

ABSTRACT

Title of dissertation: EFFECTIVENESS AND IMPACT ON JOB
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Few issues are more complex and require more effort than the training and performance of law enforcement personnel to be competent in a society where their performance is significantly important and multifarious to the general public. It is imperative that our law enforcement personnel are well prepared in their respective training programs and in skills that are transferable to their jobs. The theoretical lens that guided this research is the Kirkpatrick (Kirkpatrick & Kirkpatrick, 2006) model. The purpose of this study was to determine to what extent graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceived their learning experiences to be effective and transferable to their job. There were no significant differences in the Total Effectiveness, as it relates to Reaction, Learning, Behavior/Performance, and Results/Impact of graduates job performance. The findings of this study also suggest that law enforcement personnel employed by different types of agencies did not differ in their perceptions of the total effectiveness of the law enforcement

training program at the academy hosted by a Mid-Atlantic regional community college.

EFFECTIVENESS AND IMPACT ON JOB PERFORMANCE OF A COMMUNITY
COLLEGE LAW ENFORCEMENT CURRICULUM

by

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DEDICATION

I wish to dedicate this dissertation to my merciful God, my mother (Rosemaria) and my grandparents (Virginia and Frederick) for your unconditional love, selfless sacrifices, commitments, dedication and belief in me and my abilities. Words, thoughts, and actions can not express my gratitude for all that you have done to help me achieve who I am today, and where I am going in the future. May they always be aware that my love is endless from the earth to the heavens, and forever more. Thank you!

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CHAPTER 1

INTRODUCTION

Few issues are more complex than the training and performance of competent law enforcement personnel in a society where their performance is significantly important and multifarious to the general public. This is particularly so when the media is filled with reports of unethical issues, poor training, incompetence, and mishaps within the communities that law enforcement officers serve (Carter, 2015; Pollock, 2012). Law enforcement “training is as important as doctors attending medical school or lawyers passing the bar exam” (Hawkes, 2017, para. 1) and persists even through many arduous challenges (e.g., acts of terrorism, increases of criminal activity on social media, possible inadequate and poorly developed law enforcement curricula, etc.). Given these profound challenges, it is imperative that our law enforcement personnel are well prepared in their respective effective training programs and possess skills that are transferable to their job.

Background of the Study

In the past century, academies located at community colleges have assumed this important training role and responsibility for law enforcement personnel. Police training has evolved from an apprenticeship approach based on the job training to a more formalized approach that is used today. With the evolution of law enforcement, so has the emphasis on education and training, especially during the professional era of policing by providing standards,

regulations and procedures in law enforcement training (Scheina, 2013). Law enforcement training academies and agencies must prepare personnel with sufficient skills in “federal and state laws, evidence handling, prisoner transport, defensive tactics, firearms, driving, customer service, [community policing], and many other areas of law enforcement” (Hawkes, 2017, para. 2). These competencies must be assessed to validate the course and instructional effectiveness.

To evaluate the effectiveness of a training program, a useful definition has to be employed. Franklyn (2013) defined effectiveness as “student success [and satisfaction], meeting the goals [e.g., crime reduction, effective education and training, stronger community relationship, less unethical behavior] and mission of the institution, client [and citizen], or the view or perception of stakeholder” (p. 4). Other researchers have defined effectiveness as “resulting in enhanced professionalism, more accountability, [effective outputs and strong academic outcomes], higher awareness of the need to provide better services to students [and to the community], and their ability to resolve other” ongoing quality of life issues, dilemmas and problems within the community (Franklyn, 2013, p. 8).

Because of the numerous training complexities involved, it is crucial that academies located at community colleges effectively educate and evaluate whether the learning experiences and skills taught to law enforcement students are “applicable in practice” once employed (Cayirdag, 2016). Law enforcement academies commonly use surveys at the completion of their courses and

programs to determine training effectiveness and suggested improvement of training delivery in a way that influences recruits' knowledge, skills, and behavioral patterns (Carter, 2015). It appears that little research discusses and evaluates the quality of education that community colleges have endeavored to deliver and transfer to law enforcement jobs.

The purpose of this study was to determine to what extent graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceived their learning experiences to be effective and transferable to their jobs. Such a study is important in ascertaining whether educational institutions are adequately preparing their law enforcement graduates, by frequently assessing and improving their training programs based on the input of their employed graduates. By investigating the perspectives of the law enforcement personnel who graduated from these academies, community colleges can gain a better understanding of whether training programs are serving the needs of trainees for the jobs that they accept.

A review of the literature revealed that today's emotionally complex law enforcement climate, spurred on by incidents such as those involving Michael Brown, Freddie Gray, and Eric Garner, is primed for reform. These African-American men were victims of the too often problematic education and training of our American law enforcement personnel "who [sometimes] targets Black [and Brown] men and sets them up to fail" (Butler, 2017, p. 16). The need for vigorous law enforcement educational reform is paramount. Law enforcement

performance and the actions of officers are consistently in the news, and perhaps the current climate provides an opportunity to encourage senior law enforcement personnel and academy instructors to solicit ideas to improve law enforcement training and produce graduates who are more successful (Carter, 2015; Carter & Sapp, 1990; Conser, Paynich, & Gingerich, 2013).

Current research appears limitedly focused on academic requirements, program evaluation, and resources to improve law enforcement academy education while students are in the program. In addition, there is limited research to address law enforcement curricula in academy training. To further expound on this predicament, Carter (2015) asserted that increasing demands for accountability of law enforcement officers necessitate focusing of resources to instructional areas needing improvement to produce better qualified graduates. Fortunately, program evaluation models have been proposed by various researchers to improve law enforcement training.

Program Evaluation Models

Assessing and evaluating programs for training law enforcement personnel after graduation is essential. Evaluations could provide significant feedback to educational programs and communicate evidence of growth, progress, or even failure within the program or organization itself (Addleson, 2002; Carter, 2015; Senge, 1994). Program evaluation is defined as “the systematic assessment of the worth or merit of some object or aim” (Borate, Gopalkrishna, & Borate, 2014, p. 2). Traditional law enforcement educators use

program evaluations for administrative actions of controlling, directing, and coordinating impactful law enforcement student education, resources, and activities (Cordner & Scarborough, 1998; Schmallegger, 2008; T. Powers, personal communication, January 21, 2015). Today's law enforcement training administrators and personnel want to know whether education and training competencies are being mastered by trainees and, most importantly, which areas of education and training are beneficial and effective for trainees upon graduation from an academy. This line of reasoning may be used to measure and determine the effectiveness of the curriculum used in a training program.

Program evaluation allows an organization to investigate the worth, merit, progress, and failures of a program and, through various methods, to gather data and improve performance and communication (Borate et al., 2014). According to Borate et al. (2014), training evaluation is at the heart and soul of an organization. It is at this level that an organization determines "the worth or value [and] . . . to what extent and how well the training met and satisfied the individual as well as organizational needs" (p. 3). Thus, program evaluations of law enforcement training academies are of paramount importance for understanding the systemic worth of the programs and their transference to the job (American Society for Training and Development, 2009; Carter & Sapp, 1990; Conser, Paynich, & Gingerich, 2013; Davis, 2012).

Many law enforcement departments today require law enforcement personnel to earn college credits and, in some cases, possess professional

certificates and college degrees (Chappell, 2008; Davis, 2012; Pollock, 2012). Some current researchers correlate the possession of college degrees with improved performance and decreased use of deadly force (Carter, 2015, Mayo, 2006; Paoline & Terrill, 2007; McElvain & Kposowa, 2008). Considering this approach, a new paradigm may be required for curriculum evaluation to discern whether skill standards that were taught to the students transferred to job performance (Philips, 1996; Paynich, 2009; Pulakos, 2004; Carter, 2015; Chappell, 2008). To support this paradigm shift, Confrey and Stohl (2004) argued that “student outcome measures are of critical importance” (p. 49).

Wright, Dai, and Greenbeck (2011) suggested that there may not be a “logical link between successful completion of the police training academy and success on . . . [the job]” (p. 2). That correlation “remains difficult to establish empirically” (Wright et al., 2011, p. 2). Although some researchers have disagreed about whether a link exists between education and successful job performance, most agree that law enforcement academies have a critical responsibility to “instill in [trainees] . . . the knowledge, values, and ethos of its organization’s specific . . . needs” (Caro, 2010, p. 360). Nonetheless, research suggested that thorough educational and tactical training taught by law enforcement academies hosted by community colleges produces “better judgment . . . better problem solvers [and better job performance] compared to those without college [education]” (Chappell, 2008, p. 10). Therefore, methods to assess the training and its link to increased successful job performance are

important, and there appear to be several philosophies or models for conducting these evaluations.

According to the literature, researchers appear to investigate two dimensions of law enforcement training programs. First, it is prudent that researchers should evaluate all educational programs to determine if they create an environment that fosters innovation and creativity in instructional and curricular arenas (Carter, 2015; Cayirdag, 2016). Second, researchers should assess these innovative programs to determine whether they are, indeed, using the appropriate evaluation models effectively to ensure that the training transfers to performance on the job (Cayirdag, 2016; Cropley, 2001; Fairweather & Cramond, 2010). This research will explore the second dimension as perceived by program graduates.

There are many models available for evaluating an educational training program. Evaluation training models, such as the discrepancy model, assess an individual's academic performance, typically through a series of tests aligned with an overall standard established by the top achievers (Uprichard, 2010). This model evaluates student performance based on the highest academic performers as a benchmark for other students to reach. Uprichard described the discrepancy model as the foundation of educational assessment for decades. This approach is utilized to evaluate students' competencies. Although many researchers suggest that the mentioned methodology of the discrepancy model is the best model for evaluating students' performance, some critics consider the model to

be educationally biased in areas of “culture, creativity and academic self-efficacy” (Cayirdag, 2016, p. 1384).

Of particular interest, the discrepancy model does not take into consideration students’ prior academic or cultural exposure and how those facets may influence job performance. Therefore, some students may be tested and evaluated based on the assumption that they have been exposed to certain prior educational and cultural competencies. The discrepancy model was created for educational institutions to evaluate and determine the needs of students and was utilized for compliance with the 1975 Individuals with Disabilities Education Act (Rosen, 2017). However, to date, 39 states allow use of this evaluation model in primary and secondary institutions. The other 11 states, in part or completely, consider it culturally and academically biased (Rosen, 2017). Ultimately, the drawbacks may outweigh the advantages of using this model.

Another educational evaluation system is Kern’s six-step approach model (Kern, Thomas, & Hughes, 2009), which has the potential to accurately evaluate a training program. The six steps of the Kern’s model include the following:

1. Problem identification and general needs assessment
2. Needs assessment for targeted learners
3. Goals and objectives
4. Educational strategies
5. Implementation
6. Evaluation and feedback.

These six steps appear to be complex. Kern et al. (2009) recommend a pre-then-post evaluation to determine the next step in the evaluation process. It is mentioned that one does not need to start with the first step in this model. However, Kern et al.'s (2009) six-step approach has fallen short by assuming that the evaluator efficiently conducted a pre-then-post evaluation to determine which steps are needed next. This process may be confusing to conduct, especially if the evaluator ineffectively conducted a prejudicial pre-evaluation that could adversely affect the outcome of the post evaluation assessment.

Although Kern et al. (2009) made a persuasive case for conducting a thorough program evaluation with multiple steps to evaluate training, some researchers believe that this model has no clear structure and thus is not effective. Furthermore, the Kern et al. (2009) model predicates the assessment of an individual's or group's perspective and rests upon the assumption that the prescribed steps do not have to occur in any particular sequential order. According to Kern et al. (2009), these steps can be used as a learning model. Kern et al. (2009) asserted that these steps are universal and adaptable to all program evaluations, but they neglect to explain how this is so. Additionally, the model fails to show once a student graduates how these processes can be implemented or benefit a program evaluation for a complex educational institution that sponsors law enforcement training.

Although the discrepancy and the Kern's six-step approach models are useful for evaluating educational programs, they may not be a good fit for

evaluating a law enforcement academy's intricate program. Some researchers have asserted that using Kirkpatrick's Four-Level Training Evaluation Model (Kirkpatrick & Kirkpatrick, 2006) has the best value, flexibility, and structure to assess and evaluate the successful transfer of learned training from a law enforcement academy to a trainee's job performance after graduation. Therefore, the theoretical lens that guides this research was the Kirkpatrick model, which is described below.

Theoretical Framework

This study utilizes one of the most current and widely used models, Kirkpatrick's Four-Level Training Evaluation Model (Kirkpatrick & Kirkpatrick, 2006; see Figure 1). The Kirkpatrick model includes four levels: reaction, learning, behavior/performance, and results/impact. These four levels can be guided by using the following questions: (a) What are the graduates' perceptions of the law enforcement academy's effectiveness in terms of the learners' attitudes (*reactions*)? (b) What are the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' knowledge (*learning*)? (c) What are the graduates' perceptions of the law enforcement academy's effectiveness in terms of changing learners' behaviors (*behaviors/performance*)? and (d) What are the graduates' perceptions of the law enforcement academy's effectiveness in changing learners' knowledge on the job and confidence in the workplace (*results/impact*)? (Kirkpatrick & Kirkpatrick, 2006).

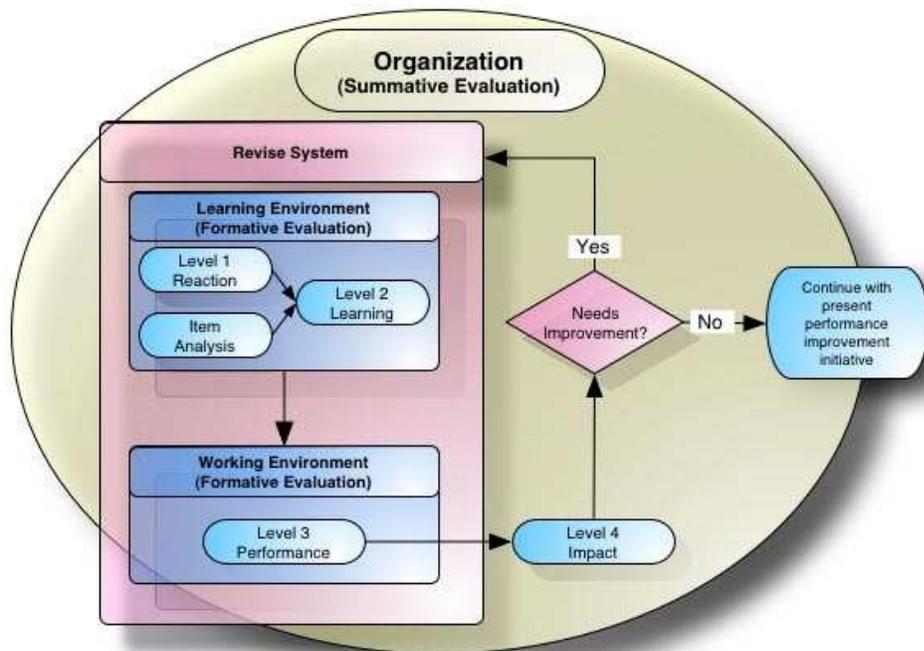


Figure 1. Kirkpatrick's Four-Level Training Evaluation Model

Figure 1 illustrates the Kirkpatrick Model (2006) Four-Level Training Evaluation Model summative evaluation process to be used in a law enforcement training academy. This process is flexible and most advantageous for all levels of a law enforcement training programs. This model provides the mechanisms to explicate areas in the training programs that are effective or not effective (Chang, 2010). The levels 1, 2, and 3 rely on formative evaluation processes which provide feedback on the training environment and curriculum and how they relate to work performance.

The first process in the model is the Level 1: Reaction. The law enforcement personnel provide generalized and limited feedback on the

program's effectiveness, such as the classroom conditions and overall general satisfaction with the training program. If feedback at the reaction level provides adequate ratings, then a program evaluator will move to Level 2: Learning. This level provides a more in-depth analysis.

Level 3: Behavior/Performance provides concrete and tangible measurement of officers' performance. The evaluator is able to gain insight into what is actually working and what is not. Furthermore, this performance level gauges whether the training is providing beneficial and effective levels of behavioral changes for the officers. It measures whether the training is producing better and effective outcomes for the law enforcement personnel who are working in the field after one year on the job.

Level 4: Results/Impact measures community outcomes, such as crimes rates, crime reduction, and community support. If these outcomes are measured to be successful then the results/impact level indicates systemic changes that are impactful, effective, and beneficial to the community, the law enforcement agencies involved, and the individual officer.

At this point, the training is deemed effective and should be emulated. However, if there are needs for improvement, then according to the model, the four-level evaluation process requires a systemic realignment (revise system) from scrutinizing the environment in which the training was conducted to the curriculum itself. The evaluation process is repeated.

Kirkpatrick's model is an effective tool for use by law enforcement training academies to evaluate their curriculum for trainees because it offers a structured and cohesive framework. Such a framework examines the impact of curricula development and assesses law enforcement officers' perceived behavior in their job performance. The five dependent variables used in this study derive from Kirkpatrick's Four-Level Training Evaluation Model: (a) reaction, (b) learning, (c) behavior/performance, and (d) results/impact. The fifth measure, total effectiveness score, was calculated by summing the scores from the four sub-indicators scores of the model.

Application of the Theoretical Framework in this Study

Kirkpatrick (1998) has indicated that the model may be most advantageous for improving knowledge, skills, and job performance, especially for a complex and ever-changing environment, such as law enforcement. This study utilizes Kirkpatrick's Four-Level Training Evaluation Model to survey law enforcement academy graduates by assessing and evaluating their performance.

First, the dependent reaction variable describes the law enforcement officer's personal response from the training (e.g., Did the law enforcement personnel enjoy the training?). This is the officer's immediate, emotive reaction from the training. Second, the dependent learning variable provides a measurable level from the training in terms of increased knowledge or increased intellectual achievement (e.g., Did the law enforcement personnel-training advance his or her learning?) This learning variable is important in ascertaining

whether intellectual skills have been measured and analyzed for intellectual comprehension, which leads to behavioral changes. Third, the dependent behavior/performance variable provides the assessment of whether the law enforcement personnel applied the training to their behavior/performance on the job (e.g., Did the law enforcement personnel use the training on their job for behavior/performance changes?). Finally, the dependent results/impact variable provides a measurable analysis of the influence of law enforcement training and its results/impact on the employee and an organization (e.g., Did the law enforcement training cause notable change to the law enforcement personnel and across the entire law enforcement agency?).

After the results are analyzed from Kirkpatrick's Four-Level Training Evaluation Model and have led to a perceived positive impact on the law enforcement personnel and organizational change, it becomes beneficial to replicate the training and continue the results (Kirkpatrick & Kirkpatrick, 2006). According to Kirkpatrick and Kirkpatrick (2006), if the results or impact are poor or unfavorable, then this four-level evaluation requires that the four steps be repeated, from scrutinizing the environment of the training from the instructor and into the curriculum itself, where all levels require revamping. It is clear that these variables will provide the necessary analysis for evaluating training for law enforcement personnel who have participated in a training program (Chang, 2012; Kirkpatrick & Kirkpatrick, 2006).

Purpose of the Study

The purpose of this quantitative study was to determine to what extent graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceived the effectiveness of training program. The intent of the study was to determine if learning experiences during the training were effective and transferable to their performance on the job. The broad question focused on whether or not the perceptions of the effectiveness of the training were different between graduates who went on to work at different types of law enforcement agencies. The type of law enforcement agencies that employed the graduates were, (a) Local Police Departments, (b) Sheriff Departments, (c) State and Federal Police Departments, and (d) Other Law Enforcement Agencies. Other Law enforcement agencies included security companies, loss prevention agencies and campus police departments. Effectiveness was measured by total effectiveness and Kirkpatrick's (2006) four sub-indicators of effectiveness: (a) reaction, (b) learning, (c) behavior/performance, and (d) results/impact.

The independent variable for this study, as indicated above, was the type of law enforcement agency that employed the graduates. The five dependent variables (reaction, learning, behavior/performance, results/impact and total effectiveness) used in this study were derived from Kirkpatrick's (2006) Four-Level Training Evaluation Model.

First, the dependent variable reaction describes the law enforcement officer's personal response from the training. This is a law enforcement's

personnel immediate and emotive response from the program training. Second, the dependent learning variable provides a measurable level from the training of increased knowledge or increased intellectual achievement. This learning variable is important to ascertain whether intellectual skills have been measured and analyzed for comprehension, which leads to behavioral changes.

Third, the dependent behavior/performance variable provides the assessment of whether an individual can apply the training to performance on the job. Fourth, the dependent results/impact variable provides a measurable analysis of the influence of law enforcement training as it relates to the community, e.g., community needs and resources.

The fifth dependent variable reflected the total effectiveness which was determined by summing the ratings of Kirkpatrick's (2006) four sub-indicators (reactions, learning, behavior/performance and results/impact). Therefore, using Kirkpatrick's (2006) model was beneficial to determine if there is a need to further assess and target appropriate changes to law enforcement curriculum and training. Furthermore, it will provide useful student post-graduation assessment, particularly at academies hosted and operated by a community college.

Research Questions

The following research questions, in addition to Kirkpatrick's theoretical framework, guide the proposed quantitative study, which aims to elicit responses from law enforcement graduates from an academy hosted by a community college. The overall research question for this study is, how effective was the

training program at the law enforcement academy hosted by a community college and its impact on their work performance and community. The sub-questions are represented by following:

RQ1: What are the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' attitudes (*reactions*)?

RQ2: What are the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' knowledge (*learning*)?

RQ3: What are graduates' perceptions of the law enforcement academy's effectiveness in terms of changing learners' behaviors (*behavior/performance*)?

RQ4: What are graduates' perceptions of the law enforcement academy's effectiveness in changing learners' knowledge on the job and confidence in the workplace (*results/impact*)?

RQ5: What is the relationship between the independent variable, type of law enforcement agency that employed the graduates, and participants' perceptions of the total effectiveness of the program?

RQ6: What is the relationship between the independent variable, type of law enforcement agency that employed the graduates, and

participants' perceptions of the four aspects of effectiveness (reactions, learning, behavior/performance and results/impact)?

Hypotheses

The following are the hypotheses associated with the six research questions for this study:

- H₀₁: There is no significant difference in the graduates' perceptions of the training program's total effectiveness between graduates employed by different types of law enforcement agencies?
- H₀₂: There is no significant difference in the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' attitudes (*reactions*) between graduates employed by different types of law enforcement agencies?
- H₀₃: There is no significant difference in the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' knowledge (*learning*) between graduates employed by different types of law enforcement agencies?
- H₀₄: There is no significant difference in the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' behavior (*behavior/performance*) between graduates employed by different types of law enforcement agencies?
- H₀₅: There is no significant difference in the graduates' perceptions of the law enforcement academy's effectiveness in terms of

learners' knowledge on the job and confidence in the workplace (*results/impact*) between graduates employed by different types of law enforcement agencies?

Significance of the Study

This quantitative study may provide significant and valuable feedback for law enforcement academies hosted by Mid-Atlantic regional community colleges with the ability to evaluate their law enforcement curricula to ascertain what is perceived as effective and most beneficial in the areas of knowledge and skills being transferred to the job. This research may provide data to impact appropriate curricula changes, expanding on areas that are working or eliminating ineffective aspects that have proven to be irrelevant to today's law enforcement while on the job. Furthermore, this study will help agencies and law enforcement training programs to better implement professional development and best practices in law enforcement.

Limitations and Delimitations

It is advantageous that a researcher identifies all limitations and delimitations that may develop from a researcher's investigation to avoid intentional bias (Carter, 2015; Creswell, 2003). Limitations of a study are those characteristics of research design or methodology that may impact or influence the interpretation of the findings generated by the data. Limitations are constraints on generalizability, applications to practice, and the usefulness of the findings, as well as internal and external validity of the results (Creswell, 2003:

Price & Murnan, 2004). Examples of limitations include (a) there is a lack of resources or sample size, (b) inability to control the research environment, (c) data collection can be expensive and time consuming if randomization and identification of a control group is required, (d) outcomes of the research may be limited due to the use of a close ended set of questions, and (e) quantitative data analysis can be extensive, especially for researchers from non-statistical backgrounds (Barbour, 2000). Randomization and the lack of a control group is the key limitation of this study. However, these are limitations commonly found in educational research (Price & Murnan, 2004).

Delimitations are pivotal in narrowing the scope of an investigation because they allow the researcher to conduct focused research (Carter, 2015; Leedy & Ormrod, 2016). Delimitation in research allows a researcher to be selective and control the scope of the study. Stated differently, delimitations help set boundaries and restrictions for the research (Chenhall & Langfield-Smith, 2007; Leedy & Ormrod, 2016). As a result, participants will be targeted from only one Mid-Atlantic regional community college in the state of Maryland from a cross-section of graduates associated with the law enforcement academy program. Moreover, this study will use graduates who have been employed on the job one or more years. This study excludes graduates who have been employed less than one year by a law enforcement agency.

Definition of Key Terms

An understanding of the following terms is essential to the operational approach of the study.

Education and Training: For the purposes of this study, both terms are considered synonymous.

Effectiveness: For the purpose of this study, effectiveness is defined as “resulting in enhanced professionalism, more accountability, [positive outputs and strong academic and professional outcomes], higher awareness of the need to provide better services to students [and to the community], and their ability to resolve other” ongoing quality of life issues, dilemmas and problems within the community (Franklyn, 2013, p. 8).

Law Enforcement Agencies: For the purposes of this study, law enforcement agencies are described as sheriff and police departments, federal law enforcement agencies (e.g., Naval Criminal Investigative Service (NCIS), the Federal Bureau of Investigation (FBI), etc.).

Law Enforcement Academy, and Police Academy: For the purposes of this study, there are institutions whose primary function is to train federal, state, tribal, international, county and city law enforcement officers (Federal Law Enforcement Training Center (FLETC, 2014).

Summary

Law enforcement academies are designed to train progressive 21st-century law enforcement personnel who can adequately address current-day

issues. Law enforcement academies have to strive to remain relevant (T. Powers, personal communication, January 12, 2015). The purpose of this quantitative study is to determine to what extent graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceived their learning experiences to be effective and transferable to job performance.

This study is important to ascertain whether law enforcement education institutions are truly preparing their law enforcement personnel by frequently assessing and improving their training programs, which includes post-graduation assessments. By investigating the perspectives of the law enforcement personnel who graduated from academies, the community can gain a better understanding of whether training programs are best serving the needs of trainees on the job. This research aimed to improve curriculum development and the evaluation of law enforcement academies. A literature review surrounding assessment and evaluation of law enforcement training is outlined in Chapter 2. Chapter 3 describes the methodology required to conduct the study.

CHAPTER 2

REVIEW OF LITERATURE

Education and Training for Law Enforcement

Since the beginning of the professional era in law enforcement, there has been a concerted effort by law enforcement academies to reform their curriculum and training to meet the 21st-century complexities of being a modern patrol officer (Baro & Burlingame, 1999; National Institute of Justice, 1995, 1997; Sadd & Grimes, 1995; Scheina, 2013). Part of this push includes promoting reform in how to educate law enforcement personnel through police academies; the goal was that by “1978 all police recruits would have at least two years of college” (Baro & Burlingame, 1999, p. 1). The rationale was to produce better law enforcement in communities, create a culture of professionalism, and curb unethical behavior (Baro & Burlingame, 1999; Carter, 2015). With many police-related controversies in recent years, such as officer-involved shootings and deaths, unethical behavior, and police brutality, there is a need for academic reform in training, education, and curriculum development to improve knowledge and comprehension, provide better communication skills and a stronger understanding of constitutional guarantees, and minimize unethical behavior (Carter, 2015; Chappell, 2008; Cordner, 2016;).

There are differing opinions among researchers as to whether educational reform is necessary (Bumgarner, 2002). Baro and Burlingame (1999) argue that “only 1% of local law enforcement agencies demand some level of higher

education” (p. 1). However, most researchers contend that educational reform in the areas of curriculum, training, and ethics is warranted (Carter, 2015; Carter & Sapp, 1990; Chappell, 2008; Partnership for 21st Century Skills, 2008; Scheina, 2013). Some suggest that law enforcement trainees who receive an effective comprehensive curriculum from a law enforcement academy do not necessarily need a college education for better job performance (Baro & Burlingame, 1999; Roberg & Bonn, 2004). Baro and Burlingame (1999) assert that the need for college education is pointless since “police organization and police work have not changed in ways that require it” (p. 1).

Berg (1994) suggests that law enforcement academies offer training, not necessarily education. Training is based on skills that can be acquired through “hands-on” demonstration and, in many cases, can be developed by seasoned law enforcement officers, whereas education is about “theoretical based knowledge, values, and attitudes” that will be taught by a professor at a collegiate institution (p. 1). Formal education is advantageous for law enforcement personnel because it teaches critical-thinking skills, an important skill for day-to-day patrolling in the field (Baro & Burlingame, 1999; Berg, 1994; Cordner, 2016).

Evaluation currently shows that results are limited and inconclusive as to whether a comprehensive curriculum can help with overall performance and knowledge while on the job (Caro, 2010; Chappell, 2008; Committee to Review Research on Police Policy and Practices [CRRPPP], 2004; Flores, 2011). Despite some criticism, there is a need for objective analysis to evaluate whether

community colleges entrusted with curriculum for educating law enforcement personnel have an impact on their training and ability to perform their daily duties (Bumgarner, 2002; Chappell 2008; CRRPPP, 2004; Clark, Hutchison, & Lockyer, 2010; Flores, 2011). Although researchers may disagree on the direct link of education and the successful performance of law enforcement personnel and other criminal justice practitioners, most agree that law enforcement academies are responsible for “instilling in cadets/trainees the knowledge, values, and ethos of its organization specific to the needs and developmental values necessary for the organization to survive, evolve, and thrive in its existing environment” (Caro, 2010, p. 360). Research also suggests that thorough and current educational and tactical training taught by academies will result in “better judgment and better problem solvers compared to those without college [education]” (Chappell, 2008, p. 10).

In addition to a need for better tactical and academic training in higher education, many law enforcement academies neglect to adequately address the physical and mental health of officers. Law enforcement academies are entrusted with the “primary focus of producing tactically proficient warriors who can take charge of a situation, bring order to chaos, remove disruptive elements, and protect the public from harm” (Feemster, 2010, p. 1). However, some researchers suggest that the focus on tactical training often leads to the neglect of the “well-being of officers . . . which can be seen in the characteristic range of maladaptive behaviors (e.g., burnout, suicide, departmental discord, alcohol and

drug abuse, domestic abuse) that plague police organizations and most probably the institution of policing at large” (Feemster, 2010, p. 1). Law enforcement curriculum for the 21st century should adequately acknowledge the problems confronted by first responders, such as suicide and mental illness, as academies are mandated to provide appropriate resources to address these issues (Cordner, 2016; Enea, 2010; Feemster, 2010; Hoggett & Stott, 2010). Feemster (2010) argues that the curriculum should acknowledge the following:

The feelings of others, defining social intelligence, the ability to understand human conditions and needs of people, spiritual intelligence, the intuitive ability to unravel real and perceived problems, and the need to understand disorder and chaos and find a sustainable solution for the modern police officer. (p. 2)

The literature review suggests that academies are entrusted with the honorable vocation of producing law enforcement personnel and other criminal justice practitioners who are physically, emotionally, and spiritually equipped to deal with day-to-day situations (Chappell, 2008; Enea, 2010; Feemster, 2010; Hoggett & Stott, 2010). Ideally, a law enforcement curriculum should offer holistic and multidimensional approaches to help personnel deal with the “unprecedented levels of toxicity, stress, crime, and deadly violence and other heinous acts of violence” (Feemster, 2010, p. 2) to which officers are exposed daily. The research further states that officers require the opportunity to react to, and often prevent, crime through a balanced emotional, physical, and “spiritual

foundation” (Feemster, 2010, p. 2). Relevant curriculum reform in previously suggested areas should include institutional training, curriculum development, curriculum evaluation, and policies that include “flexibility, inner thought, inspiration, and the courage to take risks” (Oliver & Lagucki, 2012, p. 1). Law enforcement personnel must be able to adequately assess problems and make critical decisions that will impact the lives of the citizens they have been entrusted to serve.

The Training of Law Enforcement Personnel

Training law enforcement personnel in the 21st century is a complex task. For generations, police organizations have been structurally patterned after the military model, utilizing a pyramidal structure with a police commissioner as chief executive officer down to police officers who function as first-level responders or employees (Cordner, 2016; Scheina, 2013; Schmallegger, 2016). With this type of authoritative leadership, there are roles and responsibilities that are clearly defined and enforced, with punitive actions if they are violated. Decisions, education and training, and police activities are guided by rules and regulations called General Orders (GO) and a chain of command, including administrative and support staff entrusted with maintaining and increasing organizational proficiency (Cordner, 2016; Gardiner & Hickman, 2017; Giblin, 2017; Scheina, 2013; Schmallegger, 2016). Like militaries, police departments are structurally defined in terms of leadership by a fixed division of labor, the chain of command, and the organizational rules and regulations (Inciardi, 2009; Schmallegger, 2016).

This division of labor affects the nature of the education and training of current and future law enforcement personnel. Critical factors, such as financial resources are important in terms of how to educate and train law enforcement personnel. For example, who will be trained, how often the training will occur, and what will be taught? These criteria dictate and govern most small, medium, and large police departments (Cordner, 2016).

Various levels of police managers who are entrusted to train and educate law enforcement personnel have to maneuver through layers of bureaucracy in addition to the accrediting agencies that certify law enforcement personnel (Cordner, 2016; Gardiner & Hickman, 2017; Giblin, 2017; Scheina, 2013). Police managers typically rely on a leadership style that requires, at least in theory, individual orders, requests, or other types of correspondence or communication, originating from the top or bottom, and passing through several layers of the organizational hierarchy. Research shows that this organizational structure can be exhausting, particularly in attempting to remain current and relevant in educating and training law enforcement personnel (Cordner, 2016; Gardiner & Hickman, 2017; Giblin, 2017).

Furthermore, this chain of command helps to ensure rules and regulations are designed to control and guide the actions of police personnel (Inciardi, 2009; Schmallegger, 2016). These rules and regulations are bound in an operational manual generally called GO (General Orders). GO explains how a particular report should be written based on specific circumstances and in

what manner it should be written, including whether to use black or blue ink. In addition, GO provides guidance and training regarding how to deal with citizen complaints, record-keeping, replacement of uniforms, use of deadly force, and many other day-to-day operations (Aamodt, 2004; Cordner, 2016; Gardiner & Hickman, 2017; Giblin, 2017; Scheina, 2013).

Training law enforcement personnel is viewed by some as merely an administrative activity that is basically a way of “controlling, directing, and coordinating law enforcement personnel, resources, and activities in the service of crime prevention, the apprehension of criminals, the recovery of stolen property, and the performance of various regulatory and helping services” (Schmallegger, 2008, p. 123). Police managers use various styles of policing as educational training initiatives to identify methods and techniques to fulfill administrative and civil duties for current and future police personnel. The following are some of the broadly defined styles for training law enforcement personnel (Cordner, 2016; Gardiner & Hickman, 2017; Giblin, 2017; Scheina, 2013; Schmallegger, 2016).

Schmallegger (2016) provides five styles for training law enforcement personnel.

- Watchman style: This style of training law enforcement personnel is characterized by a strong emphasis on order maintenance. It is typically characteristic of police working in lower-class communities where informal police intervention and training tactics are harsh, cynical, or abusive towards citizens as a method of keeping the

peace. There is a prominent emphasis on crime control than crime prevention.

- Legalistic style: This training style is committed to enforcing the law in its strictest sense with very little room for flexibility. Law enforcement personnel who use this method maintain a hands-off approach to community conflict coupled with the application of criminal law.
- Service style: This style is marked by an altruistic concern for helping and aiding the citizenry, with less emphasis on strict enforcement. For example, law enforcement personnel work closely with community action organizations and social service groups. There is greater emphasis on crime prevention and community involvement.
- Police-community relations (PCR) style: This style requires keen identification of crime areas and the development of solutions from within the community. There is a greater emphasis on crime mapping, and this style emphasizes legitimacy from the community that is served daily.
- Team policing style: This style of training is an extension of the PCR style, in that it provides collaboration between the police, community, and other community stakeholders.

Each of these training styles has advantages and disadvantages. Typically, the results of the training styles are limited in terms of arrest and suppression of criminal activities. There is also limited feedback on the effectiveness of the

training styles from the law enforcement community. Furthermore, there is limited feedback on the effectiveness after being taught from law enforcement academies (Cordner, 2016; Gardiner & Hickman, 2017; Giblin, 2017; Scheina, 2013; Schmallegger, 2016).

There is a greater need for training and education for 21st-century law enforcement personnel. Research contends that college training of law enforcement personnel can result in better critical-thinking skills, more tools to adapt in critical situations, fewer ethical problems, and greater levels of flexibility in executing the law (Caro, 2010; Carter, 2015; Chappell, 2008; CRRPPP, 2004; Flores, 2011). In addition, a greater emphasis on the development of written and oral communication skills in law enforcement academies will allow officers to be better prepared to navigate the multifaceted dilemmas of modern times. In other words, law enforcement recruits appear to be more professional, have less administrative problems, and are more adaptable in the communities they are entrusted to serve. However, research also shows that such results are inconclusive (Chappell, 2008; Marion, 1998; Petty & Guthrie, 2000; Oliver & Lagucki, 2012; Out & Horton, 2005).

Researchers suggest that law enforcement academies that embrace the ability and willingness to change through innovation, creativity and transparency will create a long-lasting and meaningful organization (Cordner, 2016; Rowley, Lujan, & Dolence, 1997). Community colleges and police academy organizations that are located on their campuses can promote “accountability, efficiency and

planning” (Rowley et al., 1997, p. 19). Ultimately, academy instructors and employees from the bottom to the top have the capabilities to drive organizational performance through effective training. Law enforcement academies that focus on the need to develop, expand, and reinvent skills and promote flexibility and an environment of workforce training will remain relevant and competitive in the 21st century.

The Community College and Law Enforcement Academies

Modern law enforcement is frequently traced back to England when Sir Robert Peel aggressively advocated for a bill in Parliament in 1826 to make policing an official entity of the British government (Dressler, 2002; Hoggett & Stott, 2010; Scheina, 2013). There is also a uniquely American evolution of policing, although one must be cautious when discussing historical patterns to not suggest too strong of a cause-effect relationship (Scheina, 2013). Scheina (2013) suggests that American policing can be broken into three eras: the vigilante era (1776–1900), the local control era (1900–1965), and the professional era (1965–present). Throughout the different eras, many ethical problems have been identified, both on and off duty, which have impacted the way law enforcement professionals are trained, educated, and evaluated (Carter, 2015; Dressler, 2002; Scheina, 2013).

Because of corruption and other issues, reforms have been continually introduced to improve standards in hiring law enforcement personnel. Despite many efforts during the professional era of policing, such as those from influential

figures like J. Edgar Hoover and August Vollmer, “training varied widely by state, agency, and budget, and most recruits were still insufficiently prepared for police work” (Chappell, 2008, p. 1; Scheina, 2013). This was especially true during the turbulent decade of the 1960s, when an effort was made to further professionalize law enforcement (Scheina, 2013). During each era in the history of law enforcement, policing has wrestled with the lack of adequate education and training, police corruption, and other ethical issues that still exist today (Carter, 2015; Scheina, 2013; Gottschalk, Dean, & Glomseth, 2012). Therefore, it is essential that current academic development for law enforcement training builds on “specific, desired outcomes” to truly benefit from a strong “level of readiness” (Enea, 2010, p. 2) in patrol operation.

Law enforcement in the community, and training academies for law enforcement through academic curriculum, have grappled with the effects of too much power and/or power not adequately defined. For example, the vigilante era, spanning roughly the period between the 1840s and the early 20th century, was marked by political and internal corruption and “was characterized by the watchman style of policing, and saw officers recruited informally and learning the ropes on the job” (Chappell, 2008, p. 1; Scheina, 2013). Police officers were essentially paid to participate in the law enforcement arena, but there were no formal guidelines for recruitment, hiring, background, or training. Law enforcement personnel were not “formally screened and any training they received was left to seasoned police officers in the field” (Chappell, 2008, p. 1).

Therefore, law enforcement academies lacked the necessary training, program evaluation, and curriculum development to determine if training was effective or useful.

Law Enforcement Curriculum Development

Some researchers suggest that there is a need for reform of curriculum development that is measurable and that requires law enforcement academies to grant college credits and, in some cases, to offer professional certificates and college degrees for their law enforcement personnel (Carter, 2015; Chappell, 2008; Scheina, 2013). Nonetheless, Wright et al. (2011) suggest that a “logical link between successful completion of the police training academy and success on street patrol remains difficult to establish empirically” (p. 2). Researchers may still disagree on the direct link between education and the successful performance of law enforcement personnel, but most agree that academies have a critical responsibility to “instill in cadets the knowledge, values, and ethos of its organization, specific to the needs and developmental values necessary for the organization to survive, evolve, and thrive in its existing environment” (Caro, 2010, p. 360). Research also suggests that thorough and current educational and tactical training taught by law enforcement academies will improve problem-solving skills among personnel (Caro, 2010; Chappell, 2008; Wright et al., 2011).

Unfortunately, as greater needs dictate stronger and better tactical training and higher education, some law enforcement academies have neglected to adequately address the physical, ethical, and mental health of officers, as well as

perform critical program evaluations of law enforcement programs (Carter, 2015; Feemster, 2010; Scheina, 2013; Wright et al., 2011). Law enforcement academies are entrusted with the “primary focus of producing tactically proficient warriors who can take charge of a situation, bring order to chaos, remove disruptive elements, and protect the public from harm” (Feemster, 2010, p.2; Ferguson, 2005; Hoggett, & Stott, 2010). This tactical style of training will always be the responsibility of any law enforcement academy. However, law enforcement academies must be designed for the 21st century to adequately acknowledge the problems, especially in academic and training programs, and provide practical solutions to deal with the problems and provide real resources. It is essential that law enforcement academies remain relevant.

Researchers have suggested that law enforcement curriculum that develops ongoing evaluation mechanisms and strong feedback that shows “the need for reforms in policing . . . [in] higher educational requirements, community policing, expanded programs for recruiting minorities and women into police forces, sensitivity training for officers, citizen review boards, applications of new crime analysis systems (e.g., crime mapping), and internal police surveillance and audit systems have been initiated to promote effectiveness, fairness, and accountability” while operating in uniformed patrol (Rosich, 2007, p. 12). All of these paradigm shifts in curriculum development and design contribute to the purpose and resolution displayed in the modern law enforcement patrol officer and has led to a fundamental shift in the workforce (Rosich, 2007). Law

enforcement agencies are seeking a workforce that is reflective of the dynamic changes in technology and global initiatives.

The Community College and Workforce Development

Historically, during turbulent economic periods in the United States, community colleges (and technical colleges) have served an important workforce development function in helping people recover economically and revitalizing the national economy (Achieving the Dream, 2010; American Association of Community Colleges [AACC], 2010, 2016; American Competitiveness Initiative [ACI], 2006; Carter, 2015; Domestic Policy Council [DPC], 2006; Partnership for 21st Century Skills, 2008; Scheina, 2006). Community colleges have allowed people to gain economic competitiveness through job training, certification, and licensure programs, such as law enforcement academies (ACI, 2006; AACC, 2010, 2016; DPC, 2006; Partnership for 21st Century Skills, 2008). According to the AACC (2016), “45% of students across the United States take undergraduate courses at community colleges” (p.1), for affordability and open access (AACC, 2016; National Center for Education Statistics, 2007).

Reportedly, community colleges serve as a bridge for individuals who are struggling economically, serve individuals looking to develop or expand competitive skills, and aid as a vital resource for employers looking to fill the gap of vocational and technical skills within the workforce (AACC, 2010, 2016; Achieving the Dream, 2010; Deil-Amen & Rosenbaum, 2003; Myran, 2003;

Partnership for 21st Century Skills, 2008). According to the DPC (2006),

Community colleges can provide:

a stronger educational system that equips our [future] workforce with the [technical and vocational] skills necessary to transform those ideas into goods and services that improve our lives and provide our Nation with the researchers of the future; and an environment that encourages entrepreneurship, risk taking, and innovative thinking.” (p.1).

Furthermore, federal, state and local legislators are increasingly advocating for community college education in an attempt to revitalize the economy and meet employers’ demands for an educated, skilled, and marketable workforce for the 21st century (AACC, 2010, 2016; Goldrick-Rab, 2010; Partnership for 21st Century Skills, 2008; Van Noy, Jacobs, Korey, Bailey, & Hughes, 2008). In many cases, community colleges are viewed as a welcome alternative to 4-year institutions. Carnevale, Smith, & Strohl, (2013) research suggest that:

By the year 2020, [the] Overall employment is expected to increase by almost 24 million over 10 years, from 140.6 million in 2010 to 164.6 million by 2020. In addition, 30.8 million replacement jobs are expected to become available due to retirements and individuals leaving the labor force. Overall, the economy will create 54.8 million new and replacement jobs between 2010 and 2020. (p. 8).

Some of this growth will be in the private and public law enforcement sector, which will require individuals to possess some form of postsecondary education, credentials, and/or technical certifications (Carnevale et al., 2013; Duree, 2007; Partnership for 21st Century Skills, 2008; Myran, 2003; Patton et al., 2016).

Some research contends that this educational trend of employers seeking an increase in certifications and licensures from their employees may be attributed to the advancements in technology, skilled technological application, and various social media outlets, such as Twitter, Skype, Facebook and Instagram (AACC, 2010; Carnevale et al., 2013; Duree, 2007; Patton et al., 2016). Everyday exposure to these platforms in every aspect of our lives can naturally have an impact on jobs, employees, and the global economy. (AACC, 2016; Cronenwett et al., 2007; Goldrick-Rab, 2010; Van Noy et al., 2008).

In light of these projections, the government and private businesses have turned to community colleges (and technical institutions) in an attempt to fill workforce gaps by educating the ever-increasing student body, comprised of historically underperforming and underrepresented student populations (Achieving the Dream, 2010; AACC, 2010; Cronenwett et al., 2007; DPC, 2006; Goldrick-Rab, 2010; Partnership for 21st Century Skills, 2008; Van Noy et al., 2008). Furthermore, community colleges provide students and workers with the convenient accessibility to postsecondary education through open-access formats, smaller class sizes, and affordability and the fact that a majority of professors work in the field of study. These qualities provide students and

employers with opportunities that may not be offered by traditional four-year colleges and/or universities (Achieving the Dream, 2010; AACCC, 2010; Cronenwett et al., 2007; DPC, 2006; Goldrick-Rab, 2010; Van Noy et al., 2008). This appeal to students has helped maintain community college relevancy in an atmosphere where convenience, affordability and access to higher education are important (Cohen & Braver, 2008). Community colleges have become the gateway of opportunity for low-income students, marginalized students, students of color, first-generation college students, reentry into the workforce students, and working adults in general. For many, they are the segue to a four-year institution and job training skills that can translate to better career opportunities and a higher income (Achieving the Dream, 2010; AACCC, 2010; Cronenwett et al., 2007; DPC, 2006; Goldrick-Rab, 2010; Van Noy et al., 2008).

Workforce development is the heart and soul of the community college mission (American Association of Community Colleges, 2010; Deegan & Tillery, 1985; Partnership for 21st Century Skills, 2008). A recent study suggests that by “2020, 65 percent of all-American jobs will require some level of post-secondary education or credential, but with the current rate we will fall short by 5 million” (Carnevale et al., 2013, p. 3). This shortage of skilled, educated workers makes community colleges a critical resource for employers. Some employers may be concerned about their bottom line and are continuously exploring the economic value of community colleges for workforce professional development and their ability to provide high-demand credentials to employees on a restricted budget

(Achieving the Dream, 2010; AACC, 2010; Cronenwett et al., 2007; DPC, 2006; Goldrick-Rab, 2010; Van Noy et al., 2008). As it was in the past, community colleges continue to provide open-access, inexpensive tuition, and life-changing career opportunities (American Society for Training and Development, 2009; Townsend & Wilson, 2006) for those seeking personal and professional advancement. Through workforce development, many community colleges and businesses address time management as well as resources in our ever-changing global world. Community colleges serve foundational needs along with innovation and partnerships that serve our communities' needs (American Society for Training and Development, 2009; Cohen & Brawer, 2008; Townsend & Wilson, 2006).

College and Student Evaluation/Assessment of Curriculum

Community colleges and law enforcement academies in particular should represent the multicultural population of the United States and implement strategies to increase higher participation, equity and achievement among diverse ethnic groups, and other special populations. Greene, Marti, and McClenney (2008) stated:

One of the most unrelenting challenges confronting higher education [law enforcement academies] is a participation and achievement gap between ethnic groups. For example, U.S. Census Bureau data indicated 60% of Asian and 42.8% of white, compared to 32.7% of African American and

24.8% of Hispanics, 18-24 year olds were enrolled in degree-granting institutions in 2005. (pp. 514-515)

Community colleges and law enforcement academies should understand that providing lifelong learning, effective curriculum development, and program evaluation will advance students more successfully in this turbulent job market environment (Caro, 2010; Chappell, 2008; Feemster, 2010; Greene et al., 2008; Phillips, 1996; Pulakos, 2004). Furthermore, community college police academies that remain current, innovative, and abreast of the needs of students will see shrinking achievement gaps and more professional, academic, and tactical training for modern law enforcement personnel and recruits (T. Powers, personal communication, January 12, 2015). This shrinking of the academic achievement gap can be attributed to the growing areas of outcome assessment and curriculum and program evaluation. For example, hiring academic and technical instructors of color promotes diversity in curriculum development and design with the hope of providing a more diverse curriculum that is reflective of the various student populations. This represents a step in the direction of closing the achievement gap, promoting inclusivity, and providing better cultural exposure for law enforcement personnel (Greene et al., 2008; Out & Horton, 2005; Turner, Gonzalez, & Wood, 2008; Wright et al., 2011).

Some community colleges are making concrete efforts to improve accessibility, affordability, and retention of students of color and those law enforcement personnel who attend those community colleges (American Society

for Training and Development, 2009; T. Powers, personal communication, January 12, 2015). Nonetheless, finding ways to close the achievement gap is a complex and daunting task. As community colleges find innovative opportunities for achievement growth through assessments and curriculum evaluation, it is hoped that colleges will continue to use methods, technology, and pedagogies that are working and eliminate those that are not beneficial for students (American Society for Training and Development, 2009).

College Evaluation and Assessment of Curriculum

College assessment and program evaluation are important components for ongoing success by improving student learning in areas of knowledge-based principles, technical skills, and professional comprehension (Stassen et al., 2001). Program assessment is defined as a process of “determining whether students have acquired the skills, knowledge, and competencies associated with the focuses on assessing student learning program of study” (Stassen et al., 2001, p. 7). A comprehensive assessment is the “systematic collection and analysis of information to improve [most importantly] student learning” (Stassen et al., 2001, p. 5). A program assessment has three purposes: to expose, to assess, and to improve. It exposes areas of weakness and strength, which can help improve the program and identify what is or what is not working for the instructor and student.

The process for program assessment evaluates “whether or not intended outcomes are being achieved and how the programs can be improved.” Stassen

et al. stated that “An assessment process should also be designed to inform departmental faculty and other decision-makers about relevant issues that can impact the program and student learning” (2001, p. 5-7). Stassen et al. (2001) also suggested that to effectively assess and evaluate a program curriculum, the assessment is:

- Systematic, using an orderly and open method of acquiring assessment information over time.
- Built around the department mission statement and an integral part of the mission.
- Ongoing and cumulative: over time, assessment efforts build a body of evidence to improve programs.
- Versatile and multifaceted: assessment information is collected using multiple methods and sources.
- Logical, realistic and pragmatic: assessment is used to improve the campus environment, not simply collected and filed away.
- Faculty/student-designed and implemented, not imposed from the top down.

Student Evaluation and Assessment of Curriculum

Student evaluation and curriculum assessment require balancing knowledge, skills, and attitudes within the format of constructive feedback. Evaluation at any level is “an integral part of the instruction process and as crucial for helping students learn” (Guskey, 2003, p. 7; U.S. Department of

Education, 2003). Not allowing student evaluation or assessment of curriculum to be co-contributors to the evaluation process will result in a failure to adequately measure the need for instructional corrective processes (Guskey, 2003).

Guskey (2003) suggested that there are three primary purposes for student evaluation and assessment of curriculum: (a) formative assessment of the teaching and learning process where “concepts, skills and criteria align with instructions” (p. 8); (b) evaluation of a student’s outcomes exploring the “importance of learning goals” (p. 8); and (c) summative assessment of information on the student’s and teacher’s progress in “knowledge, understanding, or skill that they were intended to measure” (p. 8). Student evaluation and assessment of curriculum help to make informed decisions and gauge performances from the student as well as the instructor. Overall, student assessment and evaluation provide evaluative and descriptive information for corrective improvement, which in turn can improve classroom instruction and produce better student outcomes (American Society for Training and Development, 2009; Guskey, 2003). Assessment is most important for students and teachers in three critical areas: (a) it provides corrective measurements in areas that need to be improved, for example, curriculum development and design; (b) it gives feedback about what is and is not working; and (c) it serves as a form of professional vitality for an academic program (American Society for Training and Development, 2009; American Society for training and

Development, 2009; Barton, 2002; Guskey, 2003; Stiggins, 2002) by providing evidence that the course, instructor, or program is working.

Monitoring Key Student Outcomes for Change

By way of assessment and evaluation, community colleges can “better align their student growth data with other key measures of teacher [and student] effectiveness” (Reform Support Network, 2013, p. 4). These can be used as an early measure of ascertaining if a student, instructor, or program is on the right track (Barton, 2002; Guskey, 2003; Stiggins, 2002). According to the Reform Support Network (2015), “Over the past four years, 30 states have passed legislation calling for new, rigorous evaluations for teachers and principals that incorporate measures of student growth as one of multiple measures of teacher [student] performance” (p. 1). These student outcomes for change are best defined as an effective measurement of strategies communicating growth in a student, teacher, or educational program in general (Reform Support Network, 2013).

The Reform Support Network (2015) suggests that educational institutions or programs use the prediction model, which is defined as “how well students will perform on a particular assessment based on his or her prior test scores” (p. 1), as this can provide an early indication about the progress of a student and allow adjustments to be made by the professor. These indicators can influence students’ academic strategies, as they can make adjustments to avoid possible academic failure. It is important to develop outcomes for change that have an

impact on student success and provide the proper diagnosis with the necessary remedies to overcome failure and implement strategies to reach student goals.

Reform Support Network, 2013 – 2015 posits that some of these strategies includes:

- Improving student academic achievement, through assessments and evaluations, test assessment indicators, or non-test indicators.
- Improving instructional quality and instructional design, “to construct bodies of evidence [through research, and teaching] and how to align the evidence with the learning goals for students [and teachers]”
- Increasing data to show academic alignment with course and student outcomes.
- Increasing alternatives in assessment and evaluation, such as non-test indicators like student participation in school, attendance, dropout rate, etc.
- Collecting a wide range of data, assessment, and evaluation for program improvement (p. 6).

These strategies provide academic institutions and educational programs with a variety of methods to improve performance outcome goals and student-learning outcomes. According to Reform Support Network (2015), “new selection practices (input) for hiring teachers in a turnaround school are intended to increase the number of highly effective teachers in the school (output), which should result in higher student achievement (outcome)” (p. 10). Monitoring

outcomes will measure progress aligned with academic goals and facilitate continuous improvement. The Reform Support Network (2013) notes that some key areas of monitoring outcomes includes:

- Developing instructional (and academic) planning where instructors have planned well, are creative and innovative, current in subject matter knowledge, with curriculum development and design aligned to subject matter
- Creating professional development that provides ongoing training, internal and external educational resources, and higher academic achievements, for example, advanced technical and tactical training.
- Creating current and relevant research-based instructional (and educational) strategies: (academic policies and procedures that are innovative and relevant)
- Overseeing ongoing internal and external evaluation: for improvement, elimination of programs, courses, and instructors that are not aligned with objectives; and assessment and evaluation to show evidence of success to be used as an academic model “to connect student growth and educators’ effectiveness” (p. 5)

College evaluation and assessment are critical for student and instructor improvement and success, as they provide vital indicators of students’ performance, especially in educational programs such as law enforcement academies. Administrators, educators, and students who have early predictors

“are more likely to go to college, earn higher incomes and less likely to become teenage parents” (Reform Support Network, 2015, p. 2). Community colleges have served as a gateway for achievement and success for the most vulnerable students, including in law enforcement programs hosted by community colleges. It is important to monitor student outcomes through evaluation to ascertain whether growth, comprehension, and mastery of knowledge, skills, and training have been successfully achieved. In some cases, educational programs such as law enforcement academies provide a “second chance to demonstrate success” for the most marginalized students in society (Guskey, 2003, p. 10; Vaughan, 2000). These analyses will provide useful and practical perspectives concerning student learning outcomes.

Importance of Student Learning Outcomes

Law enforcement recruits at the community college in general are very unique students because they must know the theories and have the ability to practice the subject matter competently, exercise critical thinking and discretion, and follow operational procedures (Caro, 2010; Chappell, 2008; Wright et al., 2011). The concept of student learning outcomes is best defined by the Yuba Community College District (YCCD, 2005) “as knowledge, skills, and abilities that students have attained as a result of their involvement in a particular set of educational experiences” (p. 1). Students or recruits who attend a community college law enforcement academy are responsible for three areas of student learning outcomes: (a) community college policies, procedures, and instructional

information, which is the “institutional level”; (b) the law enforcement academy, or the “program level”; and (c) the Maryland Police and Correctional Training Commission (MPCTC) learning objectives, or the “course level” (YCCD, 2005, p. 2). Therefore, a student learner in a community college must understand the subject matter taught by the professor and aligned with the college’s instructional policies and procedures and follow MPCTC learning objectives and policies, as well as other regional or statewide law enforcement guidelines. This is not an easy task for students or for those entrusted to educate them at a community college. To help ensure a successful implementation of important student learning outcomes, the following are recommendations for institutions that educate these students:

- Ensuring that students (or law enforcement recruits) are cognizant of their own learning styles and abilities
- Developing and conducting maintenance by faculty of operational parameters for learning, technical skills, and skill-based knowledge.
- Implementing a tangible framework for others to emulate
- Developing and implementing a blueprint for curriculum evaluation and assessment outcomes for improvement or change
- Installing processes for internal and external assessment
- Developing a robust and comprehensive performance measurements in terms of student engagement, student assessment, and student academic success

- Evaluating and implementing ongoing feedback from accrediting agencies such as the Middle States Commission on Higher Education or MPCTC (Barton, 2002; Goucher College, 2017; Guskey, 2003; Reform Support Network, 2013; Stiggins, 2002)

The community college student enrolled in a police academy should be able to think critically. This is not only an example of an institutionally mandated student learning outcome but also a crucial skill for law enforcement personnel in the field of patrol (Feemster, 2010; Ferguson, 2005; Hoggett & Stott, 2010; YCCD, 2005). Student learning outcomes will examine how objectives mandated from MPCTC are defined, used, and applied in terms of law enforcement recruits' physical abilities, competencies, and job performance. In addition, law enforcement personnel students, upon completion of the law enforcement program, will have the ability to do the following:

- Effectively write, read, and explain reports
- Critically analyze data, crime scenes, and criminal scenarios
- Effectively explain law enforcement terms, policies, and procedures as these relate to uniform patrol officers
- Sufficiently cite, understand, and explain the Constitution and relevant laws pertaining to uniform patrol (Inciardi, 2009) (Schmalleger, 2016)

Furthermore, part of the education and training of law enforcement personnel is to be able to inspect evidence, look for potential biases, ask whether the conclusions have been oversimplified or overgeneralized, consider who is

offering the explanation, and think critically through the topic or issue (Chappell, 2008; Feemster, 2010; Ferguson, 2005; Inciardi, 2009; T. Powers, personal communication, January 12, 2015). These are important student learning outcomes and concepts law enforcement recruits should be able to master in addition to the ability to think critically and analyze a criminal case or prosecute a suspect. This training is all part of the educational experience of the community college student learner. Moreover, recruits must develop a sense of justice and have respect for civil and human rights and the precepts of the U.S. Constitution. Assessment of student learning outcomes is critical in determining whether these skills have been mastered. There are several models available to ascertain this information.

Evaluation and Assessment Models

Evaluation and assessment models are the lifeline of any program, particularly educational programs such as a law enforcement academy, because they provide “a systematic method for collecting, analyzing, and using information” to measure whether learning is taking place and the knowledge is being comprehended and demonstrated (Metz, 2007, p. 1). Metz (2007) states that evaluation and assessment models can be divided into two categories: process evaluations and outcome evaluations. The process aspect of any program evaluation measures whether the “program model was implemented as planned, whether the intended target population was reached, and the major challenges and successful strategies associated with program implementation”

(Metz, 2007, p. 1). Outcome evaluations assess “to what extent, the expected changes . . . outcomes occur and whether these changes can be attributed to the program or program activities” (Metz, 2007, p. 1).

Ward et al. (2007) contend that evaluation is most advantageous when law enforcement academies use real-life assessment models such as a collaborative and action-oriented program evaluation model, or a strategic process, program, and performance evaluation model. The collaborative and action-oriented program evaluation model “relies on stakeholders working together to identify the problem, develop goals and objectives, define success, decide how and what to measure, and determine how to use results to continue improving the community” (Ward et al., 2007, p. 11). The strategic process, program, and performance evaluation model, on the other hand, is a “holistic” (p. 12) approach to evaluating any law enforcement program or curriculum. It is best defined as “collecting both process and outcome data. Analysis of process data answers questions about how efforts are conducted, with what resources, with whom, and how the police department partners with others in the community. Outcome data are collected to measure the effectiveness of the service standards that have been defined with citizen input” (Ward et al., p. 12).

No matter which assessment and evaluation model is used to evaluate a program or its curriculum, feedback provides information about student development (Peach, Ruinard, & Webb, 2014). Metz (2007) contends there are five important reasons why assessment and evaluation need to be conducted:

1. Program assessments can ascertain and expose what works and what does not work. For example, “Are law enforcement personnel benefiting from the program?” or “Are law enforcement recruits receiving the necessary skills and training?” (Ward et al., 2007, p. 2).
2. Program evaluation and assessment models expose the effectiveness or lack thereof of a program to all interested stakeholders, e.g., police departments, law enforcement academies, and the community. Program assessments provide the vital tools to determine whether financial investment in the law enforcement community is worthwhile (Ward et al., 2007, p. 2).
3. Program evaluation can provide systematic feedback for the overall improvement of the program, for instructors, and for law enforcement personnel performance. Additionally, it “provide(s) opportunities to discuss the challenges they face and offer potential solutions” (Ward et al., 2007, p. 2).
4. Program evaluation provides an opportunity for internal and external assessments. Evaluation and assessment models provide the resources for internal and external assessments “by conducting critical self-assessments, including police recruits, instructors and program needs assessments, measuring recruit and instructors’ performance, and assessing whether program learning objectives are aligned and mastered” (Ward et al., 2007, p. 2).

5. Program evaluation can strengthen learning and skills, contributing to the body of ongoing knowledge for all invested stakeholders. It provides an effective exchange of knowledge, skills, and processes for other programs (Ward et al., 2007, p. 2).

Assessment and evaluation models can be used for educational programs such as a police academy. Any type of program comes with strengths and weaknesses. Therefore, it is fundamental to provide a snapshot of its effectiveness and suggest improvements so law enforcement administrators can discontinue ineffective methods, programs, or curriculum.

Ward et al. (2007) contend that law enforcement personnel program administrators may want to turn a blind eye to the reality of negative results from a program evaluation, particularly because the cost of implementing these strategies can be burdensome (Metz, 2007). Peach et al. (2014) believe that “meaningful feedback nonetheless provides students [and program administrators] with an understanding of how they can close the gap between current and expected performance and helps them trouble-shoot their own performance” (p. 242). Ultimately, program evaluation and assessment models are implemented to improve programs and using them will “provide process data on the successes and challenges . . . [and] outcome data on program participants” (Metz, 2007, p. 3). Finally, program monitoring, evaluation, and assessment models can provide tangible data for ongoing improvements,

funding, and best practice strategies for other law enforcement academies to emulate (Metz, 2007; Ward et al., 2007).

Maryland Police and Correctional Training Commission (MPCTC)

The MPCTC is the official accreditation agency that monitors, regulates and maintains standards, and certifies all police officers, sheriffs, and special police officers in the state of Maryland. Traditional police academies organized by individual police agencies and nontraditional academies located within community colleges are responsible for educating and training police academy recruits for approximately 26 weeks, or 1,040 hours, of course instruction. The learning and demonstrable objectives are created by experts from current and former law enforcement personnel to other academicians. MPCTC is the certifying commission for Maryland law enforcement for aspiring police officers in small, medium, and large police agencies. MPCTC requires all law enforcement academy instructors to be certified by them; if an instructor possesses a master's degree or higher, required certification is waived.

Law enforcement recruits are required to satisfactorily complete a comprehensive and intense training consisting of, but not limited to, police ethics, community policing, tactical training, and Emergency Vehicle Operation (EVO) Training. MPCTC, through its certification process, ensures that potential law enforcement personnel serving municipal, local/county, and state police departments; county sheriffs' offices; and other special police departments have satisfactorily met at least 70% of the minimum requirements (Maryland

Department of Public Safety and Correctional Services [MDPSCS], 2017).

Furthermore, MPCTC ensures that all law enforcement personnel are satisfactorily proficient in “extrapolating evidence and evidentiary procedures, tactical training for patrol officers, traffic laws and traffic investigations, criminal investigations, first responder emergency medical care, communications, and report writing” (MDPSCS, 2017).

Aligning Educational Standards

MPCTC’s learning objectives are created and mandated to ensure that educational standards are being mastered (Carter, 2015; T. Powers, personal communication, January 12, 2015). A relevant question is: Can the law enforcement recruit effectively demonstrate tactical skills? Aligning educational standards can help a law enforcement academy focus on student performance and academic mastery through demonstrations and testing of learning objectives. MPCTC and community colleges have a fundamental responsibility to ensure that standards in the areas of academic curriculum, tactical training instruction, and outcome assessments are aligned with academic performance (Carter, 2015; Chappell, 2008; Ferguson, 2005; Fodera, Alifano, & Savelli, 2005; Marion, 1998; Petty & Guthrie, 2000). As a result, MPCTC requires approximately 750 objectives that are curriculum-based as well as practical demonstrations to be satisfactorily completed for learner-based competency. This type of alignment is necessary to ascertain whether academicians are making a connection between what is being taught and students’ ability to understand what is being taught.

Unfortunately, research shows little evidence of whether instructors and law enforcement programs have been evaluated to fully understand if learning objectives are indeed aligned with MPCTC objectives, and whether law enforcement recruits have truly mastered them in their work environment (Carter, 2015; Fodera et al., 2005; Oliver & Lagucki, 2012). Aligning educational standards can reveal what the police recruit and/or student has gained from the training or educational experience. In other words, evaluation helps to gauge success for the police academy instructor and overall educational program.

MPCTC also ensures that learning objectives are coordinated with the law enforcement academy by creating an academic environment that fosters critical learning skills and multidimensional approaches to learning in the areas of mental health, spirituality, fitness, and other tactical training. However, the mandated learning objectives are not effectively being measured in the field. While MPCTC learning objectives are assessed through periodic audits conducted by its accrediting commission, these do not measure whether what law enforcement recruits *do* with their learning is effective for their job performance. MPCTC alignment ensures that police academy recruits' performance is at an appropriate level for public and officer safety to be achieved, particularly in the areas of assignments, comprehensive examinations, scenario-based learning, and instructor demonstrations.

MPCTC Training Objectives

The MPCTC was established by the state of Maryland to oversee all training for police and correctional officers. These learning objectives are considered to be mandated minimum guidelines for training institutions and are taught as knowledge objectives and demonstration objectives. Each officer must pass a written and practical exam for most objectives with a passing score of 73% or higher. Additionally, the MPCTC states that for an entry-level police officer, he/she must undergo 26 weeks, or 1,040 hours, of training for small or medium-size agencies, such as police academies at community colleges (MDPSCS, 2017).

However, police academies at community colleges can exceed the expectations set forth by MPCTC, for example, by making sure all police recruits pass their objectives with a score of 100%, instead of the state-mandated 73% passing score for all learning objectives. Some law enforcement academies have extended their academy from 26 weeks to 42 weeks or more, with the intent that every objective be thoroughly taught and understood by each recruit. Academies vary in how they implement learning objectives, but they all must adhere to guidelines set forth by the training commission. MPCTC learning objectives need to be specific and measurable for police recruits to master and comprehend. When matriculating the types of law enforcement departments, the recruits are seen as having a vital role within the community as gatekeepers of peace and order and guardians of the use of force. Their training and education have to

demonstrate such an understanding in order to execute this demonstrative task of police leadership.

Without MPCTC learning objectives, and the ability to evaluate them, it would be difficult to ascertain what the recruits should be learning. For example, the objectives particular to the demonstrations provide the professor or academy instructor with explicit knowledge as to whether the police recruits have mastered the objective. In addition, MPCTC learning objectives provide a good assessment of curriculum development or redevelopment and overall strength of the program. For police academies, MPCTC learning objectives provide a comprehensive assessment of course design, curriculum, and development by outlining tangible, measurable assessments of expected learning outcomes. These learning objectives assist in determining whether recruits understand the concepts within police operations. They provide a guarantee that all police recruits are learning and mastering the same concepts in a comprehensive fashion, which creates continuity.

Coordination of Objectives in Law Enforcement Training Curriculum of Academies at Community Colleges

The coordination of MPCTC learning objectives in law enforcement training curriculum within academies hosted by community colleges can be a daunting process (Cordner, 2016; Cordner & Scarborough, 2007; Gardiner & Hickman, 2017; Giblin, 2017; T. Powers, personal communication, January 12, 2015; Scheina, 2013). Education and tactical training are coordinated with

mandated learning objectives to improve academic and behavioral performance as well as to develop a skill-based demonstration for law enforcement personnel (T. Powers, personal communication, January 12, 2015). Those who are entrusted with the education, for example, police academy instructors and commanders, ask themselves, “What are the specific police recruit behaviors, skills, or abilities that need to be achieved?” (Stassen, Doherty, & Poe, 2001, p. 11). This question can be effectively answered by using three types of learning objectives: (a) cognitive objectives that evaluate student learning; (b) effective objectives that evaluate what police recruits should think or care about; and (c) behavioral objectives that evaluate what police recruits should be able to do (Stassen et al., 2001, p. 11). Law enforcement academies have to assess whether comprehension is being achieved and whether the police recruit truly understands how to effectively use the training. In the law enforcement academy, this can be measured when recruits are evaluated, but the real task is whether they can demonstrate learning objectives in a real-life and real-time environment, such as when they are on uniform patrol.

Learning objectives within academic programs like a law enforcement academy are aligned and written to achieve the aforementioned objectives. According to Stassen et al. (2001), the following connections are needed for effective learning outcomes to be achieved:

1. Learning goals and objectives: What will the police recruit need to know, value, and be able to do upon leaving the academy?

2. Learning processes: What learning experiences will the police recruit need to achieve for his or her learning objectives?
3. Assessment and evaluation models: Will the academy know that police recruits are meeting MPCTC learning objectives?
4. Assessment and evaluation processes: What is the overall assessment and evaluation plan for your police academy program?
5. Outcomes and results: What are the students' findings? How does the data support these findings? Are there decisions, plans, and recommendations based on the academy's findings to improve the police academy program?

It is a quintessential aspect of any law enforcement program to coordinate and align MPCTC learning objectives to contribute to the process of evaluating the academic and behavioral success of the student. Evaluation models provide the necessary framework for an analysis, feedback, and continual improvement of the law enforcement curriculum at a regional community college.

Discrepancy Evaluation Model

There are many models available for evaluating an educational training program. The discrepancy model assesses an individual's academic performance, typically through a series of tests aligned with an overall standard set by the top performers (Schulz, Moller, Seidler, & Schnell, 2013; Uprichard, 2010). As early as 1976, the discrepancy evaluation was used to identify learning disabilities (Kavale, 2001). This model relies on two variables, ability and

achievement, which “can be combined to determine the presence or absence of the learning disability” (Kavale, 2001, p. 2). However, Kavale (2001) takes a closer look at “theoretical problems . . . practical difficulties surrounding prediction, a necessary part of discrepancy” evaluation processes (p. 2). Part of the discrepancy model is to assess ability and achievement with an accurate measurement. Some researchers contend that it is impossible for a discrepancy model to have an accurate assessment because it does not consider the possibility of low achievement, which can be due to a multitude of factors, such as cultural difference or lack of academic exposure; thus, it is seen to falsely diagnosed students as having a learning disability (LD) (Kavale, 2001).

Another issue with the discrepancy model is the inability to clearly define a learning disability (Kavale, 2001). The vague assessments or calculations used to identify a student with a learning disability do not clearly relate to intelligence or IQ. For Kavale (2001), the discrepancy model “is best associated with the concept of underachievement. Thus, when a student meets the discrepancy criterion, what is being affirmed is underachievement, not LD” (p. 6).

Although many researchers suggest that this assessment methodology is the best model for evaluating student performance, some critics consider the model to be educationally biased in areas of “culture, creativity and academic self-efficacy” (Cayirdag, 2016). Cayirdag (2016) argues that if students or trainees are exposed to “certain domains,” such as a positive environment, they may generally develop much-improved capabilities compared with other

students. Of particular interest is that the discrepancy model does not take into consideration students' prior academic or cultural exposure and how those facets may influence job performance. Therefore, some students may be tested and evaluated based on the assumption that they have been exposed to certain prior educational and cultural competencies.

Cayirdag (2016) argues that students who fail are not lacking in academic proficiency, but rather are lacking in academic and environmental exposure. Because of this bias, students may be mistakenly placed into developmental or special education programs (Cayirdag, 2016; McClafferty et al., 2002). The discrepancy model was utilized for the Individuals with Disabilities Education Act in 1975, and it was created for educational institutions to evaluate and determine the needs of students. However, to date, only 39 states have allowed use of this evaluative model, while the others consider it to contain cultural bias (Rosen, 2017). Ultimately, the drawbacks of this model may outweigh its advantages.

Kern's Six-Step Approach Model

Another educational evaluation model is the six-step approach model (Kern et al., 2009), which has the potential to accurately evaluate a training program. The six steps in this model are (a) problem identification and general needs assessment; (b) needs assessment for targeted learners; (c) goals and objectives; (d) educational strategies; (e) implementation; and (f) evaluation and feedback (Clark et al., 2010; Rohwer, Schoonees, & Young, 2014). These steps appear complex. Kern et al. (2009) recommend a post-evaluation of a program to

determine the next step in the evaluation process. In other words, one does not need to start with the first step in this model. However, Kern et al.'s six-step approach falls short by assuming that the evaluator conducts a pre-then-post evaluation to determine which step is needed first. Kern et al.'s process also may be confusing to conduct.

Although Kern et al. (2009) have made a persuasive case for conducting a thorough program evaluation with multiple steps, some researchers believe that this model has no clear structure and thus is not effective. Furthermore, the model rests upon the assumption that the prescribed steps do not have to occur in any particular sequential order but rather can be used as a learning model. Kern et al. (2009) and Clark et al. (2010) assert that these steps are universal and adaptable to all program evaluations, but they neglect to explain how this can be accomplished. Additionally, the model fails to show how these processes can be implemented or benefit a program evaluation for a complex educational institution that sponsors law enforcement personnel training.

Kern et al.'s (2009) method is more effective when utilized in groups where several minds aim toward a synergistic outcome. Consistency and common goals are the fruit of this model, given that group members are offering their own perspectives and anticipating a mutually beneficial and shared outcome. Besides encouraging collaborative work, the use of factual data as a part of the methodology supports the group members' resolution to remain objective and reach mutual agreement. Using the aforementioned steps, the

resolution would remain objective and justifiable, and if a new issue were to arise during the process, the group could revisit the original issue and alter the steps, if needed, to work toward a resolution (Clark et al., 2010; Kern et al., 2009; Rohwer et al., 2014). To that point, a disadvantage of the Kern method is that people will not always reach a consensus and/or teamwork may be lacking. Furthermore, a continuous collection of data is needed at every step of the process in order to be fully beneficial. Inaccurate data or omissions could skew the outcome and lead to unfavorable results.

Although the discrepancy and the six-step approach models are useful for evaluating educational programs, they are not a good fit for evaluating a law enforcement academy's intricate program. Some researchers have asserted that using Kirkpatrick's Four-Level Training Evaluation Model (Kirkpatrick & Kirkpatrick, 2006) has the best value, flexibility, and structure to assess and evaluate the successful transfer of training from a law enforcement academy to a trainee's job performance after graduation. The theoretical lens that guides this research project is the Kirkpatrick model.

Kirkpatrick Four-Level Model

Kirkpatrick's Four-Level Training Evaluation Model (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006; Ulum, 2015) is a well-known model for evaluating a learner's outcomes in training programs such as a law enforcement program. Ulum (2015) defines an educational program as a conceptual approach in academics such as "educational programs, training programs, and course

programs . . . which provides the related aim, the content, the order of the content, and how, where, when and with whom this content will be executed” (Ulum, 2015, p. 106). Some of the benefits of this evaluation model are the focus on the outcome assessment of a program, curriculum evaluation, and assessment of learners’ satisfaction with the program (Chang, 2010; Frye & Hemmer, 2012; Ulum, 2015). According to Ulum (2015),

A program evaluation [using Kirkpatrick’s model] is a kind of examination in social research field and it checks the sufficiency of educational programs. The broadest purpose of evaluation is to contribute judgments about the worth of an evaluated program or to point to the value of the program or just a section of it. (p. 106)

This research study focuses on evaluating a law enforcement academy program, which will benefit administrators, academy commanders, and other academicians who are entrusted with educating and training law enforcement personnel in academies.

The Kirkpatrick model includes four levels: reaction, learning, behavior/performance, and results/impact. These four levels can be captured by using the following questions: (a) How did the trainee *react* to the training?; (b) What did the trainee *learn*?; (c) What was the *behavior* (e.g., performance) of the graduate in the workforce?; and (d) What are the *results* of the training or how did the training *impact* the individual or organization? (Kirkpatrick & Kirkpatrick,

2006; Ulum, 2015). Each of these steps is used to systematically measure an educational program for its effectiveness.

The reaction level explores the approach of the student towards the program (Ulum, 2015), tapping into the emotional aspect of one's initial feeling after the training; it entails "affective responses to the quality of the training" (Bates, 2004, p. 341). The learning level measures knowledge achieved by a sample population that was exposed to the education or training (Ulum, 2015). In other words, what did the student gain from the training compared to what he/she understood before the training, and has the training concretely changed him/her for the better? The behavior/performance level provides the vital measurement of whether the law enforcement personnel adequately applied the training to their performance on the job. Finally, the research measures whether the major goal of the education was attained. Has the totality of the training changed not only the student but also the environment in which the student works as a results/impact of the training? This last level takes on a holistic approach.

Kirkpatrick's model allows a thorough step-by-step assessment at each level to gain data, insight, and knowledge on the effectiveness of an educational program and is particularly suited to a law enforcement educational program with multiple layers of bureaucracy (Bates, 2004; Chang, 2010; Dressler, 2002; Ulum, 2015). Kirkpatrick's model provides the simplification that is needed for such an intricate training organization, in that it provides a "straightforward" approach without the burdensome evaluation mechanism that defines Kern's six-step

approach (Bates, 2004). To that point, Bates (2004) states that this “model eliminates the need to measure or account for the complex network of factors that surround and interact with the training process” (p. 342).

Law enforcement personnel are responsible for educating and training new police recruits on learning objectives such as “preventing and controlling threatening conduct; aiding individuals in danger of harm; protecting constitutional guarantees; resolving conflicts; and, identifying potentially serious problems” (Cordner & Scarborough, 1998, p. 49-52). These learning objectives are vital for effectively protecting and serving the community. Cordner & Scarborough (1998) state, “It is through feedback that corrective action is taken, thus providing effective output in the future” (p. 62). In sum, Kirkpatrick’s model is a very effective tool for law enforcement personnel to use as a gauge of the effectiveness of a program (Chang, 2010). It provides an assessment on a learner’s outcomes in a training program through four levels: reaction, learning, behavior/performance, and results/impact, assuming that each level’s importance is greater than the next and systemically linked together (Frye & Hemmer, 2012; Ulum, 2015).

Examining Limitations of Using the Kirkpatrick Model

Training evaluations measure the effectiveness and improvement of a training program as it relates to stated goals, outcomes, and objectives (Bates, 2004; Cordner, 2016; Goldstein & Ford, 2002; Holton, 1996; Swanson & Holton, 2000), but no training evaluation is complete or without limitations. Bates (2004)

states that Kirkpatrick's model "makes false linkages, and data may not be clearly sequentially linked" (p. 342). This model assumes that each level is interconnected. First, it does not factor in the impact of the environment, which is the internal and external factors of the individual taking the training. All of these factors "have been shown to influence the effectiveness of both process and outcomes of training" (Bates, 2004, p. 342). Second, there may not be "a causal chain such that positive reactions lead to greater learning" (Bates, 2004, p. 342). Bates (2004) identifies three other areas of limitation with Kirkpatrick's model: "the incompleteness of the model, the assumption of causality, and the assumption of increasing importance of information as levels of outcomes are ascended" (p. 342).

For Bates (2004) this model is incomplete because it does not take into account as important factors the characteristics of the work environment or of the trainee. These characteristics reveal the cultural connections of the organization, values and goals that are essential for a thorough assessment. In addition, Kirkpatrick's model assumes that a causal relationship exists between the levels of evaluation. However, research has failed to show any causal relationship, whether "substantial or linear" (Bates, 2004, p. 342), with the other levels of Kirkpatrick's model. Lastly, the model assumes that each level of data expands on the previous level. This gives a false sense that the last level will ultimately be the most effective, but Bates (2004) concludes that there is no scientific data to support this assumption.

Despite the shortcomings and limitations of Kirkpatrick's model, Goldstein and Ford (2002) contend that this style of evaluation can bring about a cohesive assessment that will lead to organizational improvements. Furthermore, this model places greater emphasis on outcomes (Bates, 2004; Chang, 2010; Cordner, 2016). Some researchers contend that there are many factors and variables that are significant when assessing any evaluation and that to haphazardly navigate through an evaluation process with side blinders on can be reckless.

Bates (2004) argues that this reckless behavior of not factoring in all variables in the evaluation process, such as the environment or the individual, "can result from any number of factors ranging from the failure to protect participants' rights to the inability of the evaluation to convey accurate information about the object of study" (p. 343). To overcome this pitfall, Frye and Hemmer (2012) assert that "an evaluation plan must be designed to feed information back to guide the program's continuing development . . . program evaluation becomes an integral part of the educational change process" (p. 1). However, the cost of using this model can be prohibitive. Bates (2004) states that "over 94% of business organizations evaluate training reaction measures" (p. 344). At this reaction level, cost is minimal in terms of design and execution. The reaction level requires the evaluator to express his or her initial feelings from the training (Bates, 2004), with little overhead cost, compared to the cost of executing the

intricacies of the other three levels, that is, learning, behavior/performance, and results/impact.

Another critique is that the Kirkpatrick model does not consider the contextual human drive of the individual (Bates, 2004). Does the student have the drive, influence, and desire to complete or even engage in the training process? It is this connection that some researchers contend is lacking as an evaluator moves from one level to the next. These are important dynamics that are not taken into account during the evaluation process using Kirkpatrick's model (Frye & Hemmer, 2012). The perplexity and cost of conducting this type of evaluation for large organizations is significant. Most large organizations use levels one and two of Kirkpatrick's (1998) model to conduct evaluation on training but skip levels three and four because of the cost of implementation. However, researchers agree that the "lack of feedback within an organization results in lack of organizational control. If chiefs [or law enforcement directors] fail to make provision for feedback, they will soon lose control over their entire organization" (Cordner & Scarborough, 1989, p. 61).

Kirkpatrick's Model for Law Enforcement Curriculum Evaluation

Law enforcement organizations are generally bureaucratic in nature, adhere to a fixed set of rules, and have a hierarchy of authority (Cordner, 2016; Dressler, 2002; Gaines & Miller, 2014; Scheina, 2013). Therefore, the need for a systematic structure to evaluate training programs and training curriculums will be most advantageous in this type of environment. It may provide the orderly

structure with which most paramilitary training programs are familiar. Educating and training law enforcement personnel is a dynamic job that requires ongoing evaluation and improvement to remain relevant and current (Cordner, 2016; Cordner & Scarborough, 1989). Moreover, law enforcement training academies deal with pre-entry trainees who are not yet employed in a law enforcement career, but must assess them in their current state, a veritable “viewing them where they are” task. This can mean some policing experience or none, and some college credits or none. A curriculum that is reflective of this duality is needed in the 21st century with the advancements in science, technology, and policing strategies at all levels of society (Cordner, 2016; Fodera et al., 2005). Using Kirkpatrick’s model unfolds at various levels whether the training has been well developed, especially at levels two, three, and four (Frye & Hemmer, 2012; Kirkpatrick & Kirkpatrick, 2006; Ulum, 2015). Kirkpatrick’s model assesses whether the law enforcement trainee has acquired the necessary knowledge and skills within the prescribed academy training, the capacity to analyze, think objectively, think critically, and make reasonable conclusions in the patrol field (Cordner, 2016; Cordner & Scarborough, 1989).

Utilizing Kirkpatrick’s model for law enforcement curriculum evaluation will help to facilitate this process by asking the *why* and *how* for most law enforcement training programs. The *why* will be answered by garnering a better understanding of current and innovative knowledge to keep police officer trainees abreast of the latest technology, trends, and skills in law enforcement. The *how*

provides an assessment on what is working and what is not by conducting ongoing evaluation for improvement. Kirkpatrick's model gives training programs useful outcomes on the overall health of the training program. It unfolds the areas that are strong and exposes the areas that are weak through a methodical approach (Kirkpatrick & Kirkpatrick, 2006).

Birzer (2003) states that the law enforcement training curriculum "should include the needs, interests, and desires of the learner . . . police subjects should be presented so that trainees can use them in purposefully working through some problematic situation" (p. 36). However, Birzer (2003) admits that this "may be difficult to accomplish in a law enforcement context, since federal and state law training commissions in many jurisdictions mandate much of the curriculum content" (p. 36). Therefore, law enforcement academies with a strong, thorough organizational evaluation process that "strive for active participation" (Birzer, 2003, p. 36) will do well to overcome some of the tough hurdles.

Kirkpatrick's analysis ultimately determines what is effectively working and what is not, employing a simplistic approach to assessing training objectives (Bates, 2004). Some organizations, particularly a law enforcement training program, focus on outcome data after the fact, which reduces the need for pre-measurements of learning because it gravitates to a simplistic process of methodically evaluating a training program (Bates, 2004; Corder, 2016; Corder & Scarborough, 1989; Giloth, 2004). The critical nature of making decisions while on patrol requires the enforcement of policies and procedures taught to new

recruits; these must be effectively evaluated as well (Cordner, 2016; Cordner & Scarborough, 1989). Lastly, the “conclusions about the training effectiveness are based solely on outcome measures [feedback]. The model decreases the number of layers with which training evaluators will need to be concerned” (Bates, 2004, p. 2). Therefore, this straightforward model can be an effective tool for providing useful, measurable outcomes and valuable feedback on training performance for a complex organization such as a law enforcement academy.

Employer Feedback on Student Performance in the Workplace

Student Perception of the Effectiveness of the Training

Law enforcement training has come under scrutiny recently by both practitioners and academicians who question the quality of the education that recruits receive prior to beginning their careers. Researchers may question whether the training adequately prepares recruits to be effective law enforcement personnel (Bates, 2004; Cordner, 2016; Cordner & Scarborough, 1989). This study analyzes whether effective curriculum can be a major determinant of effective performance. Comparing the content (and curriculum) of law enforcement academies can indicate whether providing quality training and education to aspiring law enforcement personnel within the constraints of budgetary limits, internal scrutiny, and community distrust can still produce effective law enforcement officers.

Albarano (2015) contends that the question of how to produce quality employees and how to compare their performance to that of their peers is not a

problem unique to law enforcement. The way students or law enforcement recruits perceive their training is important. Some researchers argue that good and effective training from colleges can produce law enforcement personnel with better critical thinking skills, which could have a positive effect on whether they perceive their training to be effective (Chapman, 2012; Horn & Neville, 2006). Law enforcement agencies are gauging whether education and training from formalized institutions, such as community colleges and police academies, are beneficial for the individual law enforcement officer or the organization in general. Hall, Ventura, and Lambert (2007) contend that there are significant benefits to formal education and training, although research is inconclusive at best. Bond (2014), on the other hand, finds the benefits to be conclusive and argues that law enforcement recruits are doing a better job in the areas of communication, interaction with the public, and having the ability to think critically. This takes on a personal perspective for Bond and solidifies the argument of whether the students' perceptions of effectiveness in the field is achieved, because growth in the aforementioned areas is evident in law enforcement capabilities and job performance.

Proponents of formalized education, such as community colleges that host law enforcement academies, argue that the focus should continue to be on access, opportunities, and success. In part, student success is contingent on mechanisms available for feedback, evaluation, and services from these collegiate institutions, such as advisors, and these services are necessary if

student effectiveness is measured (Cordner, 2016; Cordner & Scarborough, 1998). According to the Center for Community College Student Engagement (2018),

Even though the benefits of advising are well established, Center [’s] data indicate that not all students are getting everything they need. Among students who have been enrolled at their colleges for more than one semester, 78% report meeting with an advisor. Of those students, 47% report being *very satisfied* with their advising experience, 44% say they are *somewhat satisfied*, and 7% say they are *not at all satisfied* (p. 2).

Whether students have access to advisors or faculty who understand how to advise will have a radical impact on students’ perception of effectiveness in training. Colleges and other academic programs or organizations that provide services for their students (or employees), such as advising and mentorship, tend to be more successful (Center for Community College Student Engagement, 2018; DeBate, 2010), which can in turn result in a positive reaction from the student (or law enforcement trainee).

However, providing these services comes with challenges as well. Birzer (2003) finds that there is push-back “at the management level because maintaining the hegemonic status of training is easier than implementing change” (p. 38). In addition, design and implementation of the training curriculum may be limited because of the mandates from accreditation agencies like MPCTC and legal requirements. In other words, there may be some resistance from internal

and external agents in the acceptance of feedback. Furthermore, these internal and external factors may have an impact on the perception of a student (or employee) and how he or she perceives his/her training, job performance, and job satisfaction and will eventually have an impact on productivity and outcomes (Albarano, 2015; Birzer, 2003; Jacobs & Dougherty, 2006).

Law enforcement academies hosted by community colleges have to bridge the gap in providing opportunities “in post-secondary education and re-training opportunities that often result in increased earnings potential and overall a more competitive workforce” (McElhoe, 2014, p. 4). McElhoe (2014) states that in 2012, community college students represented 45% of all U.S. undergraduates and 42% of first-time freshmen. These data are indicative that for some students community colleges represent the potentiality of success, new skills and knowledge, and effective job performance for their employers. McElhoe (2014) points to the impact of community colleges on the economy, which surpassed \$800 billion in added income during 2012, or 5.4% of the nation’s gross national product. The increase in revenue impacts law enforcement agencies that hire those students from academies hosted by community colleges. Many of these mid-size and smaller agencies rely on community college law enforcement academies to fill gaps within their workforce (T. Powers, personal communication, January 12, 2015).

Students’ perception of effectiveness may be tied to services such as advising and/or mentorship available on community college campuses.

Furthermore, academic institutions have to be open to change and have the willingness to realign their programs and curricula to meet the challenges of the 21st-century student in academic and technical programs (Albarano, 2015; Birzer, 2003). Training exclusively through a traditional method of teacher-centered learning may have limited benefits for modern learners (Birzer, 2003). There has to be more real-life interaction, perceived support, inviting and inclusive dialogue, and openness to innovative and creative perspectives for students to achieve real success and job satisfaction (Birzer, 2003; Chomal & Baruah, 2014).

Research may suggest that some students (and employees) are looking for unique benefits from the nontraditional academic services within their academic institutions, such as providing a communal and effective problem-solving relationship, for example, counseling (Bates, 2004; Chomal & Baruah, 2014; Cordner, 2016; Cordner & Scarborough, 1989), relevant teaching skills, encouragement, and empathy. These attributes are not seen as “crutches” but as support systems to foster a successful transition from first to finish on their academic and personal life journey. These nontraditional services may help not only with students’ successful transition throughout their academic life but also may serve as a benchmark to determine if their experiences at community colleges, or technical programs such as law enforcement academies, were indeed successful and effective (Albarano, 2015; Birzer, 2003; Chomal & Baruah, 2014; Johnson, 2011; T. Powers, personal communication, January 12, 2015).

However, some researchers suggest no matter how effectively curriculum or program evaluations are conducted, there are many challenges.

Challenges in Conducting Law Enforcement Curriculum Evaluations

Law enforcement personnel are required to make ethical decisions. Their values and behaviors are tested on a daily basis, and the decisions they make will not only impact the organization they serve but society in general (Carter, 2015; Chappell, 2008; Johnson, 2015). With the various layers of bureaucracy in place within policing, conducting a program or curriculum evaluation can be a challenge (Dressler, 2002). Before the professional era of policing, law enforcement officers had “little or no training given to officers, no recruitment standards to speak of, and no job security because officers could be hired or fired at will” (Dressler, 2002, p. 5; Johnson, 2015). The need for professionalization became paramount. This professionalization took the form of academic reform to address systematic corruption and went from an apprenticeship-type of training to a more formalized style, such as a police academy (Dressler, 2002; Scheina, 2013). As the demands of law enforcement increase, so does the corresponding need to educate and train new officers. With law enforcement academies entrusted as one of the primary conveyors of academic training, the challenge to conduct program and curriculum evaluations has become more significant.

Program and curriculum evaluation are best defined as “a systematic process of gathering and analyzing information for the purposes of program

assessment, program improvement, and, in a broader sense, strategic management. It provides a structured way to verify, document, and quantify program activities and their effects” (Ward, Chibnall, & Harris, 2007, p. 3).

Evaluations will outline what is successful and what needs improvement, which is critical in terms of the allocation of resources, accountability, and the successful longevity of a program (Ward et al., 2007). According to Ward et al. (2007), evaluations are important for the following reasons:

- To ensure that your program or curriculum is aligned with your learning objective: “A well-planned evaluation requires you to clarify assumptions about the links between your target population, the program activities, and the immediate, intermediate, and long-term outcomes you expect.” (p. 5)
- To provide a road map for others to follow, “with the potential barriers and pitfalls identified.” (p. 5)
- To shed light on the inner and outer working mechanisms of the program or curriculum: “Evaluation often uncovers positive or negative program effects that were neither anticipated nor intended—consequences that can be lost if no evaluation process is in place.” (p. 5)
- To evaluate the effectiveness of the program or curriculum: “Data collected during an evaluation will help document and demonstrate what is working and what is not.” (p. 5)

- To contribute to a body of knowledge, skills, and training: “The lessons that are learned from evaluation can be shared with other law enforcement agencies and communities. Sharing evaluation findings regularly will contribute to creating a much-needed body of verifiable law enforcement knowledge.” (p. 5)

Ward et al. (2007) assert that program evaluations are a rarity even in terms of curriculum. Some law enforcement academies’ curricula are developed and designed around mandated learning objectives from accrediting agencies that certify law enforcement personnel, such as MPCTC (Carter, 2015). Beyond routine audits, curriculum or program evaluations tend to be very limited, if they are conducted at all. According to Ward et al. (2007), this reluctance to implement evaluation of local or state law enforcement programs and curriculum “might stem from not wanting to invest in learning bad news” (p. 6). However, the reality is that program and curriculum evaluations can help with the allocation of more resources and funding. They can also help an institution honestly assess areas that need improvement, especially in the areas of academics and training related to complex 21st-century issues.

Furthermore, Ward et al. (2007) indicate that evaluation in the areas of curriculum and program can result in the following for law enforcement agencies, police academies, and other law enforcement entities:

- “Evaluation informs spending decision” (p. 6): program and curriculum evaluations help to improve allocations of financial resources for further education and training initiatives for law enforcement personnel.
- “Evaluation supports community and law enforcement” (p. 6): evaluations will assess whether education and training being taught in law enforcement academies are effective and current for officers working in the field and the community they will impact.
- “Internal structures and systems” (pp. 7-9): evaluations help to scrutinize the inner workings of an educational program, such as the effectiveness of instructors, course assignments, and environment.

Therefore, the challenge is for law enforcement academies to conduct more program and curriculum evaluations to ascertain whether courses taught in law enforcement academies hosted by community colleges are effective in context or if those courses need improvement. Ward et al. (2007) state, “[Curriculum and program] evaluation in law enforcement holds tremendous potential and is not a dangerous process designed to document failure or generate bad news. Instead, it is a valuable tool that agencies can use to enhance, prioritize, and justify activities” (p. 13).

Summary

Law enforcement academies at community colleges generally teach theories, policies, and procedures, and their practical application. This is the unique quality that the community college instructors bring to the learner:

knowledge of the subject matter and experience, which must be assessed and evaluated to determine whether students are learning and mastering the subject matter. Despite the limited amount of curriculum and program evaluation in traditional and community college law enforcement academies, this topic continues to receive a great deal of attention from the local and national media, community advocacy groups, and the law enforcement community in general. These interested groups want to know if current curricula taught by law enforcement academies are providing the most effective cognitive, social, and emotional support in their academic courses.

CHAPTER 3

METHODOLOGY

A review of the literature revealed research that specifically addressed curriculum evaluation processes of community college's law enforcement academies while students are enrolled (Cayirdag, 2016; Cropley, 2001; Fairweather & Cramond, 2010; Tashakkori & Teddie, 2003). However, there is limited curriculum evaluation and assessment research post-graduation concerning the effectiveness of law enforcement academies operated by community colleges. As such, there is a need to add to the literature, which may improve those law enforcement academy's curricula development efforts. The purpose of this quantitative study was to determine to what extent graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceived their learning experiences to be effective and transferable to job performance. The primary concern was possible differences in perceptions between graduates who are employed by different types of law enforcement agencies.

Research Design

This study used a quantitative research design. According to Ethridge (2004), "descriptive research can be explained as a statement of affairs as they are at present with the researcher having no control over variable" (para. 1). Ethridge suggests that the advantages of descriptive research provides (a) an effective way to analyze non-quantified topics and issues, (b) observes the

phenomenon in a completely natural and unchanged natural environment, and (c) gives an opportunity to integrate the qualitative and quantitative methods of data collection. Some disadvantages of descriptive research that Ethridge mentioned includes information about (a) descriptive studies cannot test or verify the research problem statistically, (b) research results may reflect certain level of bias due to the absence of statistical tests, and (c) the majority of descriptive studies are not repeatable due to their observational nature (Ethridge, 2004, para. 7-8).

The researcher developed a survey using components of Kirkpatrick's Four-Level Training Evaluation Model (Kirkpatrick & Kirkpatrick, 2006). Descriptive statistical analysis (e.g., frequencies, percentages, means, and standard deviations) was used to summarize the findings to determine if graduates of community college law enforcement academies perceived the training as effective and transferable to law enforcement employment post-graduation. MANOVA was used to test the hypotheses.

Participants

The study surveyed a cross-section of 200 graduates from a training program at an academy hosted by a Mid-Atlantic community college and who presently work in law enforcement. Surveys were sent to graduates of the program with at least one year of employment in a law enforcement agency. The graduates were expected to be employed with police or sheriff departments or local, state/federal or other agencies. The researcher used frequencies and

percentages for each of the demographic characteristics to develop a profile of the participant (see Table 1).

The demographic profile reflected that: 35.6% of the respondents worked at local police departments, 15.1% worked in either state or federal law enforcement agencies, 13.7% worked in sheriff's police departments, and 35.6% reported their work environment as *other law enforcement police departments*. Law enforcement organization sizes varied. Of the respondents, 21.1% indicated they worked at a law enforcement agency with one to ten personnel. Furthermore, 19.7% indicated they worked with 11 to 20 personnel, 16.9% with 21 to 50, 22.5% with 51 to 400, and 19.7% with over 400 law enforcement members.

The respondents also had varied years of experience in law enforcement: 62% had one to five years, 11.3% had 6 to 10 years, 7.0% had 11 to 15 years, 4.2% had 16 to 20 years, and 15.5% had over 20 years of experience. These data clearly show most respondents had one to five years of experience in law enforcement. Of the respondents, 74% were male and 26% were female. In response to the question regarding college education, 38.9% reported having some college education; this is typical because many community college police academy graduates receive a certificate of completion with the option of obtaining an associate's degree after completing other required courses, 9.7% reported only high school education, 20.8% had associate degrees, 8.3% had

Table 1

Demographics of Law Enforcement Personnel

Variable	Frequency	Percentage
Type of Law Enforcement Agency:		
Local Police Department	26	35.6
Sheriff Police Department	10	13.7
State and Federal Police Department	11	15.1
Other Police Department	26	35.6
Total	73	100.0
Size of Organization		
1-10 people	15	21.1
11-20 people	14	19.7
21-50 people	12	16.9
51-400 people	16	22.5
Over 400 people	14	19.7
Total	71	100.0
Years in Law Enforcement		
1-5 years	44	62.0
6-10 years	8	11.3
11-15 years	5	7.0
16-20 years	3	4.2
Over 20 years	11	15.5
Total	71	100.0
Gender		
Male	54	74.0
Female	19	26.0
Total	73	100.0
Education Level		
High School	7	9.7
Some College	28	38.9
Associate's	15	20.8
Bachelor's	6	8.3
Master's	13	18.1
Doctorate	3	4.2
Total	72	100.0

baccalaureate degrees, 18.1% had master's degrees, and 4.2% reported having doctorate degrees.

Instrumentation

Data collection included a quantitative questionnaire (see Appendix A) sent to graduates from a law enforcement training academy operated by a Mid-Atlantic region community college. With the exception of demographic questions, the questionnaire used a five-point Likert-type scale as the primary tool derived from Kirkpatrick's Four-Level Model (Kirkpatrick & Kirkpatrick, 2006). This questionnaire is an adaptation from a published survey instrument used for health care, "Evaluation: Present Practices in U.S. Business and Industry: Technical Training" (Twitchell, 1997) and from Gomez (2003), who adapted the same survey for a study on financial and contextual information that could be used for technical organizations, programs and businesses dealing with return-on-investment. The questionnaires were then modified to the researcher's focus on law enforcement training. For example, the researcher changed the reaction response section from the technical business training questionnaire to reflect law enforcement personnel training reaction responses (see Appendix A).

Pilot Study

The use of a pilot study was advantageous for this research; it revealed any logistical or procedural deficiencies prior to the research study (Carter, 2015; Creswell, 2003; Drost, 2011; Smallbone & Quinton, 2004). The researcher conducted a pilot study with the collaboration of experts in the field of law

enforcement training who are knowledgeable about law enforcement program evaluation. These experts helped to develop and refine the questions on the survey (Carter, 2015; Creswell, 2003; Lancaster et al., 2004). Participants were given adequate space for suggestions and recommendations. The law enforcement experts were encouraged to complete the survey and provide their feedback to the researcher within seven days of delivery.

Twenty respondents completed the survey. Some of experts made suggestions to correct sentence structure and grammatical errors in two questions to improve comprehension and clarity. Additionally, the researcher was encouraged by the experts to emphasize the importance of anonymity in the electronic cover letter email. The researcher reviewed the experts' suggestions and recommendations, made the appropriate changes, and updated the instrument.

As a result of the original survey reviewed to develop the survey used in this study and the feedback from experts, the final questionnaire was divided into five sections that covered the demographics and Kirkpatrick's four levels. There were 47 questions, and the average time taken to complete the instrument was approximately ten minutes. Six questions were required for each of Kirkpatrick's levels (reaction, learning, behavior/performance, and results/impact). A Likert-type scale used for many of the items provided a meaningful, accurate, and insightful dataset on a five-point scale (Boone & Boone, 2012; Carter, 2015; Creswell, 2003; Likert, 1932; Maxell, 1996). A Likert-type scale is most

advantageous for gathering participants' survey ratings (Boone & Boone, 2012; Carter, 2015). The details of the scale are described in each of the sections below.

Section 1: Demographic Profile

Section one of the survey addressed the Demographic profile of the graduates from the law enforcement academy. These questions identified background information such as participants' type of law enforcement agency, size of law enforcement agency, number of years employed in law enforcement (included full-time, part-time and contract employees), gender, and level of education. Type of law enforcement agency included local police departments, state/federal or other law enforcement agencies after one year of employment.

Section 2: Reaction

Section two of the survey addressed the *reaction* variable from Kirkpatrick's Four-Level Training Evaluation Model through the question, What are the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' attitudes (reactions)? Section two included six Likert-type scale questions for responses with one additional question seeking additional information regarding enhancing law enforcement training. This section of the survey collected information using questions which measured participants' immediate reactions gleaned from their law enforcement training. For example, the reaction section included the following questions: (a) Did the law enforcement trainee find the training beneficial? or (b) Did the law enforcement trainee find the

environment of the training to be conducive to learning? A Likert-type scale response included six components: (a) Does Not Apply = 0, (b) Strongly Disagree = 1, (c) Disagree Somewhat = 2, (d) Unsure = 3, (e) Agree Somewhat = 4, and (f) Strongly Agree = 5. The researcher added the scores from the six items to calculate the range of scores between 0 and 25. A higher score represented a “larger amount of ability or attribute being measured” (Carter, 2015, p. 60).

Section 3: Learning

Section three addressed the *learning* variable from Kirkpatrick’s Four-Level Training Evaluation Model through the question, What are the graduates’ perceptions of the law enforcement academy’s effectiveness in terms of learners’ knowledge (learning)? The *learning* variable provided a measurable level of the training in terms of increased knowledge or increased intellectual achievement (Kirkpatrick & Kirkpatrick, 2006). The learning variable was necessary to measure intellectual achievement that leads to behavioral changes. Section three included six Likert scale questions for responses with one additional question for feedback on enhancing law enforcement training received. The *learning* section included the following questions: (a) Did the law enforcement trainee master the appropriate skills and knowledge? or (b) Did the law enforcement trainee experience the intended outcome? The Likert-type scale used for these items was described in Section 2. The researcher added the scores from the six items to calculate the range of scores between 0 and 25.

Section 4: Behavior/Performance

Section four addressed the *behavior/performance* variable from Kirkpatrick's Four-Level Training Evaluation Model by asking, What are graduates' perceptions of the law enforcement academy's effectiveness in terms of changing learners' behaviors (behavior/performance)? This section provided data regarding whether law enforcement personnel applied law enforcement training to their job (Kirkpatrick & Kirkpatrick, 2006). Section four included six Likert scale questions for responses with one additional question aiming to capture additional factors that may have affected knowledge transfer from law enforcement training to professional career in law enforcement. The *behavior/performance* section included the following questions: (a) Did the law enforcement trainee use his/her learned skills? or (b) Can the law enforcement trainee transfer his/her training skills to others? The Likert-type scale used for these items was described in Section 2. The researcher added the scores from the six items to calculate the range of scores between 0 and 25.

Section 5: Results/Impact

Section five addressed the *results/impact* variable from Kirkpatrick's Four-Level Training Evaluation Model through the question, What are graduates' perceptions of the law enforcement academy's effectiveness in changing learners' knowledge on the job and confidence in the workplace (results/impact)? The data provided measurable details of law enforcement's impact on the training (Kirkpatrick & Kirkpatrick, 2006). Section five included eleven Likert scale

questions for responses with one additional question for feedback on current law enforcement performance. The *results/impact* section included the following questions: (a) Did the law enforcement training from a community college provide a perceived return on investment for the law enforcement agency? or (b) Did the law enforcement training provide a quantifiable reduction or increase in complaints as result of the community college academy training? The Likert-type scale used for these items was described in Section 2. The researcher added the scores from the six items to calculate the range of scores between 0 and 25. The ratings on the items were summed to yield a range of scores between 0 and 25.

Validity of the Instrument.

Validity implies that the researcher's instrument measured what it was intended to measure (Drost, 2011; Pagano, 2004; Smallbone & Quinton, 2004; Trochim, 2006). Furthermore, validity adds meaning and worth to a research study. It serves as a point of reference or benchmark to measure information, or data in a quantitative research (Drost, 2011; Smallbone & Quinton, 2004 Trochim, 2006). The validity of the instrument was established using several techniques. First, the questions on the survey were based on a theoretical framework, the four levels for evaluating training programs (Kirkpatrick, 1998; Kirkpatrick & Kirkpatrick, 2006). Second, examples from previous studies that used Kirkpatrick's model were reviewed.

The questionnaire used during this research was an adaptation from a published survey instrument used for health care, "Evaluation: Present Practices

in U.S. Business and Industry: Technical Training” (Twitchell, 1997) and from Gomez (2003), who adapted the same survey for a study on financial and contextual information that could be used for technical organizations, training programs and businesses dealing with return-on-investment. Except for demographic questions, the questionnaire used a five-point Likert-type scale as the primary tool derived from Kirkpatrick’s four-level (reaction, learning, behavior/performance and results/impact) model (Kirkpatrick & Kirkpatrick, 2006).

Reliability of the Instrument.

Cronbach Alphas were computed to determine the reliability (internal consistency) of a test (Drost, 2011). Internal consistency gauges the regularity “within the instrument and questions how well a set of items measures a particular behavior or characteristic within the test” (Drost, 2011, p. 111). Reliability helps to establish accuracy and regularity in data (Carter, 2015; Drost, 2011). Drost described reliability as “the extent to which measurements are repeatable” (Drost, 2011, p. 106). Therefore, reliability is concerned with consistency (Carter, 2015; Drost, 2011). Whereas, validity is focused on “the meaningfulness of research” (Drost, 2011, p. 114).

Reliability coefficients were calculated for the four variables (reaction, learning, behavior/performance, and results/impact). The resulting Cronbach alpha coefficients ranged between .706 and .912. Alpha values equal to or greater than .70 are sufficient for research purposes (Carter, 2015). The

instrument meets the minimum requirement for reliability. A summary of reliability of coefficients are presented in Table 2.

Table 2

Reliability of the Instrument

Variables	Reliability Coefficient	Number of Items
Reaction	.706	6
Learning	.828	6
Behavior/Performance	.892	6
Results/Impact	.912	11

Data Collection Procedures

Data collection procedures required multiple steps. This researcher obtained approval for this research from the Institutional Review Board (IRB), Morgan State University and a Mid-Atlantic community college, where the participants were identified and data collected. Participants received a consent letter (see Appendix B) that outlined the purpose of the research, consent verification, and ways to provide feedback. A recruitment letter (see Appendix C) was sent to introduce the research, and a brief explanation for the study was provided. Confidentiality and integrity of the responses were stressed, and results will be provided to participants upon request. Furthermore, a voluntary

electronic consent form gave participants' option to terminate the study at any time.

Participants had two weeks to acknowledge and respond to the survey. If participants did not respond within the two weeks, the researcher followed up with another email with an electronic read-receipt indicator affixed to the email. The researcher made follow-up telephone calls as a last resort to ascertain why participants did not respond to the email in an attempt to obtain 30% participation. Finally, collected data were extracted from the survey company's website, reviewed for accuracy, and analyzed.

Data Analysis

The researcher utilized the SPSS Statistics Version 25 software to analyze the data using descriptive statistical procedures. Descriptive statistical analysis uses frequencies, percentages, means, and standard deviations (Arkkelin, 2014; Salkind, 2010). The total effectiveness score and the sub-indicators of effectiveness (reaction, learning, behavior/performance, and results/impact) were computed by summing the ratings from each section of the questionnaire. The sums from the sub-indicators of effectiveness were added to obtain the total effectiveness score.

A multivariate analysis of variance (MANOVA) model for data analysis was used to analyze the responses from the graduates as related to the Kirkpatrick model. MANOVA is the appropriate statistical procedure when there are one or more independent categorical variables and two or more interval

dependent variables collected from the same participants. This type of analysis is most advantageous because it provides a researcher with the capability to execute analysis of multiple correlated variables instead of individual statistical analysis procedures (Carey, 1998; Creswell, 2003). The use of individual statistical procedures when there are multiple dependent variables increases the chances of making a Type I error rejection of a true null hypothesis (Creswell, 2003). As applied to this study, the type of agency that employed the graduates served as the independent variable (research question one and hypothesis one), and five dependent variables (research question two and hypotheses two-five) were total effectiveness score, and sub-indicators (reaction, learning, behavior/performance, and results/impact). All of these variables were entered into a single MANOVA model to test the hypotheses at .05 level of significance. All of the hypotheses were tested at the .05 Level of significance. A data analysis of the procedures are summarized in Table 3.

Summary

The focus of this quantitative study was to collect and analyze data from former graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college. The researcher analyzed graduates' perceptions of their reaction, learning, behavior/performance, and results/impact, and whether they perceived that the training received was effective and transferable to the job after graduation. The researcher used descriptive and inferential statistics to address the research questions and analyze collected data using SPSS

Software. MANOVA was used to test the hypotheses at the .05 level of significance.

Table 3

Summary of Data Analysis Procedures

Research Questions	Hypotheses	Independent Variables	Dependent Variables	Statistical Procedure
1	---	---	Reaction	Frequencies, Percentages, Means, & Standard Deviations
2	---	---	Learning	Frequencies, Percentages, Means, and Standard Deviations
3	---	---	Behavior/ Performance	Frequencies, Percentages, Means, and Standard Deviations
4	---	---	Results/ Impact	Frequencies, Percentages, Means, and Standard Deviations
5	1	Type of Law Enforcement Agency	Total Effectiveness	MANOVA
6	2	Type of Law Enforcement Agency	Reaction	MANOVA
6	3	Type of Law Enforcement Agency	Learning	MANOVA
6	4	Type of Law Enforcement Agency	Behavior/ Performance	MANOVA
6	5	Type of Law Enforcement Agency	Results/ Impact	MANOVA

* Type of law enforcement agencies: Local Police Departments, Sheriff Police Departments, State and Federal Police Departments, and Other Police Departments.

CHAPTER 4

RESULTS

The researcher analyzed the effectiveness of law enforcement training according to demographic information and Kirkpatrick's (2006) four-level evaluation model. The purpose of this quantitative study was to determine to what extent graduates of a law enforcement academy at a Mid-Atlantic regional community college perceived their learning experiences to be effective and transferable to job performance. Using an online quantitative survey, electronically dispersed via QuestionPro™ survey software, the researcher collected and analyzed data from a regional sample of law enforcement graduates (n = 200). Participants returned surveys electronically; the number of useable surveys was 73. The response rate of law enforcement personnel was 36.5%. This chapter includes details of the survey results and the testing of each hypothesis.

Perceptions of the Law Enforcement Academy's Effectiveness of the Learners' Attitudes (*Reactions*)

Research question one addressed graduates' perceptions of the effectiveness (reaction) of the law enforcement academy's training. Most respondents (83.3%) indicated they *strongly agree* that professors/instructors met their training and educational needs; 1.4% indicated they were *unsure* about the effectiveness of the training program in meeting their training and educational needs. Moreover, 79.2% of respondents reported they *strongly agree*

professors/instructors provided good training aids, audiovisual tools, and other advanced technology aids. With a nearly equal reporting, 79.7% indicated they *strongly agree* the law enforcement academy was a suitable environment in learning; 78.1% *strongly agree* that professors/instructors provided quality teaching for sufficient education and training, and 72.6% *strongly agree* professors/instructors provided evaluation forms after lectures, seminars, or demonstrations for feedback (1.4% only strongly disagreed on this point). Finally 74.1% of law enforcement personnel indicated *strongly agree* for overall quality of the program. 13.8% stated *somewhat agree*, 8.6% responded *unsure* of the effectiveness in the overall quality of the training program, and 1.7% reported *somewhat disagree* and *strongly disagree* (see Table 4).

The highest mean was 4.82, indicating the graduates felt that their instructors/professors were meeting the police recruits' education and training needs. The lowest means were 4.57 for overall quality of the program and in the area of feedback and evaluation forms after lectures, seminars, or demonstrations from instructors or professors. While the reaction scores were high, one area for improvement is the use of feedback and evaluation forms. It appears that instructors/professors were not consistent in their use of feedback and evaluation forms.

Table 4

Percentage Responses to Items on Reaction Domain

Question	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
Overall quality of program	1.7	1.7	8.6	13.8	74.1	4.57	0.86
The instructors/professors provided quality teaching for sufficient education and training.	0.0	0.0	1.4	20.5	78.1	4.77	0.46
The instructors/professors met my training and education needs.	0.0	0.0	1.4	15.3	83.3	4.82	0.42
The law enforcement academy provided suitable locations for training.	0.0	0.0	2.9	17.4	79.7	4.77	0.49
The instructors/professors provided evaluation forms after lectures, seminars, or demonstrations for your feedback.	1.4	2.7	6.8	16.4	72.6	4.56	0.85
The instructors/professors provided good training aids, audiovisual tools, and other advanced technology related aids.	0.0	0.0	4.2	16.7	79.2	4.75	0.54

**Perceptions of the Law Enforcement Academy's Effectiveness
of the Law Enforcement Learners' Knowledge (*Learning*)**

Research question two addressed graduates' perceptions of the academy's effectiveness in terms of learners' knowledge (learning). The survey reported that 82.5% of respondents *strongly agree* the law enforcement academy's training provided appropriate learning and increased their knowledge; 15.8% responded *somewhat agree*, and 1.8% responded *somewhat disagree*. Furthermore, 80% of participants reported *strongly agree* when responding to whether they received the intended law enforcement training concepts, course objectives, and subject matter; 20% *somewhat agree*. None of the respondents strongly disagreed, somewhat disagreed, or were unsure that the program failed to provide the intended law enforcement concepts (see Table 5).

Perceptions of respondents were as follows: (a) 87.0% reported increased new knowledge and skills, 3.0% *somewhat agree* with this; (b) 78.3% developed ideas, skills, and information to improve learning, 20.3% *somewhat agree*, and 1.4% reported *unsure* about the effectiveness of the intended law enforcement training concepts, course objectives, and subject matter of the training program; (c) 78.3% reported the academy's program had relevant and effective learning materials, 21.7% stated *somewhat agree*; and (d) 84.8% of respondents *strongly agree* that they achieved an adequate learning experience from the academy (see Table 5). Additionally, the data revealed the highest mean of 4.87 in gaining new knowledge or developing new skills from the law enforcement training and

education. The lowest mean of 4.77 in developing ideas, skills and information to improve the learning experience.

**Perceptions of the Law Enforcement Academy's Effectiveness
in Changing Learners' Behavior (*Behavior/Performance*)**

Research question three addressed graduates' perceptions of the academy's effectiveness at changing learners' behaviors. Of the respondents, 81.6% believed the law enforcement academy's training was effective at changing their behavior and on-the-job performance; 27.4% reported *somewhat agree* and only 3.2% reported *strongly disagree* (see Table 6). It is noteworthy that 49.3% of the law enforcement personnel strongly disagreed with the statement that the "education and training did not add value to my on-the-job performance" compared to 22.4% who indicated they *strongly agree* the education and training did *not* add value to their on-the-job performance. This wide discrepancy in perception warrants follow-up and discussion.

Furthermore, 47% of the respondents strongly disagreed that "the education and training did not support or reinforce the transfer of concepts, demonstrations, and activities for better on-the-job performance;" 24.2% stated they *strongly agree*. Approximately, 51% of respondents *strongly disagree* that the (education/training from the academy lacked personnel to adequately

Table 5

Percentage Responses to Items on Learning Domain

Question	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
Your law enforcement academy's training provided the appropriate learning and increased/enhanced your knowledge.	0.0	1.8	0.0	15.8	82.5	4.79	0.53
I received the intended law enforcement training concepts, course objectives and subject matter knowledge from my law enforcement academy.	0.0	0.0	0.0	20.0	80.0	4.80	0.40
I gained new knowledge or developed new skills from my law enforcement education/training.	0.0	0.0	0.0	13.0	87.0	4.87	0.34

Question	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
I developed ideas, skills, and information to improve my learning experience.	0.0	0.0	1.4	20.3	78.3	4.77	0.46
I received relevant and clear learning materials from my law enforcement education/training.	0.0	0.0	0.0	21.7	78.3	4.78	0.42
I achieved an adequate level of learning experience from the academy.	0.0	0.0	1.5	13.6	84.8	4.83	0.41

Table 6

Percentage Responses to Items on Behavior/Performance Domain

Questions	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
I believe that my law enforcement academy's training was effective in terms of changing learning behavior and on-the-job performance.	3.2	0.0	1.6	27.4	81.6	4.56	0.82
My education/training from the academy did not add value to my work performance.	49.3	16.4	6.0	6.0	22.4	3.64	1.65
My education/training from the academy did not support or reinforce the transfer of concepts, demonstrations, and activities for better on-the-job performance.	47.0	22.7	4.5	1.5	24.2	3.67	1.64

Question	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
My education/training from the academy lacked personnel to adequately evaluate whether skills, knowledge and training were being transferred from learning to on the job performance.	50.7	16.4	6.0	3.0	23.9	3.67	1.66
My education and training from the academy did not enhance my job performance.	54.7	15.6	3.1	3.1	23.4	3.75	1.67
My education and training from the academy were not transferable to my work-related experience.	54.7	15.6	4.7	3.1	21.9	3.78	1.64

Note: Negatively worded questions were reverse coded such that 5 = Strongly Disagree and 1 = Strongly Agree

evaluate skills, knowledge, and training,) 23.9% indicated *strongly agree*, 16.4% indicated they *somewhat agree*, 6.0% were *unsure* about the effectiveness of the training program in behavior/performance on the job, and 3.0% *somewhat agree*. In addition, 54.7% of respondents *strongly disagree* that the education/training from the academy did *not* enhance their job performance; 23.4% reported they *strongly agree* with that statement.

The survey included the statement “my education/training from the academy did not enhance my work performance,” 54.7% of respondents indicated they *strongly disagree* with the statement, 21.9% indicated they *strongly agree*, 4.7% were *unsure*, and 3.1% stated they *somewhat agree* (see Table 6). Additionally, the data revealed the highest mean of 4.56 in the area of changing learning behaviors, and on-the-job performance. However, lower means between 3.64 and 3.78 were found for five of six items on this scale. Again, the discrepancy between the positive statement (overall rating effectiveness in changing learners’ behavior/performance) and five negative statements warrant additional discussion.

**Perceptions of the Law Enforcement Academy’s Effectiveness
in Increasing Learners’ Knowledge and Confidence in the Workplace
(Results/Impact)**

Research question four assessed the graduates’ perceptions of the law enforcement academy’s effectiveness in changing learners’ knowledge on the job and confidence in the work place (results/impact). The survey revealed that

57.6% of law enforcement officers believed their education and training had an impact on organizational change; 23.7% reported they *somewhat agree*; 13.6% were *unsure*; 3.4% stated they *strongly disagree*, and only 1.7% *unsure* about the effectiveness of the training program in changing learners' knowledge on the job and confidence in the work place. Because of the education and training, 69.8% of law enforcement personnel were confident in their understanding of local, state, and federal laws, and only 4.8% stated they *strongly disagree* to being confident of that understanding. Similarly, 68.2% strongly agreed that the academy training had an impact on their understanding of proper procedures for handling evidence, and 68.3% strongly agreed stated the academy improved their ability to properly transport and handle suspects (see Table 7).

Of the respondents, 64.6% expressed confidence in their abilities to manage their professional life (*strongly agree*), and 21.5% indicated *somewhat agree*. Only 1.5% reported they *strongly disagree* with this result of the training. Furthermore, 67.2% (*strongly agree*) of respondents reported improved defensive tactical skills and 67.7% (*strongly agree*) believed they enhanced verbal/nonverbal communication skills, and 23.1% of law enforcement personnel stated they *somewhat agree* that academy training affected organizational change, 6.2% were *unsure*, and 3.1% stated they *somewhat disagree*. None of the respondents reported that they strongly disagreed with this statement.

The data revealed positive results of academy training: 75.8% of participants indicated better understanding of concepts in community policing

and traffic law (only 1.6% reported they *strongly disagree*), 78.5% of respondents indicated that academy training positively affected their understanding of criminal and civil law (0% somewhat disagreed, and 0% strongly disagreed), and 74.6% reported they *strongly agree* they are able to effectively conduct investigations (0% somewhat disagreed, and 0% strongly disagreed) (see Table 7).

Additionally, the data revealed the highest mean of *4.74 from the* respondents indicating their academy education and training had an organizational impact on their knowledge and understanding of the criminal and civil laws; whereas, the lowest mean of *4.31* that law enforcement academy training effectively had an impact on organizational change. The respondents consistently reported that program was effective in the results/impact domain.

Perceived Total Effectiveness by the Type of Law Enforcement Agency

Research question five addressed possible differences in total effectiveness as perceived by graduates employed by different types of law enforcement agencies. Results of one-way ANOVA indicted there was not a significance $F = .427$, $df = 2$ and 72 , $p = .654$, difference in perceived total effectiveness by graduates employed by different types of law enforcement agencies (see Table 8). Thus, the null hypothesis was not rejected.

Table 7

Percentage Responses to Items on Results/Impact Domain

Questions	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
Do you believe your law enforcement academy training effectively had an impact on organizational change?	3.4	1.7	13.6	23.7	57.6	4.31	1.00
My academy education/training impacted my law enforcement agency's understanding of local, state and federal laws and regulations.	4.8	1.6	7.9	15.9	69.8	4.44	1.04
My academy education/training had an organizational impact on how to better understand the proper procedures of handling evidence.	1.5	1.5	4.5	24.2	68.2	4.56	0.79
My academy education/training had an organizational impact on the proper procedures of transporting suspects/detainees.	1.6	4.8	6.3	19.0	68.3	4.48	0.93

Question	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
My academy education/training had an organizational impact on my ability to personally and professionally manage my life.	1.5	6.2	6.2	21.5	64.6	4.42	0.97
My academy education/training had an organizational impact on my ability to understand and properly use defensive tactical skills, e.g. driving, take-down skills, etc.	1.6	4.9	6.6	19.7	67.2	4.46	0.94
My academy education/training impacted my ability to communicate verbally/non-verbally for better professional skills.	0.0	3.1	6.2	23.1	67.7	4.55	0.75
My academy education/training had an organizational impact on my ability to better understand concepts of community policing.	1.6	0.0	4.8	17.7	75.8	4.66	0.72
My academy education/training had an organizational impact on my ability to better understand traffic laws.	1.6	1.6	6.5	14.5	75.8	4.61	0.82

Questions	Strongly Disagree	Somewhat Disagree	Unsure	Somewhat Agree	Strongly Agree	<i>M</i>	<i>SD</i>
My academy education/training had an organizational impact on my knowledge and understanding of criminal/civil laws.	0.0	0.0	4.6	16.9	78.5	4.74	0.54
My academy education/training had an organizational impact my knowledge and my ability to properly conduct Investigations.	0.0	0.0	6.3	19.0	74.6	4.68	0.59

Table 8

ANOVA Results by Perceived Total Effectiveness by the Type of Law Enforcement Agency

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.156 ^a	2	.078	.427	.654
Intercept	1008.859	1	1008.859	5534.996	.000
Type of Agency	.156	2	.078	.427	.654
Error	13.123	72	.182		
Total	1306.804	75			
Corrected Total	13.279	74			

a. R Squared = .012 (Adjusted R Squared = -.016)

**Perceived Effectiveness by the
Type of Law Enforcement Agency**

The sixth research question was concerned with whether the sub-indicators of effectiveness of the law enforcement academy program differed based on where the graduates were employed. To compare outcomes by type of law enforcement agency, the researcher completed a multivariate analysis of variance (MANOVA see Table 9) test with total effectiveness score and four sub-indicators of effectiveness (reaction, learning, behavior/performance, and results/impact) as dependent variables. Type of law enforcement agency was the between-subjects factor (independent variable). MANOVA was the appropriate statistical procedure because the four interval dependent variables were

collected from the same individuals, which could have caused the variables to be correlated, and there was one categorical independent variable.

The first step in MANOVA is to analyze all of the independent and dependent variables in a comprehensive MANOVA test. There were no significant differences in effectiveness ratings by type of law enforcement agency, *Wilks Lambda* = 0.745, $F(16, 174.8) = 1.103$, $p = .356$, revealing that the overall MANOVA was not significant. Therefore, the null hypotheses associated with research questions five and six were not rejected, and it was concluded that there were no differences in perceived effectiveness of the training program by graduates employed at different types of law enforcement agencies. Table 9 presents the MANOVA results. Ratings did not differ by type of law enforcement agency on any of the outcome measures. For example, no significant differences in reaction to training were found among law enforcement officers employed at local police departments, sheriff's departments, state/ federal law enforcement agencies, and other law enforcement Agencies. The second step in a MANOVA analysis is to examine the ANOVA results for each of the dependent variables. This step is necessary if overall MANOVA is significant. For this study, the overall MANOVA was not significant. Therefore, it is inappropriate to attempt to analyze the results of the individual ANOVAS. However, for transparency, the results of the Total Effectiveness ANOVAS are provided in Appendix D.

Table 9

MANOVA Results for Outcomes by Type of Law Enforcement Agency

Source	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>p</i>
Reaction	0.182	2	0.091	0.470	.627
Learning	0.451	2	0.225	1.016	.367
Behavior/Performance	3.461	2	1.730	1.071	.348
Results/Impact	1.591	2	0.796	1.787	.175

Note: Error *df* = 72

Summary

This chapter included details of the findings as they are related to the six research questions based on Kirkpatrick's (2006) four-level evaluation model. The researcher used quantitative methodology to evaluate and analyze the data collected. The purpose of this quantitative study was to determine to what extent graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceived their learning experiences to be effective and transferable to job performance. They responded to statements on a survey using a Likert-type scale that provided meaningful data for analysis.

Most participants perceived their police academy learning experiences were effective in preparing them for law enforcement employment. Law enforcement academy graduates employed in various law enforcement agencies perceived their law enforcement education, training, and curricula to be effective

in all areas (reaction, learning, behavior/performance, and results/impact) based on Kirkpatrick's (2006) four-level evaluation model.

The first research question included the reaction domain to describe law enforcement officers' rating of the overall effectiveness of training program. Approximately 74% of the law enforcement personnel perceived the training to be effective and of high quality. The second research question focused on the learning domain. Approximately 83% of the law enforcement personnel strongly agreed that the academy's training provided the appropriate learning and increased/enhanced their knowledge. The third research question included the behavioral domain to assess whether the law enforcement personnel perceived the training applicable to their performance on-the-job (81.6% of the law enforcement personnel used the training and experienced performance change). The fourth research question included the results/impact domain to provide measurable analysis of the influence of law enforcement training on organizational change (57.6% of respondents *strongly agree* and 23.7 % *somewhat agree* that training caused notable change to organization). The fifth and sixth research questions were concerned with possible differences in the perceived effectiveness of the community college law enforcement academy's training program between graduates in different law enforcement agencies (by type of law enforcement agency). The ANOVA and MANOVA results showed no differences in ratings between graduates employed by different types of law enforcement agencies.

CHAPTER 5
DISCUSSION, CONCLUSIONS, IMPLICATIONS,
AND RECOMMENDATIONS

American law enforcement personnel face many legal and societal challenges. Traditional news and social media outlets are engulfed with pessimistic messages portraying threats on our cyber systems, the impact of increased and uncontrollable crime, neighborhood rivalries, civil unrest or disobedience, and law enforcement officers exhibiting unlawful behaviors. Today's unpredictability requires vigilant, well-educated and well-trained law enforcement personnel to address, and sometimes prevent, these real dilemmas. Accordingly, law enforcement academies are obligated to provide advanced and comprehensive training for law enforcement personnel.

Law enforcement program evaluations are vital for the survival of the people served as well as for the preservation of law enforcement organizations. However, a current literature review showed a focus on law enforcement administrative requirements, police behavior and conduct, and resources to improve law enforcement academy education. Yet the need for more research to address law enforcement curricula and program evaluation is important (Carter, 2015; Chappell, 2008; Paynich, 2009). Reinforcing the urgency for more research, Carter (2015) added that increasing accountability would necessitate the refocus of resources specific to improving areas of program evaluation and curricula reform.

Hence, this study was designed to assess the effectiveness of a law enforcement education and training curricula based on a student post-graduation assessment. The study concentrated on academies hosted and operated by one Mid-Atlantic community college. An extensive literature review led to the selection of Kirkpatrick's Four-Level Training Evaluation Model as the theoretical framework for this study, the research questions, and the design of the survey. As previously mentioned in the literature review, the development of an effective training program and curriculum evaluation is critical to discern whether educational skills are being effectively transferred to their job performance (Chappell, 2008; Franklyn, 2013; Patel, 2010).

Use of Kirkpatrick's Four-Level Training Evaluation Model

Kirkpatrick's model was the appropriate model to frame the research questions as well as the survey. This model allowed the researcher to evaluate the curricula (and program) for law enforcement personnel through a structured and cohesive framework. This deliberate and organized evaluation environment is most advantageous for a law enforcement paramilitary organization. The framework examined through a Likert-type survey the effectiveness and impact of curricula, education, and training on law enforcement officers' perceived behavior in the work environment. The five dependent variables used in this study derived from Kirkpatrick's model: (a) reaction, (b) learning, (c) behavior/performance, and (d) results/impact. The scores from the four

components of Kirkpatrick's model were summed to measure the graduates' perception of the total effectiveness of the training program.

Discussion

Perceptions of the Law Enforcement Academy's Effectiveness on the Learner's Attitudes (*Reaction*)

This researcher examined the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' attitudes (*reaction*). The results showed that 74.1% of the law enforcement personnel's initial reaction to the training was very favorable. Unlike some traditional law enforcement academies that are confronted with budgetary constraints and limited resources, police academies hosted by community colleges can provide a college campus environment with state-of-the-art technology, smart classrooms, and professors who are up-to-date with the academic literature. For example, 83.3% of the respondents indicated that they strongly agree that professors or instructors met their training and educational needs. In addition, 79.2% of respondents reported that they strongly agree that professors or instructors provided good training aids, audiovisual tools, and other advanced technology-related aids. Respondents (78.1%) reported that they strongly agree that instructors provided quality teaching. The feedback indicated the community college police academy was effective in terms of environment, professors' teaching abilities, and technological resources used. Although the reaction section of this study indicated the effectiveness of study by the law enforcement recruits in this police academy

training program, research literature was limited on the law enforcement recruit perspective in a community college training program. Despite the lack of literature on this perspective, Chappell (2008) emphasized that law enforcement training programs should maintain core tactical and academic competencies in areas of education and training that will ensure effective outcomes for individual law enforcement officers, and the communities they serve.

Perceptions of the Law Enforcement Academy's Effectiveness on the Learners' Knowledge (*Learning*)

In this section of the survey, the researcher focused on the graduates' perceptions of the law enforcement academy's effectiveness in terms of learners' knowledge (*learning*). Given the recent firings of some law enforcement personnel for inappropriate behavior or misapplication of the use of force, the survey reported that 80% of respondents reported receiving the intended law enforcement training concepts, course objectives, and subject matter knowledge for effective job performance. The public relies on law enforcement personnel as gatekeepers of law and order. It is important that law enforcement personnel develop and maintain the necessary skills to be prepared and available for service in the community. Given the issues of mental illness, drug addiction, and the ever-looming threats of violence; law enforcement personnel must feel and exhibit a level of confidence and believe they are indeed prepared. The survey reported that 84.8% strongly agree that law enforcement personnel achieved an adequate level of learning experiences and certainty from the academy.

Perceptions of the Law Enforcement Academy's Effectiveness on Changing Learners' Behavior (*Behavior/Performance*)

The law enforcement graduates' perceptions of the law enforcement academy's effectiveness in terms of changing learners' behaviors (*behavior/performance*) was the focus of this section. The results from the survey provided evidence that education and training can help in altering behavior. Only 3.2% of the law enforcement respondents strongly disagreed.

As media outlets expose law enforcement personnel who exhibit various levels of unethical behavior, it is critical that training and education are reflective of the appropriate values, skills, and knowledge to create an environment that is professional and ethical, as well as law enforcement personnel who are competent and capable (Carter, 2015). The survey showed that 49.3% of law enforcement personnel asserted that education and training were an added and enhanced the value of skills and knowledge supplementing their on-the-job performance. However, 22.4% of respondents disagreed that education and training added value to their on-the-job performance. This is important as law enforcement personnel must be trained, evaluated, and kept current on relevant knowledge, skills, and best practices for on-the-job performance (e.g., diversity training to develop the necessary skills to interact with people of color).

Perceptions of the Law Enforcement Academy's Effectiveness on Learners' Knowledge on the Job and Confidence in the Workplace (*Results/Impact*)

In this section, the researcher examined the graduates' perception of the law enforcement academy's effectiveness in changing learners' knowledge on the job and confidence in the workplace (*results/impact*). The results of the survey revealed that 69.8% of law enforcement personnel are confident in their understanding of local, state, and federal laws compared to 4.8% who strongly disagree. Law enforcement personnel who have a better understanding of the law will minimize violating citizens' rights and avoid the financial and criminal repercussions. In addition, 78.5% of respondents stated the law enforcement academy made an organizational impact on their knowledge and understanding of criminal and civil law. Also, 64.6% of respondents concur that they have reached a level of confidence in their ability to manage their professional life, which may avoid negative issues with their work performance.

Perceived Total Effectiveness by the Type of Law Enforcement Agency

There were no significant differences in the total effectiveness, reaction, learning, behavior/performance, and results/Impact. The law enforcement personnel employed by different types of agencies did not differ in their perceptions of the effectiveness of the law enforcement training program.

The researcher examined the perceived effectiveness of a community college law enforcement academy's training program of graduates who are employed by various types of law enforcement agencies. Law enforcement

personnel respondents (60.7%) strongly agreed with the effectiveness of a nontraditional police academy, such as a community college police academy, compared to 27.9 % who somewhat agreed. There needs to be a genuine assessment and evaluation of law enforcement training programs to meet the needs within our communities (American Society for Training and Development, 2009; Griffith, 2015; Smydo & Lord, 2016).

Law enforcement personnel have to be competent in skilled areas so they can safely participate in securing communities. For example, 70.5% of respondents believed that their academy training at a community college increased their effectiveness in areas of tactical skills, community policing services, and strong communication skills, compared to 1.6% who strongly disagreed. Competent law enforcement personnel help to build communities that are broken and restore law and order where it has been compromised.

A dynamic and comprehensive training program may be the catalyst for improving law enforcement personnel's behaviors. To that point, 72.1% of law enforcement personnel reported post-graduation that academy training was impactful in areas of mandated requirements, service projects, curricula, and self-improvement. Dynamic training will assist law enforcement personnel in performance by creating an environment that addresses the root problems in crime, providing the skills and knowledge to manage crime effectively, and serve as benchmark for other law enforcement personnel (American Society for Training and Development, 2009; Griffith, 2015; Smydo & Lord, 2016).

Conclusions and Implications

The key conclusions for this study suggest that:

1. The selected Mid-Atlantic community college law enforcement academy is perceived to be effective in providing value, real-life training scenarios, program courses and materials, and quality instruction for law enforcement education and training.
2. Education, training and curricula evaluations can provide vital feedback on the knowledge and skills of law enforcement personnel.
3. Education, training and curricula evaluations can provide useful quantitative and qualitative data for improvements (and provide feedback of what is successful).
4. Effective feedback can provide useful data on the effectiveness of the instructors and teaching methods used in the law enforcement academy.
5. Graduate feedback can provide empirical data on the effectiveness of the program.
6. Graduate feedback can also provide empirical data on the impact on job performance from having participated in the program.
7. Adequate feedback can provide useful data for other law enforcement academies to emulate.

This study's findings showed a connection to the expertise, value, cost, and education and training resources of a community college law enforcement program to be favorable. Using Kirkpatrick's evaluation model allowed former law enforcement recruits to evaluate the efficacy of training. The survey findings suggested that law enforcement personnel rated the overall quality of education and training to be 74.1% *strongly agree*, which is indicative of the depth of training. Moreover, 84.8% of respondents noted *strongly agree* that they achieved an adequate level of learning from the law enforcement program.

Additionally, the research findings suggest respondents strongly agreed with what was intended from the training as it pertains to knowledge gained, improved learning experiences, and relevant learning materials. This is quite important as traditional police academies begin to assess and evaluate their relevancy and program success. Perhaps law enforcement academies hosted by Mid-Atlantic community colleges are providing the necessary skills, training, and knowledge for 21st-century law enforcement personnel. Specific skills are required for law enforcement personnel to address and reduce the problem of poor training, locally and across the nation.

There is not any one simple cure for the many complex problems in law enforcement. However, this study's findings indicate that law enforcement academies hosted by community colleges have a strong stake in producing a new perspective on educating and training personnel in this enormous frontier

called policing. Although these research findings are favorable, the need for ongoing evaluation is paramount.

Recommendations

Key recommendations surfaced as a result of the research findings. This section provides recommendations in the areas of theory, policy, practices, and future research.

Theory

Kirkpatrick's Four-Level Training Evaluation Model offers an adequate theoretical framework for examining what is and what is not working, and a guide for overall improvement of the program. This framework can include education and training, especially in areas of curricula and program evaluation, which can benefit law enforcement personnel systematically. Furthermore, this theoretical framework serves to promote internal and external review of the education and training of law enforcement personnel, curricula reform, and overall potential strategies for change. The data in this study illustrated that law enforcement academies hosted by community colleges are bridging the gap in perspective between the police and the community by helping to resolve quality of life issues (e.g., homelessness, and abandoned buildings); preventing and curtailing criminal activities (e.g., violence and shootings); finding solutions to reintegrate offenders; strengthening family, community, and business relationships; and assisting in the mental health and addictions crises to name a few (Rosenburg, Sigler, & Lewis, 2008).

Also, the research literature revealed that some of Kirkpatrick's (2006) evaluation models such as the results/impact components were sometimes merged or separated during the evaluation process for the need of a particular outcome. However, the decision was made to combine Kirkpatrick's (2006) models of results/impact. Perhaps future researchers will analyze results/impact component separately in order to receive data on specific results (and impact of the results as it relates to education and training of law enforcement personnel).

Policy

The findings from the research establish that an effective program evaluation may be useful for creating and reviewing policies concerning the effectiveness of training and educating for law enforcement personnel in the academy. Results of this research can be evaluated for policies to determine the various causes for improving qualified law enforcement personnel. With the recent public outcries about bad actors in law enforcement, this study's findings showed that respondents strongly agree community college police academies are producing law enforcement personnel who are satisfied with the training, both personally and professionally. This, in turn, can create training and education policies in curricula and program development to prevent patterns of unlawful behavior of individual police officers. Conducting program and curricula evaluations can improve program and curricula policies by serving as an early warning for systemic reform in education and training police personnel (American

Society for Training and Development, 2009; Griffith, 2015; Rothwell & Gerity, 2008).

Law enforcement training programs are constantly being updated with required training and learning objectives with little or no training to execute those objectives from training commissions that issue them. Therefore in some cases, a training policy needs to be implemented by Maryland Police and Correctional Training Commission (MPCTC) to evaluate and assess whether mandated learning objectives at the academy hosted by a community college are effective or inadequate (or may lack the appropriate personnel with the appropriate credentials, expertise and training to adequately conduct an audit and/or program review). This research suggests that perhaps MPCTC should consider developing (and providing) universal standards for police academy instructors that are consistent and uniformed with a level of mastery and certification. All instructors should be certified in both content and the ability provide high quality instruction.

The literature review revealed that MPCTC only requires that objectives be taught without asserting the quality and effectiveness of the program or the relevancy of the objectives for law enforcement personnel. Although an audit is required, without a comprehensive evaluation, this research showed that it can be beneficial to conduct a comprehensive evaluation of the academy's program to determine if the mandated objectives are effective and beneficial for law enforcement personnel in the communities and police agencies they serve.

Furthermore, a comprehensive evaluation particularly as demonstrated in this study can possibly show that a law enforcement academy is producing good, competent, and educated law enforcement personnel.

Directors, police academy commanders, or police academy coordinators should have work experiences from local or state law enforcement agencies because they provide credibility to the program having direct knowledge of local and state law enforcement agencies laws, ordinances and local issues that most affect the community in which they serve.

Some researchers have observed that many of the accrediting law enforcement agencies, such as MPCTC, sometimes do not have a clear policy for hiring retired police officers and retired administrators from other law enforcement agencies. Law enforcement correctional officers who may not be knowledgeable about law enforcement evaluation models nor the benefits of conducting an evaluation program models in general (Bates, 2004; Carter, 2015; Cordner, 2016; Cordner & Scarborough, 1989), or former law enforcement personnel from federal agencies, that are not familiar, and do not understand local laws/ordinances, customs and procedures of local or state police academy training programs which could lead to severely inadequate training.

Practice

The researcher's findings illustrated that the law enforcement personnel respondents from the community college police academy strongly agreed that their education and training added value to their behavior. Therefore, if program

and curricula evaluation were conducted in a timely manner, education and training facilities would be able to identify areas of improvement and areas that are working to make informed decisions on curricula and educational and training programming. For example, more than half of the respondents reported that the education and training were impactful in areas of organizational change and culture.

Furthermore, the data supported the critical importance of a comprehensive evaluation, especially in the current climate of competition with other community colleges and traditional law enforcement academies. By ascertaining if a program's law enforcement graduates are reacting favorably or unfavorably to the training by providing relevant assessments, the following areas are represented: (a) education and training, (b) gaining new knowledge and new skill sets, (c) effectively changing behaviors to accommodate new knowledge, and (d) impactful results from community colleges' law enforcement academy programs (American Society for Training and Development, 2009; Griffith, 2015; Smydo & Lord, 2016).

Future Research

Future research on law enforcement program evaluations can benefit accrediting institutions, such as MPCTC, to become more transparent in their evaluation process by reaching out to other law enforcement directors from traditional academies on some of the benefits of nontraditional police academies at community colleges as a standard to emulate. This study revealed how

effective program evaluation is needed to confront the 21st century law enforcement challenges in curricula, education and training program. Program evaluations can shape or reshape the direction of any law enforcement program by steering in those directions that are effective and improving areas that are perceived to be less effective (Carter, 2015; White & Escobar, 2008).

Kirkpatrick's Four-Level evaluation model described four areas of effectiveness (reaction, learning, behavior/performance and results/impact). Kirkpatrick offered five areas of effectiveness, results and impact treated as separate indicators of effectiveness. Future researchers should use five indicators as a way of broadening their understanding of the effectiveness of the training program.

A qualitative study is needed to receive feedback from police academy directors (and academy commanders) on the perceptions of the effectiveness of conducting a law enforcement training evaluation. Feedback could provide direction on what is effective in training, especially those directly affected in the field, and areas that need improvement. This type of feedback will provide reallocation of resources in areas of instruction, and materials for additional improvement. Feedback from graduates would help by providing firsthand knowledge of the program. Based on the research findings, this community college law enforcement program should use Kirkpatrick's model as comprehensive approach to collecting meaningful and useful data. With budget cuts, community demands, and ever-challenging needs of law enforcement

personnel, police academy directors (and academy commanders) need to know what is working and what is not.

Conducting program and curricula evaluations allows law enforcement programs with critical feedback for systemic improvements for program and curricula evaluations. These changes can lead to better course instructions, innovative and relevant course topics, and an increase in retention of new recruits which is a major challenge in the 21st century. The literature review revealed the challenges in conducting curricula and program evaluations, especially in light of other situations that law enforcement personnel are confronted with such as budgetary needs, lack of adequate personnel, and ongoing ethical behaviors just to name few (American Society for Training and Development, 2009; Griffith, 2015; Josi & Sechrest, 1998; Li, 2009).

Summary

There is a need to conduct a program (and curricula) evaluation of law enforcement training. With the increase in accountability for law enforcement personnel and those entrusted to educate them, law enforcement academies that assess and evaluate their training programs can serve as a benchmark to ascertain whether law enforcement personnel graduating from police academies have developed the most effective skills and knowledge for the workplace. Research suggests that law enforcement academies can improve problem-solving skills through thorough and prevailing educational and tactical training (Caro, 2010; Chappell, 2008; Wright, Dai & Greenbeck, 2011). On the dawn of

technological advancements in law enforcement, it is imperative that law enforcement personnel are receiving the most competent training and education in criminal and civil law, community policing, and anti-terrorism.

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Appendix A

Introduction: In the following survey, the term “education/training” includes any community college law enforcement academy education/training received that addresses knowledge and skills needed for work in the law enforcement industry.

Please read each statement and select the response that best describes your opinion. To maintain confidentiality, the list that matches your name to this code number will be destroyed after responses are analyzed and a mailing list is compiled for survey results. None of the response information will be released to identify the participants.

Section 1: Law Enforcement Trainees’ Demographic Information

Please provide the following information about your specific law enforcement agency.

A1. Please identify the type of law enforcement agency for which you work. (Select one).

- Local Police Department
- Sheriff's Department
- State and Federal Law Enforcement Agency
- Urban and Rural Law Enforcement Agency
- Other _____

A2. Please indicate the size of your law enforcement organization (include full-time, part-time, and contract employees):

- 1 – 10 people
- 11 – 20 people
- 21 – 30 people
- 31 – 40 people
- 41 – 50 people
- 51 – 75 people
- 76 – 100 people
- 101 – 150 people
- 151 – 200 people
- 201 – 300 people
- 301 – 400 people
- 401 – 500+ people

A3. Please provide the number of years you have worked in law enforcement:

- 1-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 21- above years

A4. Gender

- Male
- Female
- Other _____

A5. Please select your level of education:

- High school
- Some college
- Associates
- Bachelors
- Master's
- Doctorate

A6. Were there any specific items of interest not covered by this survey? Yes No
If Yes, please tell us about these items.

A7. Do you have general comments regarding this research? Yes No
If so, please tell us these comments.

Section 2: Law Enforcement Trainees' Reaction

Section 2 – The statements in this section are designed to measure your attitude about the value of the program, program courses, instructors/professors, facilities, e.g., classroom, building, and materials/equipment used at your respective law enforcement academy. Please think of the law enforcement academy where you received your education/training when answering the following questions.

B1. Based on the selections immediately below, indicate your overall rating of the quality of your law enforcement training program. Consider the instructors/professors, real-life training scenarios, program courses and materials, quality of instructions, classroom location.

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
B1.	5	4	3	2	1	0

B2. Please indicate your perception of the following aspects of your law enforcement training:

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
The instructors/professors provided quality teaching for sufficient education and training.	5	4	3	2	1	0
The instructors/professors met my training and education needs.	5	4	3	2	1	0
The law enforcement academy provided suitable locations for training.	5	4	3	2	1	0
The instructors/professors provided evaluation forms after lectures, seminars or demonstrations for your feedback.	5	4	3	2	1	0
The professors/Instructors provided good training aids, audio/ visuals tools, and/or other advanced technology-related aids throughout your training experience.	5	4	3	2	1	0

B3A. In the space below, please share any additional information you believe can enhance the quality of the law enforcement training experience.

Section 3: Law Enforcement Trainees' Measurement of Learning

Section 3 – The statements in this section are intended to verify if learning objectives were mastered from the law enforcement education/training program that you attended.

C1. Your law enforcement academy's training provided the appropriate learning and increased/enhanced your knowledge.

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
C1.	5	4	3	2	1	0

C2. Please indicate your perception of the following aspects of your law enforcement learning:

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
I received the intended law enforcement training concepts, course objectives and subject matter knowledge from my law enforcement academy.	5	4	3	2	1	0
I gained new knowledge or developed new skills from my law enforcement education/training.	5	4	3	2	1	0
I developed ideas, skills and information to improve my learning experience.	5	4	3	2	1	0
I received relevant and clear learning materials from my law enforcement education/training.	5	4	3	2	1	0
I achieved an adequate level of learning experience from the academy.	5	4	3	2	1	0

C3A. In the space below, please share any additional information you believe might have been helpful to add to your training or how you believe your training should have been assessed?

Section 4: Law Enforcement Trainees' Measurements of On-the-Job Performance (Behavior/Performance)

Section 4 – The statements in this section relate to evaluation methods regarding the transfer of learning from your training to your job performance. These measures can typically take place several weeks or months after the completion of your education/training program, and can measure actual use of the knowledge or skills gained during the educational training.

D1. Please provide your level of agreement to the following statement: I believe that my law enforcement academy's training was effective in terms of changing learning behavior and on-the-job performance.

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
D1.	5	4	3	2	1	0

D2. Please indicate your perception of the following statements/concepts to the transference of learning for on-the-job performance:

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
My education/training from the academy did not add value to my work performance.	5	4	3	2	1	0
My education/training from the academy did not support or reinforce the transfer of concepts, demonstrations and activities for better on-the-job performance.	5	4	3	2	1	0
My education/training from the academy lacked personnel to adequately evaluate whether skills, knowledge and training were being transferred from learning to on the job performance.	5	4	3	2	1	0
My education and training from the academy did not enhance my job performance.	5	4	3	2	1	0
My education and training from the academy was not transferable to my work-related experience.	5	4	3	2	1	0

D3A. In the space below, please share any additional factors you believe may have affected knowledge transfer from your community college training program to your experience as law enforcement professional.

Section 5: Law Enforcement Trainees' Measurements of Outcomes (Results/Impact)

Section 5 - The statements/items in this section relate to evaluation methods used to measure organizational (impact) change in your training program curriculum which may have influenced organizational performance. These statements are intended to compare before and after training.

E1. Please provide your level of agreement to the following question: Do you believe your law enforcement academy training effectively had an impact on organizational change?

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
E1.	5	4	3	2	1	0

E2. Please rate the following statements:

	Strongly Agree	Agree Somewhat	Unsure	Disagree Somewhat	Strongly Disagree	Does Not Apply
My academy education/training impacted my law enforcement agency's understanding of local, state and federal laws and regulations.	5	4	3	2	1	0
My academy education/training had an organizational impact on how to better understand the proper procedures of handling evidence.	5	4	3	2	1	0
My academy education/training had an organizational impact on the proper procedures of transporting suspects/detainees.	5	4	3	2	1	0
My academy education/training had an organizational impact on my ability to personally and professionally manage my life.	5	4	3	2	1	0
My academy education/training had an organizational impact on my ability to understand and properly use defensive tactical skills, e.g. driving, take-down skills, etc.	5	4	3	2	1	0
My academy education/training impacted my ability to communicate verbally/non-verbally for better professional skills.	5	4	3	2	1	0
My academy education/training had an organizational impact on my ability to better understand concepts of community policing.	5	4	3	2	1	0
My academy education/training had an organizational impact on my ability to better understand traffic Laws.	5	4	3	2	1	0
My academy education/training had an organizational impact on	5	4	3	2	1	0

my knowledge and understanding of criminal/civil Laws.						
My academy education/training had an organizational impact my knowledge and my ability to properly conduct Investigations.	5	4	3	2	1	0

E3A. In the space below, please share any additional reasons you believe your current performance as a law enforcement officer could be better.

Appendix B

Consent Letter

Dear Law Enforcement Personnel,

Peace and blessing!

You are invited to participate in a study to determine to what extent do graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceive their learning experiences to be effective and transferable to job performance.

The study is being conducted by Reynaldo A. Evangelista, a doctoral graduate student at Morgan State University. You were selected as a possible participant in this study because you are graduate of a law enforcement academy hosted by a Mid-Atlantic community college. If you graciously decide to participate, you will follow the link to a website provided to respond to questions concerning your experience at your law enforcement academy. Your name and other identifying information are neither needed nor required. Your answers are anonymous and confidential. Completion of the survey should take no more than 10 minutes.

Participation in the study will not place you at risk for physical, psychological, or legal danger. Filling out the survey is voluntary. You will be asked a series of general questions as it is pertained to your academy education and training. The results of the study will be shared with you. Your decision whether to participate will not prejudice your future relationship with your Mid-Atlantic regional community college that you attended or Morgan State University. If you decide to participate, you are free to discontinue participation at any time without prejudice.

If you have any questions concerning this research study, please contact Reynaldo A. Evangelista, the researcher for the study, at XXX.XXX.XXXX or email me at reeva1@morgan.edu. The faculty advisor is Dr. Russell Davis, who may be reached at XXX.XXX.XXXX or email him at russell.davis@morgan.edu, and Dr. Edet E. Isuk, the IRB administrator, may be contacted at XXX.XXX.XXXX or via fax at XXX.XXX.XXXX.

When you enter the following web link, you will be asked to give your permission by clicking the button that will allow consent, and then you will follow the additional instructions for participation. Again, you may withdraw at any time without attribution, and after proceeding to survey, you may choose to discontinue participation in the study at any time. Thanking you in advance for your cooperation in this vital study concerning law enforcement education and training.

Appendix C

Recruitment Letter

Dear participant,

Peace and blessings! I am conducting a research to determine to what extent do graduates of a law enforcement academy hosted by a Mid-Atlantic regional community college perceive their learning experiences to be effective and transferable to job performance. I am requesting your participation, which will involve answering a confidential online survey that will take approximately 10 minutes to complete. Your participation in this study is voluntary. If you chose not to participate, there will be no penalty. However, I am hoping that you will participate. You must be at least 18 years old to participate in the research study. There are no foreseeable risks or discomforts to your participation. You will receive a copy of the results.

Participants will log on a secure, password-protected website and answer a series of questions. Your responses will be confidential, and any downloaded information will be kept in a secure location. The results of this study may be used in reports, lectures, presentations or publications, but your name will remain anonymous.

If you have any questions concerning this research study, please contact Reynaldo A. Evangelista, the researcher for the study, at XXX.XXX.XXXX or email me at reeva1@morgan.edu. The faculty advisor is Dr. Russell Davis, who may be reached at XXX.XXX.XXXX or email him at russell.davis@morgan.edu, and Dr. Edet E. Isuk, the IRB administrator, may be contacted at XXX.XXX.XXXX or via fax at XXX.XXX.XXXX.

Respectfully,

Reynaldo A. Evangelista

Doctoral Student, Community College Leadership Doctoral Program (CCLDP)
Morgan State University, Baltimore, Maryland.