategy at the police academy and police simulators can be a part of this strategy. Kolb’s model of learning also serves as a theoretical framework for this study. It is important to discuss Kolb’s definition of experiential learning before explaining his model. Kolb (2015) wrote, “Experiential learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (p. 51). Police cadets go through a simulation of a police experience when they are active in a police video simulator. This idea paired very well with Kolb’s model of learning.

Kolb’s model of experiential learning includes four parts: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb & Kolb, 2017). Kolb (2015) described the learning process as the creative conflict and tension between all four categories. A simpler way of looking at Kolb’s model is to view the categories as experiencing, reflecting, thinking, and acting. The learning process is meant to be a cycle where the learner stops at each location or category of the model and moves from one part to the next as needed. Kolb’s model was chosen for this study because the mechanics and structure of the training process using a police video simulator mirror Kolb’s learning cycle very well.

The first part of Kolb’s model is concrete experience. Concrete experience refers to an event that has taken place in which the learner went through that event or exercise. This could be a variety of experiences, including a simulation, a scenario, or an activity. Kolb (2015) described
concrete experiences as the “here and now” and “immediate” events individuals experience. It is simply what happens during the activity (Page & Margolis, 2017). The participant must be willing and open to these new concrete experiences (Merriam et al., 2007). The concrete experience section of the model is the first phase of the learning cycle. When it has ended, the next phase begins, which is reflective observation. For example, a cadet will enter the simulator and will first have a concrete experience in the form of a situation that requires action and decision making to solve a situation.

The reflective observation phase is when a person reflects on a new experience. This could take many forms, including quiet contemplation or speaking with an instructor or another participant and debriefing after an exercise. Kolb described this process as “carefully observing the situation and impartially describing it” (Kolb, 2015, p. 105). This section of Kolb’s model is an important component because it serves as a critical transition from the concrete experience to learning (Kuk & Holst, 2018). The subject views the experience from a variety of perspectives and reflects on them in a meaningful way (Merriam et al., 2007). The participant analyzes how they feel and think and what they hope to gain from the experience in the reflection phase (Page & Margolis, 2017). Accordingly, the cadet will mentally process the experience and internally analyze what occurred in the concrete experience. They will interpret the information and give it meaning that can be used in later portions of the learning model (Kolb & Kolb, 2017). In the reflective observation phase, the learner is asked to view the experience from a neutral and objective point of view and think about how their interpretations may have changed as time passed after the concrete experience was over (Kolb & Kolb, 2017).

Abstract conceptualization is described as thinking, using concepts, and processing information based on the experience that the learner was involved in (Kolb, 2015). A goal of this
phase is to develop theories and ideas based on reflection and thought (Merriam & Brockett, 2007). Another important component of this phase is looking at literature and established concepts and how they may apply to developing ideas (Page & Margolis, 2017). Using video simulators, the cadet will debrief the situation and think how their actions and decisions fit with police policy, social norms, and community expectations.

Finally, active experimentation involves taking all the knowledge that was gained and applying it to an entirely new situation in a purposeful and practical way (Kolb, 2015). The participant contemplates what they will do differently after having experienced the earlier parts of the cycle and puts it into practice (Page & Margolis, 2017). This phase of Kolb’s cycle allows the participant to test the hypothesis that they created for themselves (Reshmad’sa & Vijayakumari, 2018). The participant can use what they have learned and experienced to ultimately make decisions and correct problems and use those experiences as a guide for future encounters and situations (Kolb & Kolb, 2017). In the active experimentation phase, the cadet using video simulators can use the knowledge that was gained in a new way. This may be another attempt at the same scenario or using that knowledge in the future as a police officer.

The research questions related to the perceptions of the cadet match Kolb’s philosophy about learning. The learner constructs meaning from the process that involves interaction with the experience. The perception of that meaning and the perception of the process are the basis for this study. Other types of learning may not be as effective when it comes to police-related topics like developing use-of-force discretion. One of the main components of Kolb’s learning cycle is to have a concrete experience. Reading and observing alone may not be as effective as having an experience. This idea of Kolb’s philosophy of learning is missing from an adult learning strategy such as a lecture. Kolb’s learning model has been used in conjunction with other vocations that
use simulations, such as nursing and teaching, and has shown success (Reshmad’sa & Vijayakumari, 2018; Williams, 2019).

Parts of Kolb’s learning cycle may be perceived differently by the cadets based on demographic information like education, age, and race. They may make different decisions in the simulation scenarios based on life experience, and there may be value in learning about how those differences factor into the experience. Kolb (2015) related that the learning process is different for everyone. He discussed how individuality and human uniqueness can be affected by outside circumstances as well as psychological reasons. Kolb further described this idea as being related to a contextualist view, in that an adult learner’s perception of reality is constantly being created by their experience. The choices that the participants make can determine the events that they chose to partake in, and this can affect future choices. Kolb described adult learners’ prior experiences as a type of self-programming and that they will individually determine which parts of the learning cycle they will focus on. All of these ideas support the notion of looking into responses based on characteristics of individual participants.

Research Design

The focus of this project was on police cadets’ perceptions of using police video simulators in teaching and learning. To explore police cadets’ perceptions, I used a qualitative case study design using interviews of participants. Case studies generally study one particular concept (Bogdan & Biklen, 2007) within a bound system or case (Creswell, 2014). Evaluation of the activities and processes in a current program is an important component of a case study (Creswell & Creswell, 2018; Merriam, 1998; Yin, 2014). Case studies are particularly useful when studying a phenomenon within its real-world context (Creswell, 2014). Another reason for doing a qualitative case study is to determine why someone behaves or thinks in a particular way.
(Harwati, 2019). This closely aligns with this study, which was conducted to determine the perceptions of police cadets towards the use of police simulators within one specific police academy class. The real-world context such as the structure and set-up of the police academy, as well as the timing of when this research occurred and national events that have occurred related to police brutality, are all likely to shape police cadet perceptions and thus need to be considered in this study.

Case Description

The location for this study was a police academy in Illinois. A majority the agencies that send police cadets to the academy used in this study are considered suburban with a population of less than 60,000 people. There are approximately 60 cadets per academy class and the training lasts approximately 15 weeks or 540 hours. There are six police academies in Illinois, including the one for this study, and they are overseen by the Illinois Law Enforcement Training and Standards Board. Cadets must score at least 70% on weekly tests and pass the final certification test to become police officers in Illinois. The cost to send a cadet to the police academy is approximately $4,000, which is set by the Illinois Law Enforcement Training and Standards Board, and this fee is paid by the sending agency.

Current police academy training across the United States is delivered using a variety of adult learning strategies, but the two main components are classroom teaching and hands-on learning (Blumberg et al., 2019). The classroom teaching incorporates lectures and standardized tests, and the hands-on learning involves scenario training, handcuffing, defensive tactics, and firearms training (Blumberg et al., 2019). The topics generally include medical aid, firearms training, handcuffing, criminal law, patrol operations, and investigating crime (Blumberg et al., 2019; Rossler & Suttmoeller, 2017). Academies are often run using a format similar to military
boot camp. This style has been criticized as not being attentive to individual student learning needs as well as not being realistic to the goals of community policing when cadets become police officers (Blumberg et al., 2019).

The academy used for this study incorporates a police video simulator. The simulator consists of a series of video screens in a nearly 360-degree circle and a specifically designed pistol that when fired can interact with the screens. An instructor has access to the computers that run the scenario software. The cadet is given instructions prior to entering the simulator about what they may encounter. The cadet wears a full police uniform, which may be an attempt to add to the realism of the training. The cadet enters the scenario, and the instructor can modify the outcome of the scenario based on the instructor’s assessment of the cadet performance. After the cadet has experienced the scenario, the instructor will often debrief or critique the cadet’s performance and the decisions that were made concerning use-of-force discretion and problem solving.

The goal of the simulation is to teach the cadets proper use-of-force discretion and to use force that is consistent with general police policy (Axelrod, 2020; Bartel, 2018). The hope is that the cadets will properly use force when they become police officers (Axelrod, 2020). The virtual environment allows officers to make mistakes and learn from them. They are able to learn through repetition and they are able to practice proper de-escalation techniques (Axelrod, 2020; Bartel, 2018). Community members want de-escalation techniques to be used by the police prior to any potential use of force (Bartel, 2018). The simulators incorporate varying ethnicities of the actors in the scenarios, which allows for instructors to observe if there is obvious bias among cadets when using force (Axelrod, 2020). Bias training is important because many community
leaders want everyone to be treated fairly and force to be used properly by the police (Blumberg et al., 2016; White et al., 2018).

**Participants**

The sample for this study was purposive. Purposive sampling is the idea of choosing a particular group or set of individuals who are particularly relevant to the concept or ideas being studied (Maxwell, 2013). The researcher makes the decision about what group will be studied based on their experiences and beliefs about the particular group (Fraenkel et al., 2015). The sample for this study was comprised of 16 police cadets at a suburban police academy in the Midwest. The cadets were volunteers and had completed the police academy approximately three weeks prior to the interviews.

After successfully completing the IRB approval process through Northern Illinois University (see Appendix D), I emailed a total of 44 recent police academy graduates and explained the process to them. Two follow-up emails were also sent to ensure that anyone who wanted to participate was able to do so. I originally set a minimum number of participants at ten. I was able to get 16 volunteers total to assist in this study to ensure data saturation.

I asked participants about their demographics during the Zoom interview. The questions about age, race, and gender were prefaced by asking if they are comfortable talking about how they identify themselves. They were told that they were not required to answer and could decline. I did not make my own assessment or assumptions about the participants. Each of the 16 participants was interviewed one time over the Zoom application. The participants were asked to participate in an interview a second time, when they were asked some directed or clarifying questions in a follow-up interview by phone or questions by email. Eleven of the 16 original interviewees participated in the second round of questions.
The email to the participants discussed the purpose of the voluntary study and how I was seeking information about the learning strategies at the police academy and information about the experience of the cadets related to their police video simulator training. The email discussed compensation and that the cadets’ personal information will not be collected or shared. The email let the cadets know that participation was completely voluntary and was not a requirement to graduate the academy or a requirement of the agency that hired them. After the initial email, only two participants had signed up to be a part of the study. A second email was sent to remind the group about the opportunity. A further ten participants agreed to be a part of the process. A third email was sent out to make sure any remaining cadets who wanted to participate were able to do so. Four more former cadets agreed to be a part of the process for a total of 16 cadets. This was six more than the original goal of ten participants.

**Data Collection**

I collected a majority of the data using semi-structured interviews. Interviews allow for the researcher to elicit opinions and views of the participant and control the information that is received (Creswell & Creswell, 2018). It also allows the researcher to check for consistency of what was observed and to carefully ask relevant questions (Fraenkel et al., 2015). This study focused on perceptions of cadets with the intention of getting in-depth information about how they feel about the police simulators. This would have been difficult to achieve with a survey that is structured and does not allow for personal reflections. Also, feelings, intentions, meanings, and thoughts cannot be directly observed (Patton, 2002). Interviews were the best fit for this study.

The interviews were conducted though Zoom due to Covid-19 restrictions limiting in-person contact. The interviews were approximately 45 minutes in length and consisted of the
same series of questions for each participant (see Appendix A) in order to set a basic standard for the interview (Fowler, 2014). The questions focused on how the cadets felt about the teaching strategies used at the academy and their individual perceptions of the police video simulator training. A goal of this study was to involve cadets near the end of their training or who recently completed it. This allowed the cadets to get a large amount of training and to give feedback about their experiences. Because the cadets had recently graduated, the information was fresh in their minds, as opposed to a long time after the academy ends. I provided incentive to participate, which was $100.00. This amount was to help ensure that I was able to get as many participants as possible and ensure there was data saturation.

Case studies generally use multiple data sources (Fraenkel et al., 2015; Maxwell, 2013). The second source was observations of the cadets going through the police video simulation training. The observations occurred over the course of a typical day at the police academy and focused on the scenario that was being used for that particular training day. I was a non-participant observer in the police academy setting and took notes about what was seen. Observations allowed me to see how the cadets responded to the situations and the stress that occurred. The observations allowed me to view the problem-solving skills of the cadets and observe their interactions with the computer software and instruments. It also allowed me to see the debriefing process between the cadets and the instructors and observe the learning process.

**Data Analysis**

The interviews were carefully transcribed and organized into files. The files were placed into a large binder. As the interviews are transcribed, the contents were organized into sections. For example, the interviewees’ responses to the question about what simulator scenario stood out to them the most were grouped together. Those responses were then analyzed together to look for
potential consistencies. The information was coded into sections of information. For example, the cadets’ thoughts on whether or not the simulations represent what they would see in society. Creswell and Creswell (2018) wrote about developing themes from information and generating descriptions of those ideas in the analysis process (p. 194). Organizational categories involve choosing broad topics to focus on and processing that data into usable sections (Maxwell, 2013). This was the process for the first round of coding.

The second round of coding was about how the information relates to the main research questions. When similar information was found, it was clustered into a group and further coded with a category name. For example, many cadets said a way to improve the training was to add more time and have more access. This fits with the research question regarding improvements to training. The research question and the responses were clustered, and the responses were coded under the subcategory of more time. Another example would be that many cadets said a goal of the police simulator training was to cause stress. The research question about cadet perceptions was clustered with the responses regarding stress as a goal under the subcategory of stress. The strategy of categorizing data with similarities is very common in qualitative research (Maxwell, 2013). I organized the information into categories that are most important to the study. In this phase of coding, some of the data was winnowed or disregarded. It is important to pare down large portions of unneeded information (Creswell & Creswell, 2018).

The third round of coding focused on themes and how pieces of information potentially contradict each other. This round of coding looked past how the items are similar and also looked for connections between the data categories. The goal is to look for possible insights into themes and how inferences may be made towards a better understanding of the concepts.
involved. Interpretation of the information is very important and can be made throughout the analysis process (Fraenkel et al., 2015).

Finally, I summarized the findings into usable information. This process also generally involves comparing the findings to literature that is available (Creswell & Creswell, 2018). One important idea is that my personal interpretations may come into play based on my history and experiences (Creswell & Creswell, 2018). This is something that I was mindful of. The overall goal is to reduce the large amount of information into a summary of the findings (Fraenkel et al., 2015). I attempted to attach useful meaning to the findings that can be used in training programs for police academies in the United States. It is important that the summary is accurate and matches what was collected in the interviews (Fraenkel et al., 2015).

The observations were documented using field notes and I organized the data into sections. Creswell and Creswell (2018) recommend using an observational protocol to collect information from observations. This involved having field note forms that can quickly document different areas of observations. The information was grouped into a coding scheme where similar observations were categorized. Observational information can have researcher bias and researchers should do their best to acknowledge and avoid it (Fraenkel et al., 2015; Maxwell, 2013). The data was analyzed and compared against the collected interview data to create a more complete assessment of the training.

An important part of collecting data is to make sure the sample shows data saturation. Data saturation has been described as having repeated answers from participants without having new information being discussed (Creswell & Creswell, 2018). There is generally not a set number of participants as long as information is continually happening without new information
coming to light (Creswell & Poth, 2018). The goal of this study was a minimum of ten participants, but I was able to get 16 participants in an effort to achieve adequate data saturation.

**Validity and Reliability**

One method to check validity and reliability of any case study is to have someone else look at results of the study, which is also referred to as external audit or peer debriefing (Creswell & Creswell, 2018; Fraenkel et al., 2015). This was done in this case and will be explained further in Chapter 2. Giving a thorough description of the findings also adds to the validity of a study so the results can be viewed as realistic (Creswell & Creswell, 2018). Another way to add to the validity is to clarify and discuss the researcher bias (Creswell & Creswell, 2018). This was completed by adding a researcher positionality section to allow this issue to be discussed. Lastly, all of the information is presented, even if it is negative or it does not follow the themes and ideas that have been previously seen or studied. I also looked for information that is contradictory.

The reliability and replicability of any study is important (Creswell & Creswell, 2018). Procedures and protocols are documented so that others can review them. The interview questions are found in Appendices A and B. The transcripts of the interviews were checked for accuracy and the coding was consistent for the categories of information.

**Researcher Positionality**

I have been a police officer for 20 years. I started when I was 21 years old, and it is the only full-time job I have ever had. Throughout my career, I have worked in a variety of assignments, including patrol, detective, and school officer. I have over a dozen law enforcement-related specialties and certifications. I want to improve community relations and give police officers the best educational resources available. I studied law enforcement as an
undergraduate and obtained a master’s degree in law enforcement. In summary, law enforcement is my background and I want to further the field in some way. I hope to do that by studying attitudes of cadets towards police video simulators.

My negative experiences with poor training have driven me to look for better methods of instruction. My most memorable experiences from my police academy class were the scenario training sessions with live actors. There are many similarities with scenario training sessions and police video simulators in that there are interactions with a set of circumstances and the training can vary based on how the cadets perform. My negative experiences towards traditional instruction may be a disadvantage because I already have a bias towards these learning strategies for police-related topics, especially use of force. I understand that I feel this way and I need to do my best to try and be as neutral as possible and keep an open mind throughout the research process.

Generally, police academy instructors are current or prior members of the law enforcement community at academies across the United States. The cadets may see me as being a veteran police officer who automatically outranks them, where my goal is to be seen as an independent researcher. They may view me as someone who can give them guidance because many of the interactions they have had with police officers in their careers have been at the academy where they have an instructor/student relationship with them. It is possible that they may see me as someone that they hope to become someday because I have had a long career. I attempted to develop a relationship and a rapport with the participants where they felt comfortable to speak openly without fear of any repercussions. I emphasized early that I am not one of their instructors and I pointed out that my goal was to seek unbiased information from them.
Part of my researcher positionality is my epistemological view, which in this case is constructivism. The term “constructivism” comes from the idea that learners want to understand the world in which they live, and they develop meanings based on their interactions (Creswell, 2014). They construct meanings based on their own views and the interactions and views of others. This is also referred to as social constructivism (Creswell, 2014). In a constructivist view, the researcher understands that their own background and experiences may affect how they interpret the results of interviews and experiences (Crotty, 1998). Constructivists also believe that no construction of an idea or event can show an absolute truth or finalized idea about the situation or a perspective (Maxwell, 2013). The ideas of the researcher may be based on their time and the ideals of society in a given historical setting. How one views oneself is likely tied to the context they came from and the experiences they have had (Ravitch & Riggan, 2017).

For this study, a constructivist worldview will allow me to explore participants’ perspectives on using simulators in police training. Using a constructivist worldview, I am interested in how cadets make sense of their learning experiences and how their identities shape these learning experiences. Constructivism also aligns with the theoretical framework guiding this study, as experiential learning and Kolb’s experiential learning model are based in constructivism.

**Limitations**

With any study, there will be limitations. This study was limited by the amount of time and access to the cadets. I did not have an extensive amount of time to discuss the issues that are being studied in the initial interview and the follow-up questions. This study was also limited to a time frame of about one year. There may be differences in perceptions over a long period of time that will not be covered in this study. The interviews were done with recent graduates of the
police academy, and they may not remember their experiences as well as someone who is a current cadet.

Another was Covid-19 restrictions that did not allow for face-to-face interactions with participants. In some ways this was more convenient for participants because they were interviewed remotely and at a time and place that was convenient for them. Body language, including body postures, hand gestures, and the distance between the interviewer and subject, can be an important source of information (Denham & Onwuegbuzie, 2013). These nonverbal cues were more difficult to notice using a video call meeting.

One limitation could be that the cadets may be reluctant to be open with their responses if they do not trust that the responses will not be used against them. If the responses are negative in some way, they may fear that the information will get back to their agencies or to academy personnel. The cadets were reminded that I do not have an affiliation with the academy or their home agencies in effort to get the most unbiased answers. Hopefully, I made them feel comfortable in the interview process to avoid this.

The cadets may also have felt pressure to complete the interviews as part of an academy process. The academy supervisors may have encouraged cadets to participate in the study, which may have made cadets feel that they were required to participate or required to give certain answers. This may affect the overall results. I addressed this issue in detail early in the interview to reassure the participants that their involvement was voluntary.

There are limitations to the observations as well. The cadets may be uncomfortable with me viewing their activities. The skills or lack of skills of the researcher may be a factor in conducting an accurate observation (Creswell & Creswell, 2018). Researcher bias could be an issue as well in what is sometimes referred to as the observer effect. This is the idea that
behavior can change if the participants know they are being watched (Fraenkel et al., 2015). I did my best to not be a distraction in any way during the observation.

Significance

Technology and innovation have greatly improved adult learning (Dousay & Weible, 2019). Simple early advances like overhead projectors to the most current technologies, including computers, 3D printers, and virtual reality devices, have all contributed to the classroom environment, and learners have relied on new technologies to enhance their learning experiences (Dousay & Weible, 2019). Almost immediately after a new learning tool is created, educators and researchers want to know about the effectiveness of that technology (Dousay & Weible, 2019). Researchers also want to know about the interest from teachers and students and how the technology is accepted (Granić & Marangunić, 2019). This study seeks to help answer those questions using cadet perceptions of video simulators.

It is important to study the perceptions of cadets and ultimately make learning strategy decisions at the academy level based on that. Gathering perception input about training from participants is critical if the goal is to create a better prepared police officer (Edwards, 2019). It is possible that if training is perceived to be beneficial and effective, then cadets will be more successful. The foundation of modern police services should be effective police training (Makin, 2015). In a letter to law enforcement in 2016, President Obama said that police departments should be given the best tools to build trust between the community and the police agencies that serve it (Somanader, 2016). Educators and police chiefs struggle with how to prepare police academy cadets for the challenges they will face when they become police officers. New technology, like the use of police simulators, could be part of the solution to lower crime while
protecting the rights of all citizens and at the same time treating everyone justly. This may be especially true when it comes to training officers on how to use force effectively.

Using the proper amount of force is an incredible responsibility and officers will often swear an oath to do their best to make that happen. A recent study showed that the general skills necessary to make those determinations, like ethical decision making, critical thinking under pressure, and communication, are perceived by police officers as being the most important training topics for policework (Baker et al., 2017). What is appropriate use of force is governed by case law and what society would deem as reasonable given the circumstances that the officer is faced with at the time of the incident (Graham v. Connor, 490 U.S. 386, 1989). When officers do not use force in a reasonable way, it can have negative effects on communities, as can be seen with the George Floyd case in Minneapolis, the Laquan McDonald case in Chicago, the Eric Garner case in New York, and the Freddie Grey case in Baltimore (Aymer, 2016; Casiano, 2020, White et al., 2018). The police officers in these events used force that was deemed unreasonable by the communities in which they served (Casiano, 2020, White et al., 2018). If the community sees the police acting reasonably, then it may improve community relations between society and law enforcement. In summary, if training is perceived well, it may create a better officer. A better officer may have fewer negative contacts and improve community relations.

Some police academies do not have police video simulators and the information about cadet perceptions are unknown when the two academy types are compared. This study could have nationwide implications if it is discovered that the use of simulators produces a better prepared police officer. A recent study of perceptions of police officers and county sheriffs about training revealed that they thought strategies using experiential learning was one of the best ways
to improve training programs (Edwards, 2019). Police simulators may be seen as an effective experiential learning strategy and more research is needed to study these concepts.
CHAPTER II

FINDINGS AND DISCUSSION

Introduction

A police officer’s legal authority to use force to make an arrest is one of the most controversial and highly contested topics in the United States (Garner et al., 2018). When force is used improperly, especially lethal force, it can have devastating consequences for police officers and the communities they serve across the country (Nix & Wolfe, 2017). After many of these incidents are reported by the media, residents may not trust the police departments that vowed to protect them (Aymer, 2016; White et al., 2018). Because of this, community relations between the public and the local police department suffers (Aymer, 2016; White et al., 2018). Reducing harm to citizens during an arrest, even when it is deemed to be justified, is a common goal of police agencies in the United States (O’Brien et al., 2020). Proper training of police officers is necessary in reaching this goal (Blumberg et al., 2019).

Police officers have a critical role in society which includes making arrests, using force when necessary, and treating all members of society fairly and justly at all times (Owens et al., 2018). This task has been characterized as very difficult by researchers, but society demands and expects it from peace officers at all times (Owens et al., 2018). Police officers often perform many different roles in society (Stephens, 2015). They may need to be a social worker in one situation and an investigator in the next situation, all while communicating effectively with a multicultural community (Stephens, 2015). To prepare a police officer for these varying tasks requires adequate initial and continuous training. A properly trained police officer is one of the
best ways to fill society’s expectations for proper police service, including using force correctly (Makin, 2015).

Baker et al. (2015) recommended that police training on use of force techniques and proper decision making about when to use force can be improved. When realistic training was used by police departments, it improved officer performance, particularly in stressful situations (Arnetz et al., 2009). Many of the cases that caused nationwide media scrutiny can be described as extremely stressful, and so training for these types of encounters is important. Training that focuses on communication and conflict de-escalation, as well as cultural and racial sensitivities, helps to avoid the use of excessive force (Fielding, 2018). The opposite point may also be valid, in that poor training can lead to excessive force. The Department of Justice (2017) declared that deficiencies in training, including de-escalation techniques, led to avoidable and unneeded use of force by officers in the Chicago Police Department. In response to the findings, the Chicago Police Department committed to a variety of reforms, including extensive training. The need for proper police training is great in the United States, and it often begins at a police academy.

Innovation and technology will continue to be a critical component to training and adult learning (Bass, 2018). The goals of educational technology are often to provide broader access to learning while solving deficiencies in curriculum, if it is organized and implemented properly (Bass, 2018; Feldstein, 2018). One training tool that is available at police academies across the United States is police video simulators (Bartel, 2018). Officers are more likely to be effective when they are properly trained (Makin, 2015). Police video simulators are immersive and simulate real-world experiences that may occur when cadets become police officers and are out in the public. Training that involves repetition and hands-on experience is shown to be more
effective than classroom teaching alone (Kolb, 2015). Modern police simulators can incorporate an almost 360-degree view of the learning environment and include realistic sounds and situations that can test cadets’ problem-solving skills and discretion abilities. These simulators create a truly unique experience, and it is important that police training be modern and innovative (Fielding, 2018).

Guided by Kolb’s (2015) model of experiential learning and the general experiential learning theories, this qualitative case study aims to examine police cadets’ perceptions towards police video simulators as a learning method at the police academy. To identify the perceptions of police academy cadets toward the use of police simulators and to establish the efficacy of simulation as a teaching and learning strategy, I collected data from semi-structured interviews with 16 police cadets from a suburban police academy located outside of Chicago. This particular academy curriculum incorporates a video simulator that has a variety of programmed scenarios, including traffic stops, building searches, domestic violence situations, and many other scenarios that are accurate and consistent with what a police officer may encounter in their career. The simulator was made up of several computer-linked screens, a laser pistol, an advanced sound system, and trained and experienced instructors who are able to manipulate the scenario based on the cadet interactions with the presented situation. There was also a debriefing and instruction phase of the training process where there was communication and interaction between the cadet and the instructor.

The purpose of this qualitative case study was to examine police cadets’ perceptions towards police video simulators as a learning method at the police academy. This study was guided by the following research questions:
Q1: How are video simulators perceived by police cadets as a learning method at the police academy?

   Q1a: How are video simulators perceived by police cadets in regard to effectiveness as a learning method compared to other types of learning strategies that are used at the police academy?

   Q1b: How are video simulators perceived by police cadets as a learning method for developing use-of-force discretion?

   Q1c: What suggestions do police academy cadets have to improve the effectiveness of simulators as a learning strategy?

**Literature Review**

In order to briefly describe the critical components of research on adult education theories and concepts, this literature review discusses the fundamentals of adult learning, how experiential learning applies to the learning process for police academy cadets, and how experiential learning applies to the police video simulator as a learning method.

**Adult Learning**

When conducting a study of adults and training strategies, it is important to understand the basic ideas about how adults learn. Adult learning is not a new concept. Alexander Kapp first used the term “andragogy” in 1833, and it was expanded upon by Malcom Knowles in 1959. Andragogy in simplest terms is the art and science of helping adults learn (Henschke, 2016; Knowles, 1980). Knowles (1980) developed the following six assumptions about adult learning:

1) Self-concept is the idea that, depending on the situation, adults have a need to be self-directed learners and adults want to manage their own lives (Akyıldız, 2019; Knowles, 1980).

2) Adults
have useful experiences throughout their lives that can be shared with others and used as a collaborative resource for learning (Knowles, 1980). 3) A readiness to learn refers to the concept that the desire to learn is directly related to a specific need that the adult is facing at that time or may face in the future (Boz & Dagli, 2017; Knowles, 1980). 4) As they mature, adults become problem centered, as opposed to subject centered (Knowles, 1980; Merriam et al., 2007). 5) Knowles (1980) related that personal motivations become stronger than external reasons for learning. Lastly, 6) adult learners desire to know that the topic they are learning about has meaning and value to their current lives.

The general goal of many police academies is to provide training that serves as a foundation for a successful career in law enforcement (SLEA n.d.). The purpose is to transform the police cadet into someone who has general knowledge of all law enforcement topics that they can build upon as a police officer. Jack Mezirow developed transformation learning theory and it involves several key components (Mezirow, 1994; Yarbrough, 2018). It requires reflection and analysis in problem solving, and learner engagement must be very strong. Transformation learning theory involves researching the premise of the problem, discovering the process of problem solving, and analyzing the content of the issue (Mezirow, 1994). This type of learning directly relates to variation in learning strategies that occur at the police academy, including the use of scenario-based training and the use of police simulators. Mezirow (1994) has thoroughly studied adult learning and development, and he described it as “the progressive realization of an adult’s capacity to fully and freely participate in rational dialogue to achieve a broader, more discriminating, permeable and integrative understanding of his/her experience as a guide to action” (p. 226). The notion of learning from experience is an important component to the
effectiveness of adult learning, and this leads to the next theme of this study: experiential learning.

**Experiential Learning**

Many early researchers and scholars defined experience as an interaction between a person, a time and place, and a particular event (Dewey, 1938). Learners create connections from experiences and the results can be either rewarding or negative consequences (Dewey, 1916). Adult learners will learn from an event and either repeat their actions based on some type of reward or avoid it if it does not benefit them. The act of experiential learning or learning by doing is an important part of the literature on adult learning. Merriam and Brockett (2007) noted that experience is a fundamental part of learning theory, and it is difficult to locate learning concepts that do not incorporate the value of experience.

Researchers and scholars often differ on what signifies experiential learning, and it can be very difficult to accurately define. Malinen (2000), for example, explained that “adult experiential learning is a complex, vague and ambiguous phenomenon, which is still inadequately defined, conceptually suspect – and even poorly researched” (p.15). Beard and Wilson (2013) summarized prior scholarship and developed a definition: “Experiential Learning is the sense-making process of active engagement between the inner world of the person and the outer world of the environment” (p. 26). This definition is clear, concise, and focuses on the learner and their environment. The interaction between the learner and the event creates the experience that the adult learns from.
Adults may take that prior learned knowledge and apply it to other new circumstances that they encounter. It can happen in a multitude of professions. For example, the nursing field is using innovations in experiential learning though mannequin simulations. These mannequins are specially designed to give realistic symptoms that a nursing student has to counteract and deal with (Williams, 2019). One of the goals is to retain some of that knowledge that the nursing student has gained to use in the field to help real patients later on (Lisko & O’Dell, 2010). A recent nursing study showed a greater level of success for students who were part of the program with mannequins and experiential learning than those who had not been exposed to it (Williams, 2019). Bigge and Shermis (1992) related that every experience uses information from previous encounters and modifies that information for use in future situations.

**Police Academies and the Use of Simulators**

Police academies currently use of a series of lectures, expert testimony, assigned readings, and films as part of their standard curriculum (Birzer & Tannehill, 2001). It also includes extensive time at the firing range and learning defensive tactics like handcuffing (Perry, 2012). Police academies have begun to incorporate new technologies and innovations into training like police video simulators (Regehr & Leblanc, 2017). Police academies have also adopted new training about reducing officer deaths, avoiding implicit bias, and reducing the use of excessive force (Blumberg et al., 2016).

A common criticism is that police academies across the United States are very slow to adopt new learning innovations and continue to use traditional ways of teaching. Werth (2011) discussed that many educators do not understand the advantages to teaching using key concepts of adult learning theories and they often revert to well-established modes of instruction. With
traditional methods of teaching, learning can be seen as superficial and focused specifically on the information coming from the instructor and going to the student without any engagement or interaction from the student (Wilson et al., 2018). It is important that the best methods are part of the academy curriculum to give the cadets a solid foundation of knowledge. That knowledge could be crucial to creating positive citizen interactions after they leave the academy.

Police work by nature can be very dangerous depending on what situations officers are called upon to mediate. A large part of that danger involves confrontations with citizens. The danger element is not present in police video simulator training, and it is very safe. The purpose of the training is for cadets to use what they have learned and apply it to future situations. Training should seem as realistic and accurate as possible to give the cadet the closest experience to an actual encounter without there being any real danger. When the environment is realistic, it increases the likelihood that the learner will be more attentive and open to learning specific ideas, as opposed to an instructor-centered lecture where participation is minimal (Wilson et al., 2018).

The quality of the teaching is just as important as the method that is used (Wilson et al., 2018). Cadets will be actively involved in a variety of learning strategies at the police academy, and because of this, police academies often seek to maximize their training resources (Perry, 2012; Regehr et al., 2017). A way to do that is to use advanced use-of-force simulators that will allow for efficient and effective training sessions without the need for extra training personnel (Bartel, 2018, p. 1). Technology advances at a fast pace and it is important to utilize these advances in all fields, including police academies. “As use of force simulator technology continues to advance and become further validated with science-based research, there will be
even more sophisticated learning opportunities for law enforcement to ensure they receive the best training possible” (Bartel, 2018, p. 3). If society is demanding properly trained police officers, then technology-based simulators should be a part of well-rounded training curriculum.

**Theoretical Framework**

A central theme of this study is that experiential learning is a valuable learning strategy at the police academy and police simulators can be a part of this strategy. Kolb’s model of learning served as a theoretical framework for this study in addition to general experiential learning concepts. Kolb (2015) defined experiential learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (p. 51). Kolb (2015) described the learning process as the creative conflict and tension in four categories, including concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb & Kolb, 2017). The learning acts as a cycle where the learner interacts with each category of the model and moves from one section to the next as needed. Kolb’s model was selected for this study because the mechanics and structure of the training process using a police video simulator seem to mirror Kolb’s learning cycle. Police cadets go through a simulation of a police experience when they are engaged in a police video simulator scenario, which pairs very well with Kolb’s model of learning.

The first component of Kolb’s model is concrete experience. Concrete experience is an event that has taken place in which the learner interacted with that event or exercise. This event could be a variety of experiences, including an activity, a scenario, or a simulation. Kolb (2015) described concrete experiences as the “here and now” and “immediate” events individuals
experience. It is simply what happens during the activity (Page & Margolis, 2017). It is important to note that the participant must be willing and open to these new concrete experiences (Merriam et al., 2007). The concrete experience phase of the model is the first section of the learning cycle. When it has ended, the next phase begins, which is reflective observation. At the police academy, a cadet will enter the simulator and will first have a concrete experience in the form of an interactive scenario which requires action and decision making to solve the situation.

Next, the reflective observation portion of the model is when a learner reflects on a new experience. This could manifest in many forms, including quiet contemplation or speaking with an instructor and debriefing an exercise. Kolb described this process as “carefully observing the situation and impartially describing it” (Kolb, 2015, p. 105). This phase of Kolb’s model is important because it serves as a critical transition from the concrete experience to actual learning (Kuk & Holst, 2018). The learners see the experience from a variety of perspectives and reflects on it in a meaningful way (Merriam et al., 2007). The learner contemplates how they think and feel and what they hope to gain from the experience in the reflection phase (Page & Margolis, 2017). Accordingly, the cadet will process the experience and mentally analyze what occurred in the concrete experience. They will interpret the information and give it meaning that can be used in later portions of the learning model (Kolb & Kolb, 2017). In the reflective observation stage, the participant is asked to view the experience from a neutral and objective point of view and think about how their interpretations may have changed as more and more time has passed from the initial concrete experience (Kolb & Kolb, 2017).

Additionally, abstract conceptualization is characterized as thinking, using concepts, and processing information based on the experience that the learner was involved in (Kolb, 2015).
An objective or goal of this stage is to develop new ideas based on reflection and thought (Merriam & Brockett, 2007). Another important part of this phase is looking at existing literature and established concepts and how they may apply to developing ideas (Page & Margolis, 2017). As a cadet uses a video simulator, they will debrief the situation and think how their actions and use-of-force discretion fit with department policy, social norms, and community expectations.

The last phase in Kolb’s cycle, active experimentation, involves taking all the knowledge that was acquired during the experience and applying it to an entirely new set of circumstances in a purposeful and practical way (Kolb, 2015). The learner contemplates what they will do differently after having gone through the earlier phases of the cycle and ultimately puts their new ideas into practice (Page & Margolis, 2017). The active experimentation phase allows the participant to test the hypothesis that they created for themselves (Reshmad’sa & Vijayakumari, 2018). The learner can use their new knowledge and experience to make changes and correct problems and as a guide for future situations (Kolb & Kolb, 2017). After completing a session in the video simulator, the police cadet can use the new knowledge gained during the stages of the learning cycle and use it in another session. This may be another attempt at the same scenario or using that knowledge in the future as a police officer.

Kolb’s overall philosophy about learning will explain the mechanism of the cadet training when a police video simulator is utilized. The police cadet constructs meaning from the process that involves their interaction with the experience in the police video simulator. Other types of learning (e.g., lecture) may not be as effective when it comes to police-related topics like developing use-of-force discretion. One of the main components of Kolb’s learning cycle is to have a concrete experience, but learning through experience may be missing from an adult
learning strategy such as a lecture. Kolb’s learning model has been used in conjunction with other vocations that use simulations, such as nursing and teaching, and has shown success (Reshmad’sa & Vijayakumari, 2018; Williams, 2019).

Various phases of Kolb’s learning cycle may be perceived differently by the cadets based on their demographic information like race, education, and age. They may make different decisions in the simulation scenarios based on past life experience, and there may be value in learning about how those differences affect the overall experience. Kolb (2015) related that the learning process is different for everyone. He wrote about how individuality and human uniqueness can be affected by outside factors as well as psychological reasons. Kolb further described this concept as being related to a contextualist view, in that an adult learner’s perception of reality is constantly being altered by their life experiences. The decisions that the learners make can determine the events that they choose to be a part of in the future. Kolb (2015) described adult learners’ prior experiences as a type of self-programming and that they will individually determine which parts of the learning cycle they will focus on. All of these ideas support the view of analyzing responses based on the individual characteristics of participants.

**Research Design**

The main focus of this study was on police cadets’ perceptions of using police video simulators as a learning strategy at the academy. To analyze police cadets’ perceptions, I used a qualitative case study design using interviews. Case studies generally study one particular concept (Bogdan & Biklen, 2007) within a bound system or case (Creswell, 2014). Evaluation of the activities and processes in a current program are an important component of a case study (Creswell & Creswell, 2018; Merriam, 1998; Yin, 2014). Case studies are particularly relevant
when studying a phenomenon within its real-world context (Creswell, 2014). Another reason for doing a qualitative case study is to determine why someone behaves or thinks in a particular way (Harwati, 2019). This closely aligns with this study, which was conducted to determine the perceptions of police cadets towards the use of police simulators within one specific police academy class. The real-world context such as the structure and set-up of the police academy, as well as the timing of when this research occurred and national events that have occurred related to police brutality, are all likely to shape police cadet perceptions and need to be considered in this study.

**Research Site**

The research site for this study was a midwestern police academy located outside of a major metropolitan area. A majority of the 222 agencies that send police cadets to the academy for this study are considered suburban with a population of less than 60,000 people. There are approximately 60 cadets per academy class and the training lasts approximately 15 weeks or 540 hours. There are six police academies in Illinois, including the one for this study, and they are overseen by the Illinois Law Enforcement Training and Standards Board. Cadets must score at least 70% on weekly tests and pass the final certification test to become police officers in Illinois. The cost to send a cadet to the police academy is approximately $4,000, which is set by the Illinois Law Enforcement Training and Standards Board, and this fee is paid by the department or agency that hired the police cadet.

Current police academy training across the United States is delivered using a variety of adult learning strategies, but the two main components are classroom teaching and hands-on learning (Blumberg et al., 2019). The classroom teaching incorporates lectures and standardized
tests, and the hands-on learning involves scenario training, handcuffing, defensive tactics, and firearms training (Blumberg et al., 2019). The topics generally include medical aid, firearms training, handcuffing, criminal law, patrol operations, and investigating crime (Blumberg et al., 2019; Rossler & Suttmoeller, 2017). Academies are often run using a format similar to military boot camp. This style has been criticized as not being attentive to individual student learning needs as well as not being realistic to the goals of community policing when cadets become police officers (Blumberg et al., 2019).

The academy used for this study incorporates a police video simulator. The simulator consisted of a series of video screens in a nearly 360-degree circle and a specifically designed pistol that when fired can interact with the screens. An instructor had access to the computers that run the scenario software. The cadet was given instructions prior to entering the simulator about what they may encounter. The cadet wore a full police uniform, which may be an attempt to add to the realism of the training. The cadet enters the scenario, and the instructor can modify the outcome of the scenario based on the instructor’s assessment of the cadet performance. After the cadet has experienced the scenario, the instructor will often debrief or critique the cadet’s performance and the decisions that were made concerning use-of-force discretion and problem solving.

The goal of the simulation is to teach the cadets proper use-of-force discretion and to use force that is consistent with general police policy (Axelrod, 2020; Bartel, 2018). The hope is that the cadets will properly use force when they become police officers (Axelrod, 2020). The virtual environment allows officers to make mistakes and learn from them. They are able to learn through repetition and they are able to practice proper de-escalation techniques (Axelrod, 2020;
Bartel, 2018). Community members want de-escalation techniques to be used by the police prior to any potential force (Bartel, 2018). The simulators incorporate varying ethnicities of the actors in the scenarios, which allows for instructors to observe if there is obvious bias among cadets when using force (Axelrod, 2020). Bias training is important as many community leaders want everyone to be treated fairly and force to be used properly by the police (Blumberg et al., 2016; White et al., 2018).

**Participants**

I used purposive sampling to select and recruit participants. Purposive sampling is the idea of choosing a particular group or set of individuals who are particularly relevant to the concept or ideas being studied (Maxwell, 2013). The researcher makes the decision about what group will be studied based on their experiences and beliefs about the particular group (Fraenkel et al., 2015). The sample for this study was comprised of 16 police cadets at a suburban police academy in the Midwest. The cadets are volunteers and had completed the police academy approximately three weeks prior to the interviews. After emailing a total of 44 recent police academy graduates and explaining the process to them with two follow-up emails, I successfully recruited 16 participants in this study. Table 1 presents the demographic information of the participants. The names listed are pseudonyms as the participants are anonymous.

**Data Collection**

The first set of data was collected using two rounds of semi-structured interviews with the participants. Interviews allow for the researcher to elicit opinions and views of the participant and control the information that is received (Creswell & Creswell, 2018). It also allows the
researcher to check for consistency of what was observed and to carefully ask relevant questions (Fraenkel et al., 2015). This study focused on perceptions of cadets with the intention of getting in-depth information about how they feel about the police simulators, and interviews are the best fit for collecting data on personal reflections, feelings, intentions, meanings, and thoughts (Patton, 2002).

The first round of interviews were conducted though Zoom due to Covid-19 restrictions limiting in-person contact. The interviews were approximately 45 minutes in length and consisted of a series of questions following the interview protocol for each participant (see Appendix A) in order to set a basic standard for all of the interviews (Fowler, 2014). The questions focused on how the cadets perceived the teaching strategies that were used at the academy and their specific perceptions of the police video simulator training. Because the cadets in this study had recently graduated, the information was fresh in their minds, and they had the maximum amount of academy training and experience in the simulators. Demographic information was also collected. I provided incentive to participate to help ensure that I was able to get as many participants as possible and ensure there was data saturation. A second set of directed or follow-up questions (see Appendix B) were asked several months later to 11 of the 16 original participants who volunteered for the second round of questions. The purpose of the second round was to verify and expand on the initial findings and inquire if perceptions had changed after the cadets had some experience as police officers.

Case studies generally use multiple data sources (Fraenkel et al., 2015; Maxwell, 2013). The second source was observations of the cadets going through the police video simulation training. Observations have been a proven way to collect data and answer research questions that
Table 1

Participant Demographic Information

<table>
<thead>
<tr>
<th>Name</th>
<th>Race</th>
<th>Gender</th>
<th>Age</th>
<th>Education level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diana</td>
<td>African American</td>
<td>woman</td>
<td>25</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Justin</td>
<td>White</td>
<td>man</td>
<td>33</td>
<td>Some College</td>
</tr>
<tr>
<td>John</td>
<td>White</td>
<td>man</td>
<td>30</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Mark</td>
<td>White</td>
<td>man</td>
<td>29</td>
<td>Some College</td>
</tr>
<tr>
<td>Charles</td>
<td>Hispanic</td>
<td>man</td>
<td>26</td>
<td>Some College</td>
</tr>
<tr>
<td>Thomas</td>
<td>White</td>
<td>man</td>
<td>24</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Carol</td>
<td>African American</td>
<td>woman</td>
<td>29</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Anthony</td>
<td>Hispanic</td>
<td>man</td>
<td>25</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Kurt</td>
<td>White</td>
<td>man</td>
<td>33</td>
<td>Some College</td>
</tr>
<tr>
<td>Dominick</td>
<td>White</td>
<td>man</td>
<td>27</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Jeremy</td>
<td>White</td>
<td>man</td>
<td>27</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Brad</td>
<td>African American</td>
<td>man</td>
<td>30</td>
<td>Associate Degree</td>
</tr>
<tr>
<td>Jenny</td>
<td>Hispanic</td>
<td>woman</td>
<td>24</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Travis</td>
<td>African American</td>
<td>man</td>
<td>34</td>
<td>Associate Degree</td>
</tr>
<tr>
<td>Veronica</td>
<td>White</td>
<td>woman</td>
<td>22</td>
<td>Bachelor’s Degree</td>
</tr>
<tr>
<td>Conner</td>
<td>White</td>
<td>man</td>
<td>23</td>
<td>Associate Degree</td>
</tr>
</tbody>
</table>

are part of qualitative studies (Fraenkel et al., 2015). The observations occurred over the course of a typical day at the police academy and focused on the scenario that was being used for that particular training day. I was a non-participant observer in the police academy setting and took notes about what was seen. Observations allowed me to see how the cadets responded to the
situations and the stress that occurred. The observations also allowed me to view the problem-solving skills of the cadets and observe the interactions with the computer software and instruments. It allowed me to see the debriefing process between the cadets and the instructors and observe the learning process.

**Data Analysis**

The interviews were carefully transcribed, analyzed, and later organized into sections. For example, the interviewees’ responses to the questions about what simulator scenario stood out to them the most were grouped together. Those responses were then analyzed to look for potential consistencies. The information was coded into specific sections of information. For example, the cadets’ thoughts on whether or not the simulations represent what they would see in society was documented and put into sections. Creswell and Creswell (2018) wrote about developing themes in the information and generating descriptions of those ideas in the analysis process. Organizational categories involve choosing broad topics to focus on and processing that data into useable sections (Maxwell, 2013). This was the process for the first round of coding.

The second round of coding was about how the information relates to the research questions. When similar information was located, it was clustered into a group and further coded with a category name. For example, many cadets related that a way to improve the training was to add more time and have more access. This fits with the research question regarding improvements to training. The research question and the responses were clustered, and the responses were coded under the subcategory of more time. Another example would be that many cadets said a goal of the police simulator training was to cause stress. The research question about cadet perceptions was paired with the responses regarding stress as a goal under the
subcategory of stress. The strategy of categorizing data with similarities is very common in qualitative research (Maxwell, 2013). In this phase of coding, some of the data was winnowed or disregarded. It is important to pare down large portions of unneeded information (Creswell & Creswell, 2018).

The third round of coding focused on themes and how pieces of information potentially contradicted each other. This round of coding looked past how the items are similar and also looked for connections between the data categories. The goal is to look for possible insights into themes and how inferences may be made towards a better understanding of the concepts involved. Interpretation of the information is very important and can be made throughout the analysis process (Fraenkel et al., 2015).

Finally, I summarized the findings into usable information. This process also generally involves comparing the findings to literature that is available (Creswell & Creswell, 2018). One important idea is that my personal interpretations may come into play based on my history and experiences (Creswell & Creswell, 2018). This is something I was mindful of. The overall goal is to reduce the large amount of information into a summary of the findings (Fraenkel et al., 2015). I hope to attach useful meaning to the findings that can be used in training programs for police academies in the United States. It is important that the summary is accurate and matches what was collected in the interviews (Fraenkel et al., 2015). The summarized results were sent to the participants by email for review and the results were deemed to be accurate by the participants.

The observations were documented using field notes and I organized the data into sections. Creswell and Creswell (2018) recommend using an observational protocol to collect information from observations. This involved having field note forms that can quickly document
different areas of observations. The information was grouped into a coding scheme where similar observations were categorized. Observational information can have researcher bias and researchers should do their best to acknowledge and avoid it (Fraenkel et al., 2015; Maxwell, 2013). The data was analyzed and compared against the collected interview data to create a more complete assessment of the training. An important part of collecting data is to make sure the sample shows data saturation. Data saturation has been described as having repeated answers from participants without having new information being discussed (Creswell & Creswell, 2018). Answers from the 16 participants were continuously repeated. No new information was found, which ensured there was adequate data saturation.

**Trustworthiness**

I checked the validity and reliability of this case study by peer debriefing (Creswell & Creswell, 2018; Fraenkel et al., 2015). This was done with a peer researcher who currently serves as an executive administrator at a local community college and is a former police officer. The peer researcher’s background, experience, and education make him well suited to review the work that was done in this project. He reviewed this study and found it satisfactory. Another way to add to the validity is to clarify and discuss the researcher’s viewpoints and experience (Creswell & Creswell, 2018) This was completed by adding a brief researcher positionality section. Lastly, all of the information was presented, even if it is negative or does not follow the themes and ideas that have been previously seen or studied.

The reliability and replicability of any study is important (Creswell & Creswell, 2018). Procedures and protocols are documented so that others can review them. A copy of the interview questions is Appendices A and B. The transcripts of the interviews were checked for
accuracy and the coding was consistent for the categories of information. A description of the findings was also sent to the participants by email to review and to check for accuracy. This is done so the results can be viewed as realistic (Creswell & Creswell, 2018). This allowed for source checking and analysis of the first round of answers. The participants were also able to express if their views had changed since they had some time to work at their police departments.

**Researcher Positionality**

My past experiences have shaped my perspective. How one views oneself is likely tied to the context they came from and the experiences they have had (Ravitch & Riggan, 2017). Being in law enforcement has shaped my understanding of the value and role the police serve in society. Practicing in law enforcement shaped my approach towards this study in that I want to improve training for officers. The lens through which I view the results is guided by these experiences. Even though I am no longer a police officer, I align myself and my views more as an insider in the profession.

I was a police officer for 20 years. Throughout my career, I have worked in a variety of assignments, including patrol, detective, and school resource officer. I have over a dozen law enforcement-related specialties and certifications. I studied law enforcement as an undergraduate and obtained a master’s degree in law enforcement. My negative experiences with poor law enforcement training have driven me to look for better methods of instruction. My negative experiences towards traditional instruction may be a disadvantage because I already have a bias towards these learning strategies for police-related topics, especially use of force. I understand that I feel this way and I need to do my best to try and be as neutral as possible and keep an open mind throughout the research process.
Limitations

Like many studies, there will be limitations. This study was limited by the amount of time and access to the cadets. I was not given huge amounts of time to discuss the issues that are being studied in the interview. This study was also limited to a time frame of about one year. There may be differences in perceptions over a long period of time that will not be covered in this study. If interviews are done with recent graduates of the police academy, they may not remember their experiences as well as someone who is a current cadet.

Another limitation was Covid-19 restrictions that did not allow for face-to-face interactions with participants. In some ways this may have been more convenient for participants. They were interviewed remotely and at a time and place that was convenient for them. However, some information may be lost by this method. Body language, including body postures, hand gestures, and the distance between the interviewer and subject, can be an important source of information (Denham & Onwuegbuzie, 2013). These nonverbal cues may be more difficult to notice using a video call meeting.

One limitation could be that the cadets may be reluctant to be open with their responses if they do not trust that the responses will not be used against them. If the responses are negative in some way, they may fear that the information will get back to their agencies or to the academy personnel. The cadets were reminded that the I do not have an affiliation with the academy or their home agencies in effort to get the most unbiased answers. Hopefully, I made them feel comfortable in the interview process to avoid this.
The cadets may also feel pressured to complete the interviews as part of an academy process. The academy supervisors may also encourage cadets to participate in the study, which may make the cadets feel that they are required to participate or required to give certain answers. This may affect the overall results. I addressed this issue in detail early in the interview to reassure the participants that their involvement was completely voluntary.

There are limitations to the observations as well. The cadets may be uncomfortable with me observing them. The skills, or lack of skills, of the researcher may be a factor in conducting an accurate observation (Creswell & Creswell, 2018). Researcher bias could be an issue as well in what is sometimes referred to as the observer effect. This is the idea that behavior can change if the participants know they are being watched (Fraenkel et al., 2015). I did my best to not be a distraction in any way during the observation.

**Findings**

After intensive analysis of the results, several themes emerged from the data. The vast majority, 15 out of 16, perceived the police video simulator in a positive way. They generally found it much more memorable than any of the other strategies, like lectures. They ranked it higher in meaning and value than the other forms and they generally found it to be the most beneficial. Even though there was high praise, they also had criticisms and identified areas that needed improvement with the police video simulator. These items will be discussed in detail in this section.
Comparing Cadet Perceptions of Learning Using Different Teaching Strategies

The cadets in this study said approximately 70% of their academy time was spent in lectures, with approximately 30% of time doing hands-on work including scenarios, defensive tactics, firearms training, and physical exercise. The strategy that the cadets said made them feel the most prepared for police work was the scenario work using live actors and the police video simulator. Justin said the simulator activities were “always the most beneficial because it allowed me to cement and apply all the things I have been learning.” The cadets generally felt that they were more prepared for police work from the experiential hands-on learning, which was a smaller proportion of the total learning curriculum. Anthony said, “I feel like that’s where I learned the most, being actually put in scenarios, being hands-on, given different obstacles to navigate through.” This sentiment was very common among the cadets.

There seemed to be a common theme about the negative experience of the lectures. Carol stated, “You don’t just sit there and listen to someone talk to you. I think actually putting concepts into action is much better.” The lecture strategy was also reported to be the least liked learning strategy. They said that PowerPoint was used too much, and the lectures were often very boring, dry, and repetitive. Not all the information was negative about lectures. Anthony said some of the instructors were “awesome when engaging the class” but generally the cadets did not like when an 8-hour day was full of lectures. Conner said the instructors varied, but “some did share personal stories and experiences and videos and audio clips and others would just put plain words on a slide, which deterred the learning a little bit.” The cadets admitted that they realized the importance and understood the benefits of lectures, but they did not generally respond well to them as a learning strategy.
During the observations, the cadets seemed extremely attentive and engaged during the scenarios. They appeared to only be focused on the task that was currently being presented to them. This was consistent with their statements about seeing value in what they were learning. It was not consistent with someone who was merely present but uninterested. It was difficult to tell if they were enjoying themselves, but there was a difference in demeanor between the cadets who completed a scenario successfully and those who had a difficult time. The body language of the unsuccessful cadets generally included less eye contact with instructors and heads hanging low. Successful cadets appeared to be more confident and more receptive to feedback from instructors.

**Perceptions of Learning Using the Police Video Simulator**

The cadets said they interpreted that the main goal of the police video simulator was to expose them to stressful situations and to try to work through them. Jeremy related, “If it does happen for real, you’re going to have some idea what it’s going to be like.” They also thought it was designed to have them make critical decisions in a short time period and to learn from the choices that they made. They also felt that one of the goals of the training was to have the instructors assess their abilities as potential officers and to make decisions about whether or not they were fit to graduate. Justin said the instructors want to know, “Where’s the starting point for this recruit and how do we train them from here?” Nearly all of the cadets said the simulator was successful at reaching those goals. The cadets also mentioned that they assessed each other, which was likely an unintended result. This was not observed directly in the observations, but some cadets openly chose to work with each other and were verbal about it. This was consistent with wanting to partner with someone whom they previously assessed as being successful.
A majority of the cadets said the simulator equipment felt realistic and the scenarios were also relevant and realistic. The simulator pistol fit in their duty belt and had a similar shape and weight to a regular pistol. I observed the cadets using their standard-issue equipment seamlessly with the simulator equipment. Justin described the realism as, “I mean, it puts you into the scene. It made you feel like you were not just in a room. I felt like I was really there.” The cadets said the situations could happen in any town. Brad mentioned that he did not think the scenarios were realistic because they represent some of the worst situations that are not encountered very often. Brad said it may help “break the ice and get you thinking” but it was not realistic to a normal day on patrol.

The cadets said they felt stress during the scenarios, and they were asked to describe how they felt physically during them. Many said they thought their heart rate went up, they felt very nervous, and they had sweaty palms. Many said they experienced auditory exclusion during the scenario. For example, Veronica said:

It shows the auditory exclusion too. There were times they would ask me, "What did that guy say to you?" I'd be like, "I don't know. I don't remember," because I was so focused on his rifle or something. I didn't realize he was saying, "Go f*ck yourself." I had no idea.

Tunnel vision was also mentioned by several cadets. The cadets said they were so focused on a potentially dangerous situation that they missed seeing important information. This was present in the observations. For example, cadets missed obvious clues regarding a second shooter in specific scenarios. They also appeared nervous prior to entering the scenario, which was consistent with their statements about how they felt physically. They spoke with each other very
little prior to going into the scenario. They rolled their shoulders and stretched a bit, which may
have been as a way to relieve some of their nervous feelings.

The cadets said one of the biggest strengths of the simulator was the ability to experience
stress and act accordingly. They also felt that they gained situational experience and it improves
mindset in stressful situations. Jeremy said, “It tests how you would react, as far as who you
would shoot, who you wouldn’t shoot.” They related that the exposure to situations without
actual danger was a strength. It also allowed cadets to work together and practice communicating
as partners. This was present in the observations and the cadets talked with each other to make
plans and alert each other of potential issues. Several cadets said a strength of the simulator was
to show cadets how fast situations can go from bad to worse. John described the biggest strength
of the simulator as follows:

I would say its giving recruits exposure to that kind of situation and its showing us these
scenarios can go from zero to 100 in a matter of seconds, so you really need to be
scanning your surroundings and paying attention, because the one time that you’re not
and you become complacent and you just kind of go in with that kind of mentality is
when you’re going to get hurt.

Four cadets also mentioned that one of the biggest strengths of the simulator was the
ability to experience stress inoculation in a very safe environment. Kurt described it as “a
different way of stress inoculation and try to see how fast you're able to make a decision with the
situation that's given to you and what's going on around you.” They described the environment as
safe and there were no real consequences if they made a mistake. They said they could make
mistakes and it was not a serious issue, compared to the real world, which was a real advantage.
This concept was present in the observations when the instructors repeatedly discussed how simulator training was the time and place to make mistakes, as opposed to on patrol.

**Perceptions About Use-of-Force Discretion Development**

The cadets were asked about how the police simulator training affected their use-of-force discretion. The cadets generally said that their discretion improved and then they spoke about the strategies that they learned to improve their discretion and decision-making abilities. For example, many cadets answered what they learned about improved the use of cover. This is the concept of finding the safest area to stand in a dangerous situation, which ultimately gave them more time to make a decision about using force. Justin related the following:

> I mentioned that I used that cover, which gave me that time. There were certain things that they had taught us in the classroom that I applied in that moment and saw how it worked. I saw how it gave me that benefit when I was behind the cover.

Having extra time was emphasized by instructors during the observations.

They discussed how their verbal de-escalation skills improved because they were able to practice in a realistic scenario. Practicing these skills was present in the observations and several cadets talked throughout the scenario. The instructors also reinforced this concept in their debrief. The instructors offered suggestions about how to improve the cadets’ technique, like communicating with their partner and various threat-assessment strategies.

The cadets discussed how the practice and repetition of going through the scenarios was very helpful to the learning process when it came to use-of-force discretion. Even the potential errors during scenarios had value. For example, Kurt related the following:
Like I said, the mistakes that were made here, it kind of sticks with you afterwards like, "Oh, God. Why did I do this? Why did I do that?" Yeah, it's a scenario, it's a controlled environment, but it sticks with you, like, "Okay, if this was real life, it would have been a problem."

This shows that the cadets not only took the experience very seriously, but they considered the possible outcomes if the situation were real.

The cadets also said their threat identification skills improved through practice as well as making a split-second decision under pressure and stress. Thomas related, “I think the main way it changed was it really makes you look and think before you do something, really process what’s going on.” They also mentioned that they felt more confident about making a use-of-force decision after having gone through the training. Dominick related, “It made that decision-making process a lot more coherent for us. It made it more, I wouldn’t say easier, but it made it more practical for us.” The cadets felt the decision to use force was one of the most critical concepts to learn at the police academy. The observations reinforced these statements in that the cadets seemed to take all of their time in the scenarios very seriously. At no time did any of the cadets seem bored or uninterested. No cadet in any of the observations attempted to argue or justify a bad decision with the instructors. They were very respectful. The instructors also gave feedback in a respectful way and did not raise their voices at the recruits.

The cadets were asked in follow-up interviews about how their use-of-force discretion and discretion development may have changed since they left the academy. Many said that it did not change; however, one major difference was now they have the benefit of learning and developing their use-of-force discretion from watching their fellow officers. Anthony said, “I have been fortunate to be around officers where they have been able to de-escalate a situation
very well by connecting with people.” They also felt that many of the de-escalation techniques that they learned at the academy and used in the simulator were validated by successful interactions with people on patrol. Carol said, “Your voice is your strongest weapon if you know how to use it.” The process of developing use-of-force discretion has changed for the cadets in that they are able to practice the skills that they have learned and observe those skills in other officers.

**Cadet Improvement Ideas for the Police Video Simulator**

The cadets gave ideas about how to improve the training. Nearly all of the cadets mentioned that they wanted more time in the police video simulator. This was the most common idea. They also said the simulator needed the ability to be more interactive. The instructors were limited with how they could make the characters on the screens react. Some cadets mentioned that the scenarios could use a refresh and seemed to be dated with clothing and the styles of the characters. Some cadets said a night-time scenario would also improve the training. A cadet also mentioned that they would like to see the instructors conduct the scenario to show them exactly how it should be done. The cadets said the scenarios were often too short and needed to be much longer. Several participants related only in the follow-up interviews that they wished there were more scenarios related to traffic stops, as this is what they are doing frequently on patrol. They also mentioned in follow-up interviews that they would like ongoing training using simulators in their home agencies. During the observations, no night-time scenarios were conducted. The instructors did occasionally step out onto the simulator floor to give direction, but they did not go through the scenario as a participant. The cadets said the scenarios generally keep them confined in a small space and they wished that could move around more. This idea was present in the
observations as well. The cadets generally moved about 10 feet or less in any direction while they were in the simulator.

Many cadets said the calibration or accuracy of the shot seemed to be off and that could be improved. The observations were not consistent with this idea. The cadets generally did not appear to be consistently off with their shot placement. A follow-up question was asked in the later round of questioning about whether or not it could be related to the stress that they were under during the scenarios, as opposed to the equipment malfunctioning. Some of the cadets said it is possible that their inaccuracy with the simulator pistol was related to the stressful circumstances of the simulator and being in the police academy.

**Discussion and Recommendations**

The findings in the study support the idea that the cadets perceived the use of video police simulators as a learning strategy in a positive way. The simulators provided a learning experience that allowed them to think critically and reflect upon the scenario. They are able to use the knowledge from the experience in new situations. Their positive perceptions of the simulators reinforce the idea that it was an effective learning strategy. The cadets put a very high value on the training compared to other learning strategies. This is consistent with the literature review and theoretical framework in that experience has value to the learner (Merriam & Brockett, 2007). The experience helped the cadets make sense of the information they were being taught and how to apply it. This directly relates to the literature created by Beard and Wilson (2013) in that the experiential learning process is the interaction between the engagement in the exercise, the person’s internal thought, and how it will apply to their lives in the future. The cadets said they were able to recall the events that they experienced very clearly, often more
than the information that was presented in lectures. The cadets said they would use those experiences and memories in the decision-making process for future events.

The concept directly relates to Kolb’s model of experiential learning. Not all of the four stages of Kolb’s model may have been present for every scenario that the cadets went through. For example, the final stage of Kolb’s model, active experimentation, may not have been present because the cadets did not have the opportunity to repeat the same interaction. This idea of learning from the experience to not repeat the same mistakes is part of Kolb’s final stage, but it was not always present and was not specifically present in the observations.

The cadets’ perceptions and behaviors throughout this study were consistent with adult learning concepts. For example, the cadets discussed how they perceived the high value of using the police video simulator. This is consistent with Knowles’s (1980) assumptions about adult learners and the need to have value as a motivation for learning. The cadets also displayed a readiness to learn, which is on par with Knowles’s ideas about adult education (Knowles, 1980).

The cadets related that they had improved their decision-making abilities by learning new skills that will give them more time to think about their options. They transformed themselves through this process of learning. Mezirow’s transformation learning theory (1994) fits with this notion. The reflection and analysis of the experience are major components of Mezirow’s theory, and it was seen in practice at the police academy when the cadets debriefed with the instructors about the specific scenarios. The instructors guided the cadets to reflect on their performance and what could have been improved upon. Kolb (2015) also strongly emphasized the importance of reflection and how it should be an internal transformation of the experience for the learner. This idea can be viewed as especially important when discussing critical thinking related to discretion.
development. It can go beyond the initial ideas of training and focus on educating the learner about the very crucial topic of use-of-force discretion.

The perceptions of the cadets in this study reinforce the strong recommendation that police video simulators should be incorporated into teaching use-of-force concepts at police academies. They supplement the information that is taught in the classroom and allow the cadets to practice by going through an experience. Their use-of-force discretion is improved through the development of new skills and can ultimately lead to a properly trained officer. Critical thinking and decision making under pressure are skills that are highly valued in police officers (Baker et al., 2017). Academies that use simulators can improve those skills and move closer to the goal of producing an officer that can effectively serve the community.

**Recommendations for Improvement of the Learning Process**

As far as recommendations for police academies and curriculum, the overwhelming response from cadets was asking for more time in the simulator. The cadets were asked how much time they thought was needed and the answers varied. Some said they thought the time should be doubled and some thought it should be used as much as possible. The simulator is primarily used to teach cadets about topics related to use-of-force. The time could be expanded if the software were expanded to include other topics that are encountered by police on a daily basis. Students wanting more time is normal when new technologies are adopted in the learning environment (Shatto & Erwin, 2017). This is especially true with millennials and many young cadets fall into this age category (Shatto & Erwin, 2017). If technology is well accepted, wanting more time is often a sign of success (Wedlock & Trahan, 2019).
Based on the improvement ideas of the cadets, the manufactures should consider ways to allow for more movement. Perhaps the cadets could choose an area to move to, based on the circumstances, to allow for greater flexibility. The cadets are currently not able to go into other rooms, so it may be beneficial to explain to an instructor that they would like to open doors or go into other rooms that are on the screens. There is also a new movement-based system, created by Virtuix, that uses a device similar to a treadmill to allow movement during virtual-reality simulations (Omni by Virtuix, n.d.). This type of technology could be used for police video simulators in the future.

An implied question arising out of this study is why a learning strategy that is perceived so well by cadets is used sparingly when compared to the other forms of instruction, like lectures. There is a lot of background information that should be explained to cadets prior to use of simulators and lectures should be fine to convey that. The actual practice of using that information to develop use-of-force discretion and performing under pressure should be done safely using a simulator. It is recommended that all police academies use them to develop skills and expose cadets to experiences that can be recalled in the future, even if it is manufactured. The combination of classroom instruction and a simulated training environment has been proven to be efficient for learning, job performance, and understanding how theories related to law enforcement can be put into practice (Blumberg et al., 2019). The benefits of using a simulator seem to far outweigh the negatives and should be part of a successful police academy curriculum. Part of that success is graduating officers who will use force properly, think critically, and serve the needs of everyone in society to the best of their abilities. This is more likely to occur if officers are trained properly (Makin, 2015).
This study was on the perceptions of police cadets on the use of police video simulators as a learning strategy, and research in the future could focus on repeating the study to see if there are differences in academy classes moving forward. Other types of academies could also be studied, including urban and rural academies. There are also differences in training styles between agencies. For example, the conservation police have a different academy experience from more traditional police academies (Rossler & Suttmoeller, 2017). It could also be expanded to include research on police departments that currently use police video simulators. The perceptions of veteran police officers could show similar ideas or have vastly different results. Some of the skills learned in the simulators are considered perishable and so veteran officers would benefit from ongoing training in their careers (Blumberg et al., 2019). These complex motor skills, including those used with lethal force, are often reinforced using simulators (Di Nota & Huhta, 2019).

**Conclusion**

The goal of this study was to analyze the perceptions of police cadets on the use of police video simulators as a learning strategy. I used the framework of experiential learning and Kolb’s learning cycle as a guide to better understand the learning process that the cadets undertook during the time that they used the police video simulator. The results show that the cadets placed a high value on the experience of using police video simulators. The cadets preferred police video simulators to other learning strategies, and they perceived that they improved the skills associated with discretion and use of force. This study indicates that there is a benefit to using police video simulators as a learning strategy for cadets and they should continue to be used at police academies. Recommendations were made with how to improve the police video simulator
experience with more access and improved mobility. Further research is needed to look at how police video simulators may benefit current police officers as part of a use-of-force training program.
CHAPTER III

SCHOLARLY REFLECTIONS AND FINAL THOUGHTS

Starting the Dissertation Journey

Reflecting on the process of a dissertation is important for the researcher (Kember et al., 2008). The experiences that I went through harken to all the experiential learning literature that I have saturated this dissertation with. I would like to discuss the obstacles and the successes along the way, what the findings may mean to law enforcement training, and what the process has meant to me. One of the greatest concepts I learned during the process is how much perseverance is needed to complete every part of the process to complete a dissertation. I experienced so much during all the stages of the dissertation process, and it starts with how this topic was chosen. There are many reasons, but they center on improving the training of police officers when it comes to the critical task of using force properly. I wanted to study the use of technology in police training and how adult education strategies are being utilized. The goal is to lessen the potential for improper actions and avoid high-profile incidents. If this can be done, then the current image of police officer may ultimately change.

I was a suburban police officer for 20 years in an affluent town of approximately 30,000 residents. The town had a steady, but very manageable, crime rate for the 40-officer department. Most people in the town seemed to appreciate the police and we waved to each other as we passed by. The town and the Police Department were idyllic in many ways. This was often in stark contrast to what is being portrayed in the media. When I was hired, there were 300 people
applying for the open positions. At the end of my career, there were less than 100 for a job with reasonable pay and benefits. I cannot help but wonder about the reasons behind the decline in applicants.

Regardless of the reasons, I knew that the police officers I worked with were good people, and police officers across the United States were good people. I wanted the current image of police officers to improve. Avoiding bad exposures is one way to do that. A very recent case is a prime example of negative exposure. A police officer, Kimberly Potter, was charged and ultimately convicted of manslaughter for the killing of Daunte Wright (Bogel-Burroughs, 2021). She improperly used her firearm during a traffic altercation when she claims she meant to use her taser. It’s unclear what effect stress may have had on the situation. It’s also unclear what effect training under high stress may have had to mitigate this situation. I wanted to study this possible relationship. In my opinion, the safety of the public is more important than the image of the police, but if there is a way to make citizen encounters with the police safer and improve their image at the same time, then it is a win-win situation for everyone.

Another reason I wanted to explore this idea was because of my own experiences with police training. A lot of the standard police training was lecture based and there was very little interaction with the instructors. To myself and the classmates I spoke with, there seemed to be a small amount of useful information in an 8-hour class. There were some exceptions, and some training was excellent, but generally it was poor and was difficult to get through. After taking extensive classes on education and learning, I discovered that there are better ways to instruct adult learners. I wanted to study how those strategies could be incorporated to improve police training.
In summary, my own desires to improve the safety of the public, my desire to change the current image of law enforcement, my own experiences with police training, and the new knowledge I obtained about adult learning led me to choose this topic. I am pleased with this decision, and I hope it has value to someone else someday.

**Connecting Research to Practice**

From a directly professional standpoint, there are many skills and insights that this research process has given me that can be used on a practical level. This can be related to my current profession as a community college professor to benefit my students. The knowledge I have gained is very versatile and can be used in a multitude of ways.

When I am asked by my current employer to conduct research for a project, I have experience with the process. I understand simple concepts like gathering peer-reviewed sources and more complex topics like data saturation. All of these lend credibility to what I may be working on in the future. If I have to give a lecture, I can back up my points with sound and reliable information. I understand what goes into a good-qualitative study and can review other professionals’ research and give advice. Someone who does not have the experience of years of work on a research study may not be able to give the same insight into a project. I’ve also gone through some of the growing pains of research, and I know I can improve upon the research skills that I have acquired. My interviews improved after each one was conducted, and I think the same will be true for future projects. They will improve as I do more.

This study is on police simulators and the school that I am currently employed with has a simulator. It is not as advanced as the one at the police academy that was studied, but the knowledge gained from this study will be helpful when it is time to replace it with something new. I understand how to implement it into a training program and how to incorporate it into my
classroom. I have extensive knowledge on the technology aspects of the simulator as well as a rich understanding of adult-learning concepts and theories. When I make suggestions, I have solid reasoning behind them. Completing this study gives me that advantage.

Police video simulators will be added to several of my criminal justice courses as a learning strategy. When course curriculum is audited or checked by a dean or a program supervisor, I can explain the reasons behind incorporating technology into the classroom. I will relay the potential benefits of experiential learning to teach use-of-force practices as well as basic patrol strategies and tactics. The practical benefits of this knowledge did not always come easy. I learned this information after overcoming obstacles.

There were several issues that I had during the dissertation process, and I took them very hard when I probably did not need to. In my opinion, we are always hardest on ourselves. I incorrectly thought that the best way to get cadet perceptions was through a quantitative, data-driven, measurement study. This was not the case and, even though it was hard at the time, changing the study to be qualitative and interview based was the best thing I could have done. It created a much better final product. After the first email was sent out for participants, I only received two responses within the first couple of days. I was devastated at the time, and it felt like a huge setback, but I ended up with 16 participants after three emails were sent. This was so much more than the ten I was originally planning for. I had fears about getting a dissertation committee together, getting through the dissertation proposal interview, getting permission to do observations, and conducting the second round of interviews, among many others. Every step was difficult and every obstacle felt like a setback. I learned that perseverance is the only way to get through any setbacks and, ultimately, I am proud of sticking with this. I said from the beginning that I refuse to fail.
In some ways Covid-19 was both a curse and a blessing. It was a curse in that my timelines were altered due to the academy shutting down for a long time period. It was a blessing in a lot of ways because I was able to interview cadets via Zoom, which was much more convenient for them and for me. It may have helped with getting solid participation numbers. It was also easier to record the interviews and ultimately have them transcribed. It was a bit of a challenge when my observations occurred because there were strict protocols about who could be at the police academy during the pandemic. I had to get special permission to attend and was ultimately given access.

If I could do it over again, I would not change my sample group. I would advise someone else going through the process to find a group that was easier to access. The police cadet population posed a lot of unique challenges. First was gaining permission from the academy personnel who may have been guarded about granting access to me. The current issues with the image of police may have given them pause about my intentions. They did not want any negative attention or anything that may show the police academy in a bad way. Luckily, being a police officer gave me some validation and I also explained the process as best as I could. In my opinion, this access would be unlikely for someone who is not a current or former police officer. The cadets may have also been reluctant and may not have fully understand what my intentions were. Again, the validation of being a police officer helped me at the time as being a member of their group.

An aspect of this process that I would do differently is pick a different time frame to do this. There is never perfect time to do a dissertation while working full time with a family, but there are times that are harder than others. The time I ended up doing this project was particularly difficult because I retired from a steady career of 20 years and started a new career.
Leaving one job required a lot of effort and starting a new career was a huge amount of work. The new position required me to plan and create six courses that I had never taught before and facilitate them as best as I could. It required me to learn new online software and a whole new way of doing things. A steady time period without a lot of major changes would have been better.

**Practical Implications and Recommendations**

I have also learned so much about experiential learning concepts and their benefits. I incorporate that into my classes as much as I can, and I have found success with it. For example, in my current position I wanted students to do some hands-on learning in a mock crime scene. I borrowed furniture from the theater department and even an unused mannequin from the nursing department. I set up the mock crime scene so students could take measurements and photographs. They were also able to think critically about what they were doing, and the hope is that the experience was worthwhile and memorable. I believe it was, and even the quietest of students participated in the activity. The results from this study show that there is value in hands-on learning and I am able to use that in my current role.

Another important concept that I learned from this study is the importance of technology in all types of adult learning. This can be a part of academy training, traditional classroom instruction, or informal instruction like teaching community groups about police-related topics. I would be a huge policy advocate towards incorporating all forms of technology into standard curriculums. The findings show that it can be successful when teaching about critical thinking and decision making and it helps to engage learners through experiential learning. Technology can move the learning experience out of the classroom, and it can be meaningful and memorable for the students. It is meant to supplement the standard lecture strategy and build on the topics
that are discussed as opposed to ending the learning experience after the information has been presented. Technology will continue to advance, and institutions of all types should take advantage of new innovations.

Based on the findings of this study, law enforcement agencies should attempt to coordinate more time in the simulators as part of quarterly training. Most departments require annual firearm and use-of-force training, and this can be accomplished using police video simulators. The benefits of critical thinking using a simulator are obvious and ongoing police training using simulators was mentioned several times by the police cadets in the study in the follow-up interviews. The cost is often a factor in whether or not an agency uses a police video simulator; however, there are many creative solutions to getting access. Some agencies have banded together to share the costs of the purchase. Some have teamed up with local colleges for the use of a simulator and many area police departments use the one at my college.

The findings of the study strongly suggest that manufacturers look at ways to incorporate more movement into the scenario experience. Many cadets asked for this option, and it is more realistic to what would happen in the field. The findings show that cadets wanted much more time in the simulators and wanted a variety of opportunities to use it. Manufacturers should find ways to make the software as versatile as possible to use in more police-related topics like civil law, traffic crashes, hazardous materials, and people with disabilities, among many others.

**Direction for Future Research**

This study opens the door for future research. It can be expanded to include police academies in other areas of the United States and in other areas of the world. Many countries, especially those with fewer resources, do not use simulators and it would be very interesting to take a simulator to another country and culture and measure the perceptions of those cadets
towards police video simulators as a learning strategy. The studied groups also change over time, and future generations of cadets may have vastly different perceptions of the same experience. The participant group could also change to study current officers who use police video simulators for ongoing police training.

This study is also inspiring to look at other learning strategies at police academies. Many academies use live actors to help cadets navigate scenarios. Studying this particular method could be a completely independent research study or it could be used in a study which compares and contrasts the two learning methods. The information gained from those two studies could be used to shape police and curriculum changes at the academies nationwide. It would be valuable to look at the differences between cadets who have been to an academy with a simulator and those who have not. If there is a significant difference, it may be worth the investment to have them installed in all police academies.

This study also has the ability to become a longitudinal study. The current cadets will soon have a few years of experience and their perceptions may change after having been part of their home agencies for a considerable amount of time. The cadets, now officers, may have new insight into the training and what is really important. Even after the first round of interviews, their views changed and there were several requests for more traffic stop scenarios. There could be other suggestions that come forward as well. Supervisors and firearm training instructors could also be added to the studies to see if their suggestions are different from the participants.

**Final Thoughts**

In my opinion, every graduate student has a goal of changing the whole world when they start a dissertation. This is especially true if that dissertation has meaning to them. Everyone wants to find the magic cure for a major problem that they discovered. If that does not happen,
then graduate students may need to temper their expectations and look at the positives that came out of their extensive research. There is great value in adding to the body of research on a topic, even if it does not cause a monumental shift in thinking.

In summary, the results of this study showed the cadets put a high value on the experience of using the police video simulators as a learning strategy. They saw it as vital to their academy education and it was superior to the other forms of learning strategies. They discussed using the knowledge that they gained in their careers. The ideas about thinking about all of the use-of-force options and finding cover to give themselves more time to assess the situation are especially important. The experiences will be recalled and used as guides to make decisions. They had great ideas for simulator improvement, even though that was not part of the academy process.

In many ways, I was hoping to find these results. I was hoping that the results would be useful for academy curriculum creators as well as agencies that currently are looking for ways to improve their training programs. I was hoping to find more on developing use-of-force discretion, but I did not. I found more about how cadets found ways to improve their abilities to make use-of-force decisions, but not specifically how they changed.

I explained why I chose this particular topic of study. I did not explain why I did a dissertation and, more importantly, why I chose to get a doctorate. The reasons are probably different for everyone, but for me, I wanted to achieve something that very few people commit to. After facing multiple challenges, I fully understand why so many students do not finish their dissertations. I wanted to achieve this for myself to open doors to new opportunities in the teaching world. I wanted to be a full professor, and getting my doctorate will be a part of that.
Having the title of doctor is neat, but titles haven’t meant much to me and it wasn’t a huge factor in the decision-making process.

I came across my great grandfather’s obituary years ago and it showed that he passed away at 46 years old. He started as a water boy for the railroad and worked his way to become a superintendent of superintendents. After he died, they named one of the largest railyards in the country after him, the Kirk Yards. He achieved incredible success through extreme hard work and being able to work with people to accomplish a goal. I owe him and many other family members for their sacrifices to get me to this point. If they can achieve, I can as well. In many ways, my success is their success. I hope that someone reads my obituary someday and feels the same way after seeing what I have accomplished.
REFERENCES


APPENDIX A. FIRST-ROUND INTERVIEW PROTOCOL

The purpose of this qualitative case study is to examine police cadets’ perception towards police video simulators as a learning method at the police academy. You have signed/acknowledged the consent form. The information from this interview will be recorded, but the information that is specific to the participants, such as name, date of birth, and police agency, will remain confidential and will not be recorded.

Do you have any questions before we begin?

Introductory Questions:

1. I would like to start by obtaining some basic demographic information. (age, gender, race, education level)
2. Briefly, why do you want to be a police officer?

Police simulator perceptions and learning strategy questions:

1. What types of adult learning strategies, such as lectures, group work, or hands on training, were present at the academy and approximately how much time was designated for each portion?
   • What particular strategy or learning format that was the most memorable for you?
   • What strategy did you connect with the least or had difficulty with?
   • What training has made you feel prepared for police work?
   • What strategy did you feel was the most effective for you?
2. How would you describe the realism and accuracy of the simulation?
3. What scenarios stood out the most to you and why?
4. What do you think the goals of the simulation training are?

5. In what ways was the simulator training effective at reaching those goals?

6. What was the biggest strength of the police video simulator training?

7. What was the biggest weakness of the police video simulator training?

8. What is your overall opinion about the effectiveness of the police simulator as a learning strategy?

**Use of force discretion development questions:**

1. How did using force in the simulator make you feel?

2. Please discuss your decision-making process when confronted with a situation that may require using force?

3. Based on what you have learned during the simulation, how do you feel your use of force discretion and has been affected by this training?

4. Based on what you learned during the simulation, how will you approach patrol tactics and strategies when you become a police officer?

5. Please describe your thoughts on developing use of force discretion using police simulators.

**Suggestions and ways to improve simulator training questions:**

1. Please discuss any issues that you had with the police simulator training?

2. What, if anything could be done to improve the simulator training?

3. What would have liked to do more of or what was not needed?
APPENDIX B. SECOND-ROUND INTERVIEW PROTOCOL

1. Do the summarized results generally seem accurate to you?

2. How do you feel about the accuracy of the simulator scenarios now that you have been a police officer?

3. In what ways did the simulator training meet the needs of your duties as an officer?

4. In what ways did the simulator training not meet the needs of your duties as an officer?

5. How has your opinions changed about the use of simulators at the police academy?

6. How do you feel about the idea of using police simulators for continuous training as an officer?

7. You likely know more about department policy, your community norms and politics, and how your co-workers do things. How has your use of force discretion has changed now that you have had some time as a police officer?

8. What improvements or suggestions would you give for the video scenario training, now that are a police officer?

9. What advice would you give police cadets who are going to be using the police simulator?

10. Is there anything else you think I should know about the training at the academy in regard to the simulator or your experience?
APPENDIX C. CONSENT FORM

Study Title: Police Cadet Perceptions of Learning Using Video Simulators

Investigators
Name: Stephen Miko  Dept: HESA  Phone: (630)768-1813

Key Information
• This is a voluntary research study on police cadets’ perceptions of police video simulators.
• This study will occur over a six-month time frame and involves interviewing current and recent graduates of a police academy that uses a police video simulator.
• The benefits include adding to the body of knowledge about experiential learning and police cadets’ perceptions about using police video simulators as a learning method. There are no foreseeable risks with participation in this study.

Description of the Study
The purpose of the study is to ask police recruits about their perceptions related to the use of police video simulators as a learning strategy at the police academy. If you agree to be in this study, you will be asked a series of questions in an interview using the Zoom application over an approximately 45-minute time frame. A second follow up interview will be conducted at a later date.

Risks and Benefits
There are no reasonably foreseeable risks in participating in this study.

The benefits of participation in this research study are that the body of knowledge regarding police cadet perception of police simulators will be broadened. The information collected during the interviews will be important to the understanding of experiential learning, use of force learning methods, and how the technology of police video simulators is perceived by cadets.
Confidentiality

- This study is confidential. We will not be collecting or retaining any information about your identity.
- The records of this study will be kept strictly confidential. Research records will be kept in a locked file, and all electronic information will be coded and secured using a password protected file. The video file of the interview will be kept with the researcher on a computer that is password protected. The interviews will be erased after one year. We will not include any information in any report that we may publish that would make it possible to identify you.

Compensation

You will receive $100.00 as compensation for your time. This payment will be sent following completion of the initial interview. It will be sent electronically or in any method that the participant chooses. There will not be compensation for the follow up interview.

Your Rights

The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time. Your decision will not result in any loss of benefits to which you are otherwise entitled. You have the right to skip any question or research activity, as well as to withdraw completely from participation at any point during the process.

You have the right to ask questions about this research study and to have those questions answered before, during, or after the research. If you have any further questions about the study, at any time feel free to contact the researcher, Stephen Miko at smiko@comcast.net or by telephone at 630 768 1813 or Dr Xiaodan Hu at (815)753-6878. If you have any questions about your rights as a research participant that have not been answered by the investigators or if you have any problems or concerns that occur as a result of your participation, you may contact the Office of Research Compliance, Integrity, and Safety at (815)753-8588.

Future Use of the Research Data

Your information collected as a part of this research will not be used or distributed for future research, even if all identifiers are removed.
Your signature below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above. You will be given a signed and dated copy of this form to keep, along with any other printed materials deemed necessary by the study investigators.

________________________________________________           _____________________
Participant’s Signature                                    Date

I give my consent to be audio and video recorded during the interview with the researcher in this study.

________________________________________________           _____________________
Participant’s Signature                                    Date
Exempt Determination

25-Feb-2021

Stephen Miko (z1757836)
Counseling, Adult and Higher Education

RE: Protocol # HS21-0256  “Police Cadet Perceptions of Learning Using Video Simulators”

Dear Stephen Miko,

Your application for institutional review of research involving human subjects was reviewed by the Office of Research Compliance, Integrity, and Safety on 25-Feb-2021 and it was determined that it meets the criteria for exemption 2.

Although this research is exempt, you have responsibilities for the ethical conduct of the research and must comply with the following:
**Amendments**: You are responsible for reporting any amendments or changes to your research protocol that may affect the determination of exemption and/or the specific category. This may result in your research no longer being eligible for the exemption that has been granted.

**Record Keeping**: You are responsible for maintaining a copy of all research related records in a secure location, in the event future verification is necessary. At a minimum these documents include: the research protocol, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to participants, all correspondence to or from the IRB, and any other pertinent documents.

Please include the **protocol number** *(HS21-0256)* on any documents or correspondence sent to the IRB about this study.

If you have questions or need additional information, please contact the Office of Research Compliance, Integrity, and Safety at 815-753-8588.

**Please see the RIPS website for guidance on the impact of COVID-19 on research(including face-to-face data collection)** [https://www.niu.edu/divresearch/covid/index.shtml](https://www.niu.edu/divresearch/covid/index.shtml)