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Development of a Transfer of Training Measure for Law Enforcement

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

DEVELOPMENT OF A TRANSFER OF TRAINING MEASURE FOR LAW
ENFORCEMENT

A dissertation submitted in partial fulfillment of

the requirements for the degree of

DOCTOR OF EDUCATION

in

ADULT EDUCATION

AND

HUMAN RESOURCE DEVELOPMENT

by

Daniel Costa

2019

To: Dean Michael R. Heithaus
College of Arts, Sciences and Education

This dissertation, written by Daniel Costa, and entitled Development of a Transfer of Training Measure for Law Enforcement, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Date of Defense: March 20, 2019

The dissertation of Daniel Costa is approved.

Dean Michael R. Heithaus
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Andrés G. Gil
Vice President for Research and Economic Development
and Dean of the University Graduate School

Florida International University, 2019

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DEDICATION

I would like to dedicate this dissertation to my family for all of their support and efforts that have fueled my desire to achieve a higher level of education. Your encouragement through both words and actions has inspired me to go on even when it seemed that the finish line was nowhere in sight.

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ABSTRACT OF THE DISSERTATION
DEVELOPMENT OF A TRANSFER OF TRAINING MEASURE FOR LAW
ENFORCEMENT

by

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Florida International University, 2019

Miami, Florida

Professor Thomas G Reio, Major Professor

Training in the workplace has become a valuable tool that has been linked to improved employee performance and overall organizational outcomes. The field of law enforcement is particularly impacted by the transfer of training given its complex and dynamic nature. Despite its significance, there is a lack of research in law enforcement and therefore of available instruments to measure the transfer of training. The purpose of this study was to develop and validate an instrument to assess seven components that can influence the transfer of training in law enforcement: trainees' level of motivation/curiosity, peer support, supervisor support, opportunity to use, perceived context validity, organization learning climate, and job satisfaction. The instrument was developed and validated using a researcher-based scale development process that consisted of four phases. The instrument underwent the process of content identification and scale generation, expert review process, instrument distribution, and lastly validation through principal components analysis with varimax rotation.

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CHAPTER I

INTRODUCTION

This study develops and validates an instrument to assess factors that can influence the transfer of training in law enforcement agencies. This chapter provides an overview of the problem statement, purpose of study, directional hypotheses, significance of the study, and theoretical framework. This chapter also contains a conceptual model, definition of terms, assumptions, and limitations of the study, and the organization of the study.

Background of Study

From responding to potentially precarious situations to completing thorough investigations, law enforcement plays an integral part in the community, as it ensures the safety and security of its residents through the enforcement of laws and regulations. However, due to the complex and dynamic nature of this profession, not all law enforcement encounters lead to favorable outcomes and can result in both criminal and civil liability. As demonstrated by the cases of Rodney King, such outcomes may affect an officer's career and the community's trust and confidence in law enforcement (Lee, Jang, Ilhong, Lim, & Tushasu, 2010; Ross, 2000). Although formal law enforcement training has come a long way since its origin over 50 years ago, the need for improved quantity and quality in police training has increased, as it must reflect the demands and challenges of the community (Birzer & Tannehill, 2001; Glasgow & Lepatski, 2012; Walker, 1999).

Training is defined as the systematic acquisition of knowledge and skills that can collectively lead to improved performance in a particular environment (Grossman & Salas, 2011). Transfer of training is defined as the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in a training context to the job (Baldwin & Ford, 1988). Workplace training can result in three potential outcomes: positive, negative, and zero transfer of training (Werner & De Simone, 2001). Training outcomes have been associated with affecting employees' skills, motivation, knowledge, and job satisfaction (Bulut & Culha, 2010; Werner & De Simone, 2001).

Researchers like Baldwin and Ford (1988) explain that for transfer of training to take place it must be generalized to the individual's job and maintained over a period of time. Positive transfer of training is the degree to which individuals can effectively transfer knowledge and skills learned to their respective occupations (Baldwin & Ford, 1988). Baldwin and Ford (1988) explain that for transfer of training to take place it must be generalized to the individual's job and maintained over a period of time. Yet, as reported by Garavaglia (1993), only 15% of training skills acquired are retained a year later.

Kraiger, Ford, and Salas (1992) further argue that learning outcomes are multidimensional, and their progress can affect changes in cognitive, affective, or skill capacities. Baldwin and Ford (1988) also identified three factors that can influence training input: training design (e.g., learning principles, sequencing, and content), trainee characteristics (e.g., ability, personality, and motivation) and work environment (e.g., support and opportunity to use). Learning principles, which may include behavior modeling, error management, and realistic training environment, are examples of training

designs (Grossman & Salas, 2011). Their delivery can significantly affect how the training is transferred. A trainee's work environment can significantly predict transfer outcomes through supervisor and peer support, opportunities to apply training, and incentives and performance feedback (Grossman & Salas, 2011). A trainee's characteristics, such as cognitive ability or level of intelligence and ability to process complex ideas and retain information, plays a significant part in the transfer of training. Furthermore, other trainee characteristics, such as self-efficacy, motivation, and perceived utility of training, can influence transfer of training. A trainee's attitude and training outcomes can also be affected by prior education and training experience (Garavaglia, 1996). Past work experiences, which can be achieved through years of service, can either aid transfer (i.e., positive transfer) by building on prior knowledge or it can hinder transfer (i.e., negative transfer) if a trainee refuses to relinquish old habits (Garavaglia, 1996). Thus, Baldwin and Ford (1988) argue that evaluating transfer of training should not be one dimensional; it should be a multidimensional assessment that accounts for training design, trainee characteristics, and work environment.

Beyond transfer of training, there are other organizational factors that can affect a trainee's performance in the field. In a study conducted by Egan, Yang, and Bartlett (2004), a correlation was found between organizational learning culture and motivation to transfer learning. Organizations that place an emphasis on learning and development yielded an increase in job satisfaction, productivity, and profitability (Egan et al., 2004). The study conducted by Egan et al. (2004) further revealed a positive correlation between organizational culture, job satisfaction, and motivation to transfer training, which in turn indirectly affected job turnover.

Motivation has been shown to be a linking factor between trainee characteristics and how they perceive the validity of the training to how they transfer training (Grohmann, Beller, & Kauffeld, 2014). Other factors such as curiosity, which remains constant or even increases as individuals age, has also been demonstrated to be a contributing factor to intrinsic motivation (Giambra, Camp, & Grodsky, 1992; Reeve, 1992; Reio & Wiswell, 2000). How employees perceive their work environment has also been shown to influence the motivation to transfer training. In a qualitative study, Grossman and Salas (2011) found that trainees reported an unsupportive environment to be the most salient inhibitor of transferability.

Organizational culture and climate are concepts that have been discussed by researchers for years. Culture within an organization is defined as shared basic assumptions, values, and beliefs, which in turn create a general framework for acceptable behavior (Schneider, Ehrhart, & Macey, 2013). Conversely, organizational climate is referred to as a shared perception by employees regarding policies, practices, and procedures that are perceived as rewarded behaviors (Schneider et al., 2013). In a study aimed to identify the effects of supervisor support on transfer of training, Nijman, Nijhof, Wognum, and Veldkamp (2006) discovered a positive correlation between supervisor support and transfer of training. The results also showed that trainees who perceived the climate to be facilitating and encouraging were more likely to transfer their learning to their respective jobs (Nijman et al., 2006). Similarly, Elangovan and Karakowsky (1999) established the important role that culture plays in an organization, where an environment that fosters learning and promotes development can facilitate positive transfer of training. As described by Baldwin and Ford (1988) and Elangovan and Karakowsky (1999), to

facilitate the transfer of training there must be a relationship between the material being learned and the trainee's work environment.

Issues in Training

When properly transferred, workplace training is a valuable tool for the survivability of an organization and is associated with institutional theory (Yang, 2006). Institutional theory refers to the programs and practices that prevail in an organization's environment and ensure cohesiveness with similar institutions (Yang, 2006). In doing so, organizations also increase their survivability by recruiting talented personnel and adhere to legal requirements and prevailing practices (Yang, 2006). As a result, organizations in the United States collectively spend over 164 billion dollars annually on employee training (Miller, 2013). Furthermore, organizations over a span of three decades have developed training programs at a rate of 68%, an increase of almost 58% (Yang, 2006).

However, some concerns such as the transferability of training and the applicability of knowledge by organizations have been brought to light (Saks & Belcourt, 2006). Non-profit versus for-profit organizations have also developed a disparity of over 14% for rates of adopting training programs (Yang, 2006). Research has also demonstrated that organizations often adopt training programs without developing predetermined goals, rarely evaluate their transferability or effectiveness, and even if transferability is evaluated, unnecessarily suffer from the lack of validated tools to ensure the factors related to transfer (Yang, 2006).

Furthermore, individuals only transfer about 30% of training received to their respective jobs (Saks & Belcourt, 2006). This should be of concern for the human resource professional because improper training or the inability to transfer training can

lead to errors, injuries, and lawsuits (Grossman & Salas, 2011; Lancaster, Milia, & Cameron, 2013). Furthermore, only 62% of employees who receive formal training will immediately apply the knowledge obtained to their perspective roles (Saks & Belcourt, 2006). Additionally, these figures will decrease exponentially over time and only a third of those employees will be able to transfer their training a year later (Saks & Belcourt, 2006). Only about 15% of training skills acquired are retained a year post training (Garavaglia, 1993).

Transfer of training continues to be a prevailing problem that plagues organizations. These issues have collectively become known as the “transfer problem” (Saks & Belcourt, 2006). This is in part due to organizations failing to understand their training obstacles and ways to overcome them (Saks & Belcourt, 2006). The inability to transfer training can be potentially costly to an organization due to injuries, civil liability, and loss of life. Consequently, organizations have paid an estimated \$183 billion dollars due to injuries and deaths, which have been linked to inadequacies in the training received (Grossman & Salas, 2011).

Specifically, the issues concerning transfer of training is of particular interest in the field of law enforcement. By virtue of their employment, which can be problematic and challenging at times, law enforcement officers are faced with a multitude of service calls that can result in effecting an arrest, engaging in high liability activities, or even the use of deadly force. Within the state of Florida, law enforcement officers encompass a large workforce as it employs over 67,000 individuals (U.S. Department of Justice Federal Bureau of Investigation, 2016). Law enforcement personnel in Florida can respond to over 88,000 part one violent crimes (i.e., murder, rape, robbery, aggravated

assaults) and apprehend over 35,000 criminals for these violent crimes in a year (US DOJ FBI, 2016).

Training issues in law enforcement. As such if the training being offered to police officers is not adequately received and transferred beyond the classrooms and training scenarios, lawsuits, injuries, and death are all potential outcomes that can affect officers and their agency. In a study of 215 police departments, costs due to civil liability lawsuits amounted to over \$4.3 billion (Ross, 2000). Training inadequacies was amongst one of the most prevalent types of claims addressed by these police departments (Ross, 2000). A 10-year study in law enforcement revealed that on average training issues amounted to approximately \$450,000 in lawsuits and about \$60,000 in attorney fees per case (Fishel, Gabbidon, & Hummer, 2007).

Not only are police departments civilly responsible for police officers' wrongdoing but officers themselves might also be civilly responsible. As result, 84% of the 808 police candidates surveyed reported having fears of being sued due to wrongdoing (Vaughn & Cooper, 2001). More importantly, a similar survey conducted with city managers in California revealed that 51% of participants believed that police department budgets were impacted by lawsuits, which in turn negatively affected police services (Vaughn & Cooper, 2001).

The case of police officer Johannes Mehserle illustrates the pitfalls of training issues in law enforcement. Mehserle was a Bay Area Rapid Transit District (BART) police officer who was charged with murder when an unfortunate chain of events cost the life of Oscar Grant (People v Mehserle, 2012). While attempting to arrest Grant, Officer Mehserle mistakenly drew his handgun instead of his newly issued Taser, fatally shooting

Grant (People v Mehserle, 2012). Despite the numerous facts and lessons that were learned from this encounter, it was revealed that Officer Mehserle had only gone through six and a half hours of training to carry his Taser, a training that was described as minimal and in need of improvement (People v Mehserle, 2012). Despite these key features, Officer Mehserle was found guilty of involuntary manslaughter and sentenced to two years in prison (People v Mehserle, 2012). This case brought to light six other similar documented cases in law enforcement involving mishaps between guns and Tasers.

Problem Statement

As demonstrated by Officer Mehserle's case, training is of no use unless it is adequate and capable of being transferred into the field. Training is an essential part of the law enforcement community as training inadequacies can potentially result in the loss of life and civil liability (e.g., Fishel et al., 2007; Lee et al., 2010; People v Mehserle, 2012; Vaughn & Cooper, 2001). However, even though there is a body of research on transfer of training and the effects of organizational culture and climate on non-law enforcement organizations, research on law enforcement agencies in the United States is lacking. Furthermore, even though there are instruments available in the field of transfer of training that have yielded some validity evidence (i.e., Learning Transfer System Inventory and Dimension of Learning Organization Questionnaire), they were not designed specifically to assess learning transfer in a law enforcement setting (Holton, Bates, & Ruona, 2000; Marsick & Watkins, 1993). As the roles and duties of a police officers are multidimensional and constantly evolving, it is imperative to develop an instrument that can yield reliable and valid information that can be used to lead human

resource development research and practice regarding the transfer of training among law enforcement officers.

Purpose of the Study

This study intends to develop and validate an instrument to assess factors that can influence the transfer of training in law enforcement agencies.

Research Questions

1. Does the law enforcement transfer of training self-assessment instrument yield valid inferences?
2. Does the law enforcement transfer of training self-assessment instrument yield reliable inferences?

Conceptual Framework

This section is intended to provide a brief overview of the conceptual framework for this study. Given the multidimensionality of transfer of training, the theoretical framework for the present study draws upon several theories in the field. The first theory to be utilized is that of Baldwin and Ford (1992), which identifies three types of factors that can influence training input. In this theory, it is hypothesized that training can be influenced by the training design (e.g., learning principles, sequencing, and content), trainee characteristics (e.g., ability, personality, and motivation), and work environment (e.g., support and opportunity to use) (Baldwin & Ford, 1992).

As mentioned by Egan et al. (2004), job satisfaction, productivity, and profitability can increase when an organization prioritizes learning and development. Therefore, the second conceptual model utilized is drawn upon the work of Egan and colleagues (2004) on the effects of learning culture and job satisfaction. Egan et al.

(2004) argue that an organizational learning culture can have a positive effect on an employee's job satisfaction and in turn, this can have an effect on an organizational outcome. Examples of organizational outcome variables are described as motivation to learn and employee job turnover (Egan et al., 2004).

Although this study draws upon two different conceptual frameworks (i.e., Baldwin & Ford, 1988; Egan et al., 2004), they still have commonalities that link them to one another. The framework of Egan et al. (2004) on job satisfaction and learning cultures will be used to examine the types of behaviors that support job satisfaction and motivation to learn. This model has been shown to be useful for predicting job satisfaction (Egan et al., 2004). As demonstrated in their study, employee motivation to learn had a contribution to organizational culture and job satisfaction (Egan et al., 2004).

Furthermore, Baldwin and Ford's (1988) model that links together multiple factors that can be utilized to examine the particular training designs in law enforcement to determine their effectiveness. This model will be used to measure training-input factors such as trainee design (i.e., content, sequence, and delivery factors), trainee characteristics (i.e., prior education and years of service), and work environment (i.e., norms, supervisor/peer support, training opportunity, and incentives/feedback).

Significance of the Study

The effectiveness of law enforcement agencies in controlling crime was brought into question in the 1970's and ultimately resulted in the implementation of several policing models that are still in use today (Reisig, 2010). However, even though these models have been in existence for over 30 years, training offered to law enforcement has been slow to adapt and tends to negate the development of skills necessary to address the

evolving needs of the community. Researchers (e.g., Birzer & Tannehill, 2001; Chappel, 2008; McCoy, 2006) have called for a change in the training offered to law enforcement officers to better accompany their multidimensional role, which is constantly evolving under the theories of policing models.

The actions of officers while performing their legal duties are often scrutinized in the media and in a courtroom with disastrous side effects. As a result, it is imperative to understand what factors can affect officers' ability to transfer such training. To accomplish this task, it is important to develop a law enforcement specific instrument that can be used to assess the transfer of training in law enforcement setting. As such, this study aims to address this gap in the literature and contribute to both theoretical and practical implications in the field of human resource development and adult education. Lastly, a law enforcement specific instrument will aid in the efforts of theory building and will also assist in new research and knowledge geared towards the transfer of training of law enforcement officers.

Definition of Terms

Cognitive perspective- Is the set of variables related to the quantity of knowledge and its relationship amongst the elements of knowledge (Kraiger, Ford, & Salas, 1993).

Curiosity- Is the state of emotional arousal in which an individual seeks to obtain information or explore certain behaviors to answer a conflict or degree of uncertainty (Reio & Callahan, 2004).

Job Performance-Total expected value to the organization of the discrete behavioral episodes that an individual carries out over a standard period of time (Motowidlo, 2003).

Job Satisfaction- An employee's affective reaction to a job based on the comparison of desired outcomes to actual outcomes (Egan et al., 2004).

Law enforcement Officers- Individuals who have the authority to enforce laws and maintain civil order (FDLE Manual, 2014).

Motivation- Is the desire to apply what is learned (Yamhill & McLean, 2001).

Opportunity to Use/Train- Providing trainees with resources or on-the-job tasks to enable them the opportunity to use their training on the job (Holton et al., 2000).

Organizational Climate- Shared perceptions by employees regarding policies, practices, and procedures that are perceived as rewarded behaviors within the organization (Schneider et al., 2013).

Organizational Culture- Shared basic assumptions, values, and beliefs, which in turn create a general framework for acceptable behaviors within the organization (Schneider et al., 2013).

Organizational performance- is the effectiveness of an organization in achieving their goals (Kotter & Heskett, 1992).

Peer Support- The extent to which peers support and reinforces the use of training on the job.

Police Officer – For the purposes of this study, a police officer is a sworn law enforcement officer who is employed as a full-time officer (FDLE Manual, 2014).

Supervisor support- The extent to which supervisor/manager support is present and reinforces the use of training on the job (Baldwin & Ford 1988).

Training- The systematic acquisition of skills, concepts, and attitudes that result in improved performance in the work environment (Goldstien & Gilliam, 1990).

Training Content/Validity- The degree to which a trainee judges training content to their job requirement (Holton et al., 2000).

Training Design- A combination of principles of learning, the sequencing of instruction, and training content (Baldwin & Ford, 1988).

The transfer environment or culture- Is the shared basic assumption, values, and beliefs that can lead to a general framework of acceptable behaviors (Schneider, Ehrhart, & Macey, 2013).

Transfer of Training- The degree to which trainees effectively apply the knowledge, skills, and attitudes gained in a training context to the job (Baldwin & Ford, 1988).

Assumptions

1. It is possible to develop a measure of training transfer for law enforcement.
2. Participants will cooperate with the researcher by completing the measures used in this research completely and honestly
3. Training transfer is multidimensional.

Delimitations

Although it would be ideal to include all law enforcement workers in this research, the scope of this study will focus on law enforcement officers in Southwest Florida.

Organization of Study

This dissertation will be comprised of five chapters. Chapter 2 will explore pertinent literature with the intentions of providing an in-depth understanding of organizational culture and climate with regards to law enforcement and how it affects the transfer of training. Chapter 3 will in turn serve to discuss in detail the methodology to

be utilized, including the participants, procedures, instrumentation, and data analysis.

Chapter 4 will present the findings of the study and Chapter 5 will conclude with an overview of the study, its implications, and recommendations for future research.

CHAPTER II

LITERATURE REVIEW

The purpose of this study is to develop an instrument based on over 30 years of empirical research and validate it to assess factors that can influence the transfer of training in law enforcement agencies. Therefore, this chapter will be comprised of several sections that will be used to guide this study. The first section will review the relevant literature and studies on training in the field of law enforcement. Organizational culture will be the focus of the second section and will include an overview on the literature as well as supporting theories and models. The final section will focus on reviewing the literature pertaining to the transfer of training, theories, and supporting models related to this subject.

Training in Law Enforcement

Police training in the United States can be separated into three forms of training curricula: academy recruits, field training, and in-service training or continuing education (Taylor et al., 2013). Police officers received formal training while in the police academy and then followed up by on the job field training (Taylor et al., 2013). Traditional police training prepares police officers for firearms, defensive tactics, vehicle operations, laws. Aside from classroom training, police training has also involved to incorporate the use of scenario-based training to make the learning process more interactive (Chappel & Lanza-Kaduce, 2010).

Regardless of the curriculum, a significant portion of law enforcement training is conducted at police academies or training facilities in a traditional classroom setting with strict guidelines and classroom rules (Olivia & Compton, 2010). Instructors often place

an emphasis on standardization due to mandates from the state and strictly adhere to delivering the course objectives utilizing traditional instructional methods (Oliva & Compton, 2010). Furthermore, police officers often train in a behavioral and militaristic environment that has undergone minimal change in over 50 years (Birzer, 2003).

Although strides have been made in the field of police training since its foundation in the early twentieth century, several aspects of training offered to law enforcement officers have not evolved with the times (Vodde, 2012). Since the 1960s, billions of dollars have been granted by the federal government to police agencies nationwide to address inefficiencies in their methods of crime suppression (Reisig, 2010). In turn, the role of a police officer has shifted to not only addressing the changing crime trends, but to also meeting the needs of the community. This notion gave rise to what is known as community-oriented policing (COPS) and problem-oriented policing, which are both analogous and often employed jointly.

The main focus of community-oriented policing is to utilize a variety of strategies, some of which stem from the broken windows theory that focuses on improving the quality of life in a particular neighborhood by incorporating citizen involvement in crime prevention (Reisig, 2010). Problem-oriented policing is based on the social disorganization theory and it focuses on intervening in certain impoverished areas to determine how environmental conditions can be altered to prevent and control crime. However, despite the expenditures and efforts by both the community members and law enforcement, research has proven that these models of policing have yielded inconclusive results.

Since the watchman era of the 1840s, law enforcement in the United States has undergone several reforms that has evolved the roles and responsibilities of police officers in addressing the needs of society (Chappell, 2008; McCoy, 2006). Subsequently, law enforcement and the way it polices society has undergone a philosophical change that has shifted from reactionary to a more proactive form of patrolling (McCoy, 2006). This new era of policing requires police officers to be able to integrate themselves in their community and engage in conflict resolution with a multitude of individuals from diverse backgrounds. As such, the training needs of police officers has shifted from the basics of statue, investigation, and tactics to being skilled communicators and decision makers (Birzer & Tannehill, 2001).

In an attempt to mediate potential deficiencies in their training programs, certain police departments have performed job task analysis to ensure that the training mirrors the task performed by their officers. However, these analyses rarely identify what needs to be learned by police officers to perform their daily duties (Chappell, 2008).

Consequently, police officers spend over 90% of their time carrying out training in the areas of firearms, self-defense, and first aid while only 10% is spent learning how to apply these learned skills (Chappell, 2008). Additionally, less than 3% of training provided to law enforcement is spent on cognitive and decision-making skills that are key aspects to ensure the successful implementation of community-oriented policing and problem-oriented policing (Bradford & Pynes, 1999).

Despite the implementation of new police training curriculum that supports community policing and problem-solving models, community policing continues to present challenges as it requires academies to alter their structure and culture (Chappell &

Lanza-Kaduc, 2010). Although a paramilitary approach is essential to convey certain elements of traditional policing (e.g., defensive tactics, vehicle pursuits, and firearms), community policing requires a broader approach. Police and academy culture needs to break away from the “us” versus “them” mentality, which is counterproductive to building a relationship with the community. Secondly, police culture needs to also reexamine how it defines police work, as real police work is often synonymous with fighting crime and not building relationships with the community (Chappell & Lanza-Kaduc, 2010).

For several years, the law enforcement community has relied on traditional teacher-centered teaching methods that primarily focus on lecture and a mastery of content under undue stressful conditions (Oliva & Compton, 2010). Although the application of stress on trainees during training can potentially benefit certain aspects of their daily duties, undue stress placed on trainees can also negatively affect the learning process. The traditional teacher-centered pedagogy environment, which has been synonymous with law enforcement training, provides a fixed body of knowledge based on the trainer’s perspective that is formulated from his or her prior experiences and expertise (Mascolo, 2009). In this method of teaching, the role of the students is affected as they undertake a passive role to that of the instructor, who is active and ultimately influences the students’ ability to develop communication and interpersonal skills (Bradford & Pynes, 1999; Mascolo, 2009; McCoy, 2006).

As a result, researchers (e.g., Birzer & Tannehil, 2001; Birzer, 2003; Chapple, 2008) have called for a shift from a traditional teacher-centered approach to a learner-centered approach. Being that one of the focal points of community policing is to solve

problems through partnerships with the community, a learner-centered approach is considered to be fundamental to this process as it is associated with the development of problem solving, leadership, and communication (Birzer, 2003; Chappell, 2008).

Scenario-based training is also another example of training that can assist in developing new strategies and techniques while aiding psychomotor coordination (Oliva & Compton, 2010). An analysis of curriculum-based training offered to law enforcement officers revealed a desire for more engaging and stimulating classroom settings. Scenario-based training can offer trainees an environment where they are exposed to situations they may encounter in the line of duty (Oliva & Compton, 2010).

Moreover, training of law enforcement can also be understood within the behaviorist model. In the early 20th century, Watson (1925) developed the concept of behaviorism and it evolved to be the platform for many disciplines including training programs in law enforcement (Birzer, 2003). The behaviorism instructional approach associates individuals with machines and asserts that if the training input (stimulus) is introduced to the trainee and the trainer can control how the information is processed, then the trainee will yield a predetermined output (Birzer, 2003; Watson, 1925).

Although this method can be valuable when applied to technical or procedural skills, it can be counterintuitive with the principles of community policing, which requires the ability to make decisions and exhibit discretion (Birzer, 2003). Additionally, behaviorism compares humans to machines and negates the feelings, intellect, and emotions of trainees as these aspects cannot be measured (Birzer, 2003).

In contrast, andragogy-based learning is an adult student-centered approach that can assist law enforcement officers in the process of becoming self-directed learners

(Birzer, 2003). The process of becoming a self-directed learner is an essential aspect of the modern style of community policing and can be used alongside an evolving organization (Birzer, 2003). The concept of andragogy asserts that the role of the teacher is to facilitate learning and knowledge development (Knowles, 1990). Subsequently, students are able to formulate experiences through their journey that can provide a basis on which to relate new teachings (Knowles, 1990). Unlike teacher-centered pedagogy, which relates to learning concepts children “ought” to know, andragogy places an emphasis on concepts that adult learners “need” to know for their respective workplace roles (Knowles, 1990,). Andragogy-based curricula can also aid trainers in conveying to trainees how to identify and respond to certain issues that may arise in a community (Birzer, 2003).

Transfer of Training

Organizations have spent a considerable amount of money and time on training their employees with the goal of improving the performance of their employees and overall organization (Miller, 2003; Yamnill & McLean, 2001). The transfer of training has been defined as the degree to which a trainee can effectively apply the knowledge, skills, and attitudes gained in training to their respective roles (Baldwin & Ford, 1988). The transfer of training relates to the generalization of knowledge acquired by trainees and their ability to maintain the information acquired over a period of time (Zumrah & Boyle, 2015). Positive transfer of training, negative transfer of training, and zero transfer of training are potential outcomes of training.

An employee’s ability to effectively transfer the knowledge and skills received during training is described as positive transfer of training (Baldwin & Ford, 1988). The

less desirable outcome, which has been termed the negative transfer of training, occurs when a trainee's job performance deteriorates due to training (Werner & De Simone, 2001). Zero transfer of training occurs when a trainee does not experience a behavioral or performance change as a result of training (Werner & De Simone, 2001). These potential outcomes relate to an employee's job performance.

Job performance is defined by Rummler and Brache (1990) as an individual's effectiveness in meeting his or her job goals. Workplace training has shown to improve an employee's skills and workplace performance, as an increase in skills allows an employee to have knowledge of what skills to apply to various workplace situations (Rummler & Brache, 2012). Similarly, another goal of employee performance is to yield an increase in organizational performance. Organizational performance is defined as the effectiveness of an organization in achieving their goals (Kotter & Heskett, 1992).

When training is effective and is able to be transferred to the workplace, it has been shown to improve employee and organizational productivity and employee morale and in turn can reduce lawsuits through increased safety awareness (Salas, Wilson, Burke, & Wightman, 2006). Although certain employee and organizational outcomes can be a direct effect of performance, performance does not equate to learning (Burke & Hutchins, 2007). Burke and Hutchins (2007) found that an employee might be able to learn the material conveyed through the course, yet he or she might be unable to transfer the training and increase performance. As a result, an increase in an employee's performance, rather than learning, is a better predictor of the effectiveness of training (Burke & Hutchins, 2007).

Although there have been numerous studies on the transfer of training (e.g., Burke & Baldwin, 1999; Fecteau, Dobbins, Russell, Ladd, & Kudisch, 1995; Grossman & Salas, 2011), only 15% of employee training is at best transferred to the workplace. Similarly, Saks (2002) revealed that 40% of training received by employees is not transferred immediately after the training and the transfer percentage decreases to 70% after one year. Moreover, only 50% of training received by employees results in either individual or organizational performance. As a result, this has been coined the “transfer problem”. The transfer problem is in part due to organizations not being able to identify and overcome training barriers (Baldwin & Ford, 1988; Saks & Belcourt, 2006). Training design, trainee characteristics, and training environment are all factors within an environment that can come together to either facilitate or hinder the transfer process (Baldwin & Ford, 1988).

Factors Related to Training Transfer

Training design. The inability to transfer training is in part due to training designs that fail to incorporate methods to assist with the transfer of learning (Holton 1996). Transfer design is defined as the degree of the training design and its method of delivery, that provides trainees with the ability to transfer their learning back to the workplace (Holton et al., 2000). Furthermore, the content of the training material and the method of instructions also need to be comparable to trainees’ jobs to maximize the transferability of knowledge (Holton et al., 2000). Certain design factors and methodologies, such as multiple instruction methodology and post-training relapse prevention, have shown to have a positive effect on the transfer process.

A study conducted by Baldwin (1992) revealed a connection between design aspects and positive transfer of training. This study, which involved 72 students enrolled in a communication course, demonstrated that the implementation of multiple instruction methodologies, such as scenarios and model competency, resulted in students being able to apply their learned skills in comparison to those students who did not receive multiple instruction. Another example of a training design that has been shown to have a significant impact on the transfer process is post-training relapse prevention. In a self-reported study of 81 Israeli military personnel participating in an advanced training program employing post-training relapse prevention, greater mastery of subject and utility were reported ten weeks after training completion (Tziner, Haccoun, & Kadish, 1991). Training relapse prevention programs not only provide trainees with specific and realistic work scenarios to apply their newly acquired skills, but also allow trainees the opportunity to discuss and develop ideas to apply learned principles. Additionally, incorporating feedback into training programs has also been shown to increase trainees' ability to transfer the training into the real world and reduce their anxiety during training (Lintern, Roscoe, Koonce & Segal, 1990; Martocchio, 1992).

Learning, retention, and generalization of content by the trainee are also factors related to training activities. A self-reported study of 336 employees revealed that the design and delivery of material affected the perceived utility of training and maximized the trainee's ability to transfer the training (Velada, Caetano, Michel, Lyons, & Kavanagh, 2007). Furthermore, the applicability of the training and exercises selected during the course also affected the trainees' utility of the training. This also coincides with the findings of Elangovan and Karakowsky (1999) who found that training designs

needed to incorporate material and activities that relate to the trainees' work environment to ensure of training.

Several researchers (e.g., Baldwin & Ford, 1988; Holton, 1996; Grossman & Salas, 2011) have also demonstrated the utility of learning principles in the transfer training. Thorndike and Woodworth (1901), who in part paved the way for transfer training, asserted that to enable the transfer of knowledge there has to be a correlation between the training setting, responses, and conditions. Similarly, the principles theory suggest that training should be based upon general principles required to perform the task of the trainee (Goldstein, 1986). Under the principles theory, trainees are afforded the opportunity to gain a basic understanding of the principles and concepts surrounding their training and thus their knowledge can easily be transferred to address new challenges and unfamiliar problems.

Trainee characteristics. Baldwin and Ford (1988) asserted that trainee characteristics encompasses ability (e.g., intelligence and aptitude), personality (e.g., desire for achievement, confidence, and locus of control), and motivation (e.g., belief in training and higher self-expectancies). A trainee's ability to process complex ideas and retain information plays a significant role in the transfer of training (Grossman & Salas, 2011). Similarly, self-efficacy and perceived utility of training also take part in the transfer of training (Grossman & Salas, 2011). Other factors include level of education, attitude, and prior training outcomes (Garavaglia, 1996).

In a training context, motivation is defined as the desire to apply what is learned (Yamhill & McLean, 2001). Level of motivation can affect a trainee's perceived validity

of training, which in turn can affect job satisfaction and turnover intent (Egan et al., 2004). Motivation can be divided into two components: extrinsic and intrinsic. Perceived intrinsic motivation, which is considered to be a precursor to the transfer process, affects the trainees' desire to attend training and learn (Burke & Hutchins 2007). Intrinsic variables, such as sense of recognition, were found to positively affect the transfer of knowledge. Albeit at a lesser extent, extrinsic variables such as performance appraisals were also noted to affect transfer outcomes. Extrinsic motivation is defined as behavior which is motivated based on external rewards or for a means to an end (Vallerand, Blais, Senecal, & Vallieres, 1992)

Reeve (1992) posited that curiosity was a fundamental stage in the development of intrinsic motivation within a learner. Curiosity is defined as a state of emotional arousal in which an individual seeks to obtain information or explore certain behaviors to answer a conflict or degree of uncertainty (Reio & Callahan, 2004). Curiosity is considered to be a vital component of learning and development throughout an individual's life (Mussel et al., 2012; Reio & Wiswell, 2000). Cognitive development, academic learning, and the development of interpersonal skills and personal growth are aided by curiosity (Mussel et al., 2012; Reio & Wiswell).

Curiosity can trigger exploratory behaviors within an individual who is confronted by a particular situation that is either unique, complex, or uncertain (Mussel et al., 2012; Reio & Wiswell, 2000). Emotions such as anger and anxiety that are considered to be integral to learning are affected by curiosity (Reio & Callahan, 2004). In turn, curiosity may also have an effect on such emotions. Certain emotions such as anxiety, uncertainty, or annoyance can have an inverse effect on curiosity and ultimately

the learning process (Mussel et al., 2012; Reio & Callahan). As learners' level of curiosity diminishes and anxiety rises, their attention is divided and their level of concentration is negatively impacted (Reio & Callahan).

Scholars (i.e., Mussel, 2012; Reio & Callahan, 2004; Reio et al., 2006; Reio & Wiswell, 2000) have illuminated the importance of curiosity in the workplace, as it has been associated with supporting workplace learning, problem solving, socialization, and ultimately job performance. Socialization is central in the workplace as it facilitated the adjustment and transition of new employees to their organization values and norms. The importance of curiosity has also been perceived as an important job requirement, as it can facilitate an individual's ability to respond to and cope with changes in the workplace and within the organization. When presented with new challenges, employees with higher levels of curiosity have shown to learn more and adapt more efficiently to challenges. In turn, research has shown that an employee's curiosity can increase task proficiency and job performance (Mussel; Reio & Callahan).

A trainee's ability to retain and maintain information received during training is an integral component in the transfer process (Velada, Caetano, Michel, Lyons, & Kavanagh, 2007). Certain trainee traits such as cognitive ability and self-efficacy have been shown to influence the transfer process (Burke & Hutchins 2007). Cognitive perspective is defined as a set of variables related to the quantity of knowledge and its relationship amongst the elements of knowledge (Kraiger, Ford, & Salas, 1993). In particular, cognitive perspective focuses on how knowledge is acquired, organized, and applied (Kraiger et al., 1993). Kanfer and Ackerman (1989) along with Grossman and

Salas (2011) assert that trainees with higher levels of cognitive abilities are more prone to process, retain, and generalize information to their workplace.

Self-efficacy is an individual's belief of his or her own competence and ability to perform a task, which can ultimately affect a trainee's confidence (Bandura, 1982).

Several researchers (e.g., Burke & Hutchins, 2007; Ford & Weissbein, 1997; Grossman & Salas, 2011) have cited the importance of self-efficacy on the transfer of training.

Self-efficacy has been linked to increasing a trainee's motivation, content retention, and ability to successfully complete a task (Colquitt, Le Pine, & Noe, 2000; Grossman & Salas, 2011; Velada et al., 2007). In a meta-analytic study of 256 articles spanning over 20 years of research, Colquitt and LePine (2000) found a strong relationship between self-efficacy and motivation to learn, and ultimately the transfer of knowledge.

Training environment. The transfer environment or culture has been defined as the shared basic assumption, values, and beliefs that can lead to a general framework of acceptable behaviors (Schneider, Ehrhart, & Macey, 2013). A positive organizational transfer environment is an important aspect in the transfer process as it can be a mediating factor for an individual's job attitude and work behavior (Rouiller & Goldstein, 1993). Similarly, organizations that place an emphasis on learning have evidenced an increase in job satisfaction and productivity (Watkins & Marsick, 2003). Variables related to the transfer environment include supervisory and peer support, opportunity to use, situational cues, and follow up (Baldwin & Ford, 1998; Grossman & Salas, 2011).

As part of this culture, a trainee's supervisor plays a significant role in the transfer process (Lancaster et al., 2013). Supervisory support has been defined as the degree to

which knowledge and skills are used by the trainee and supported and reinforced by the supervisor (Holton et al., 2000). As such, the relationship that is fostered between a supervisor and an employee is known to have an effect on a trainee's level of motivation and satisfaction (Buckingham & Coffman, 2002). Several studies (Baldwin & Ford, 1988; Lancaster et al., 2013; Rouiller & Goldstien, 1993; Velada et al., 2007) have cited the importance of the supervisor support and its effect on the transfer process. In a quantitative study to determine the relationship between supervisory support, peer support, organizational support, and participation in a university setting, Cromwell and Kolk (2004) discovered a significant positive correlation between supervisory support and the transfer process.

Subsequently, for employees to successfully transfer their knowledge, they must be presented with opportunities to perform their learned skills in the workplace (Burke & Hutchins, 2007; Cromwell & Kolb, 2004). Supervisors can also reinforce a trainee's learned skills by allocating resources and allowing for opportunities to apply and rehearse learned skills on the job. Researchers like Cromwell & Kolb (2004) and Grossman & Salas (2011) have asserted that lack of opportunities can inhibit the transfer of training. A study conducted by Lim and Johnson (2002) further revealed that over 64% of the participants reported the lack of opportunity to use what they learned to be an inhibitor in the transfer process. Furthermore, research also revealed that strong supervisory support led to an increase in the content being transferred, which lasted over a year.

Social support from peers has been shown to be the most significant enabling factor in an environment that significantly affects the transfer of training (Cromwell & Kolb, 2004; Colquitt et al., 2000). The ability for peers to network and share ideas and

information during and after training has shown to positively influence the transfer of knowledge and skills one year after training (Hawley & Barnard, 2005). Peer support has also been shown to affect trainees' motivation to train (Chiaburu & Marinova, 2005). A comparison study of trainees with peer support versus those lacking such support revealed that trainees with peer support transferred their trainings to a higher degree than those without it (Cromwell & Kolb, 2004).

Post training factors, such as situational cues, can also affect how trainees will display their learned behaviors (Baldwin & Ford 1988; Grossman & Salas, 2011). A positive transfer environment will incorporate cues that allow trainees to utilize their learned skills, incentives, and feedback. Set goal cues and task cues in the workplace provide employees with opportunities to reflect on their training and apply their knowledge (Rouiller & Goldstien, 1993). In turn, trainees can be rewarded for properly applying their learned skills or be provided with remediation for incorrect use.

Consequences play a vital role in the transfer environment as they can ultimately determine how trainees will continue to apply their training (Rouiller & Goldstein, 1993). Positive feedback, negative feedback, punishment, and no feedback formulate workplace cues. Positive feedback as a result of training has been associated with a promotion while negative feedback has been linked to an inability to abide by agency operating procedures. Negative feedback occurs when a trainee is mocked by supervisors or peers for attempting to apply the newly acquired knowledge. No feedback occurs when the trainee is not provided with any information on the importance of applying the learned behaviors. In a quantitative study of 182 participants, researchers discovered that feedback was a significant contributor to the transfer of training (Velada et al., 2007).

Punishment-based feedback plays an integral part in the conditioning of an individual as it can suppress certain responses (Eysenck, 2004). Operant conditioning is based on the importance of a learner's behavior and the environmental factors that can affect the learning process. There are two forms of punishment: positive punishment and negative punishment. Positive punishment occurs when an aversive stimulus is introduced after an individual engages in a particular response or behavior. When paired with positive reinforcements, the effects of positive punishment have shown to have a longer lasting effect on an individual. Negative punishment occurs when a desired stimulus (e.g., a preferred tangible or person) is removed from a particular environment as a form of decreasing unwanted behavior.

Theories Supporting the Transfer of Training

Goal-Setting Theory

Locke's (1968) goal-setting theory suggests that intentions and values can cognitively affect the behaviors of an individual and guide that individual towards his or her goal. Goal setting theory is influential in the learning process as it relates to performance goals. The level of an individual's performance is affected by the level of the goal the individual is trying to accomplish (Locke, 1968). Latham and Locke (2007) assert that there are two factors affecting a person's desire to obtain a goal. The first one involves the level of importance for that individual to obtain that goal. The second factor relates to the individual's level of confidence to obtain that particular goal. Locke (1968) affirms that once a goal is accepted, trainees will continue their efforts until reaching their goal or lower and abandon their attempts to reach the goal.

Goal setting theory is organized around five basic principles that warrant consideration to achieve a goal. Goal-setting theory holds that goals must be clear (clarity); goals that are too easy or too difficult may not be motivating (challenging); the individual must be committed to work towards the goal (commitment); an individual must also see progress (feedback); and if a goal is too complicated then it must be broken down into subgroups (complexity) (Locke, 1968). Latham and Locke (2007) emphasize the importance of distinguishing the difference between performance and learning outcomes. Consequently, performance goals are summarized as goals that affect direct functions, persistence, and trainee actions (Latham & Locke, 2007).

Expectancy Theory

Expectancy theory is defined as a momentary belief concerning the likelihood that a particular act will precede a particular outcome (Vroom, 1964). Porter and Lawler (1968) expanded this theory beyond its original construct that centered on an individual's capacity or ability. Leonard, Beauvais, and Scholl (1999) asserted that expectancy theory is based on a motivation model and it is grounded on the exchange principle of extrinsic motivators. Intrinsic rewards (e.g., accomplishment or achievement) and extrinsic rewards (e.g., increase in pay or promotion) are the two types of performance results that can also affect the transfer of training (Yamnill & McLean, 2001). Both the expectancy theory and the goal-setting theory can aid in the process of understanding how and why a trainee perceives learning goals during the various phases of training.

Identical Elements Theory

The identical elements theory asserts that to improve the transfer of learning, a correlation must exist between training setting, responses, and conditions (Thorndike &

Woodworth, 1901). A positive transfer of training will result when trainees are able to practice the final task during training and this is accomplished by relating tasks to a trainee's work setting (Yamnill & McLeanm, 2001). Otherwise, identical elements theory states that if stimuli are not comparable and responses are different within the transfer setting, then this will result in a negative transfer of training (Yamnill & McLeanm, 2001). Similarly, Goldstein (1986) states that the principles theory proposes that training should be generalizable to the necessary principles needed to solve problems in the trainee's environment. Trainees must be able to understand the goals or objectives sought through training and must have an opportunity to practice and apply their newly acquired skills.

Near and Far Transfer Theory

Laker (1990) expands on the principle of the identical elements theory and postulates that a near transfer results when a training task replicates a job task. As a result of near transfer, organizations can expect to yield a positive transfer of training (Laker, 1990). Baldwin and Ford (1988) also affirm that the more a trainee practices the skill to be transferred during training the more successful outcome it will yield. When the training task does not emulate the work-related task, this yields a far transfer and can negatively affect the transfer process (Laker, 1990).

Holton's Model of Factors Affecting Transfer

Holton's (1996) transfer of training model (see Figure 1) posited that individual performance is based on three potential outcomes: learning, individual performance, and organizational results. Within this model, Holton (1996) proposed a connection between motivation elements, environmental elements, ability, and outcomes. Motivation

elements are described as motivation to learn and transfer and trainees' perceptions of expected utility. Environmental elements include reaction and transfer climate, while potential outcomes are linked to learning, individual performance, and organizational results. Holton (1996) further affirmed that when a training design does not afford the ability to transfer the learning, it leads to one of the causes of failure.

The model developed by Holton (1996), which builds on the principles of expectancy theory, equity theory, and goal-setting theory, is based on several influences that affect trainees' motivation to transfer the learned material. These influences include intervention fulfillment, learning outcomes, job attitudes, and expected utility of training. Intervention fulfillment relates to a trainee's expectations being fulfilled by the training, while learning outcomes affects an employee's performance that effort put forth will lead to enhanced performance. Job attitude relates to a trainee's level of organizational commitment and job satisfaction, which affects the trainee's drive to want to succeed. Lastly, expected utility of training explains that a trainee is more likely to be motivated to train when there is a higher payoff.

Figure 1. Holton's (1996) Conceptual Evaluation Model.

Theoretical Framework in Transfer of Training

The training design in Baldwin and Ford's (1988) theory (see Figure 2) is comprised of principles of learning, sequencing, and training content (Baldwin & Ford, 1988). This theoretical model builds upon and incorporates the concepts of training input factors, training output factors, and condition of transfer. Furthermore, Baldwin and Ford (1988) posited that training outcomes and training input factors, such as training design, training input, training outputs, and conditions of transfer, are all interconnected in the transfer process. Subsequently, due to their direct and indirect effects, this model is linked to learning, retention, generalization, and maintenance.

Baldwin and Ford (1988) also theorized that a trainee's work environment (i.e., training input) must be both supportive and allow the opportunity to implement the training in order to have a direct effect on the transfer. A trainee's work environment has a direct impact on generalization and maintenance and can also have a direct effect on the transfer process regardless of initial learning or retention (Baldwin & Ford, 1988). Furthermore, this model was developed to demonstrate the impact of the six linkage factors on training inputs (i.e., trainee characteristics, training design, and work environment), training output (i.e., learning and retention), and conditions of transfer (i.e., generalizations and maintenance). Although the job relevance of training is often assumed, the ability to specify and relate desired skill sets or behaviors to be learned to the trainee's job is a critical element for training to be retained and transferred (Baldwin & Ford, 1988). Remembering the knowledge and skills is only part of the transfer process, trainees must be able to generalize and maintain (i.e., training output) these skills to their job for the transfer process to occur (Baldwin & Ford, 1998). The training

content, sequence, and delivery factors are also all elements that make up the training design and can aid the transfer process (Baldwin & Ford, 1988).

Figure 2. Baldwin & Ford (1988) Transfer of Training Model

Organizational Transfer Climate Model

Researchers like Goldstein (1980) and Rouiller and Goldstein (1993) were among the first to note the importance of a supportive work environment and its influence on the transfer process. A climate within an organization's dynamics is influential to the needs assessment process, as certain organizational factors and situations can inhibit or facilitate the transfer process. Rouiller and Goldstein's model of organizational transfer climate (see Figure 3) is comprised of situational cues and consequences. Situational cues include goal cues, social cues, task cues, and self-control cues; these serve as a reminder to trainees of their training and affords them with opportunities to apply their knowledge. Social cues are used to describe behaviors and organizational influence that are caused by supervisors and peers; task cues relate to a trainee's specific job; and self-control cues allow trainees to apply learned behavior to their jobs.

Figure 3. Measures of Organizations' Transfer of Climate Model (Rouiller & Goldstien, 1993)

Effects of Learning Culture and Job Satisfaction

The conceptual model of the effects of the learning culture and job satisfaction from Egan et al. (2004) displays the relationship between the input factors (i.e., learning culture and job satisfaction) and output factors (i.e., motivations to transfer learning and turnover intention). As described by Egan et al. (2004), an organizational learning culture and its environment can also be an influential aspect in job satisfaction and a motivator in the transfer process. Job satisfaction, productivity, and profitability can increase when an organization places an emphasis in learning and development. Furthermore, a trainee's motivation, opportunity for advancement, and training rewards are all predictors for motivation to transfer learning. Due to the inverse relationship between job satisfaction and job turnover, Egan et al., (2004) argued that an organizational learning culture can have a positive effect on motivating a trainee to transfer learning. In turn, this can indirectly influence organizational outcomes through increasing job satisfaction and decreasing job turnover, all while increasing organizational productivity. Figure 4 illustrates the model of the effects of learning culture and job satisfaction.

Figure 4. Model of the Effects of Learning Culture and Job Satisfaction (Egan et al., 2004).

Components of Law Enforcement Training Transfer

Based on the prior research, a number of factors found to influence the transfer of training were used to develop the instrument for this study. The factors that were identified included curiosity (Reio & Wiswell, 2000), peer support (Baldwin & Ford, 1988, 1992), supervisor support (Baldwin & Ford, 1988, 1992), opportunity to use (Baldwin & Ford, 1992), perceived context validity (Grossman & Salas, 2011), organization learning climate and job satisfaction (Egan et al., 2004).

In their seminal study, Baldwin and Ford (1988) identified multidimensional factors that can influence the transfer of training. A model consisting of six linking factors was used to examine the effects of input factor, training output factors, and condition of transfer (see Figure 2). Baldwin and Ford (1992) furthered their research and identified three factors within the input facet that influence the transfer of training. These factors were identified as training design (e.g., learning principles, sequencing, and content), trainee characteristics (e.g., ability, personality, and motivation), and work environment (e.g., support and opportunity to use). Egan et al. (2004) conceptualized a

model that added job satisfaction as a factor influencing transfer of training. This research found a strong correlation between job satisfaction, motivation to train, and the transfer process, which in turn had an effect on employee turnover (Egan et al., 2004). Motivation was also a strong linking factor between trainee characteristics, perceived validity of training, and the transfer process (Grohmann et al., 1992). Curiosity has also been shown to be a contributing factor in the intrinsic motivation to train. Curiosity has been associated with cognitive development, learning, and certain emotions that can either aid or thwart the learning process (Mussel et al., 2012; Reio & Callahan, 2004; Reio & Wiswell, 2000). Workplace learning, problem solving, socialization, and ultimately job performance have all been associated with curiosity.

Grossman and Salas (2011) also demonstrated the importance of a supportive environment in the transfer process. Factors within an organization's climate such as situational cues which include goal cues, social cues, task cues, and self-control cues can aid the transfer process by reminding trainees of their training and affording them with the opportunity to apply their learned skills (Rouiller & Goldstein, 1993). Research has also indicated that supervisory and peer support can yield positive transfer outcomes (e.g., Baldwin & Ford, 1988; Rouiller & Goldstien, 1993; Velada et al., 2007). The opportunity to apply training has further shown to encourage learning in the workplace and allow trainees the ability to rehearse their learned skills on the job (Cromwell & Kolb, 2004; Lim & Johnson, 2002). Training incentives and performance feedback are all significant predictors of the transfer outcome (Grossman & Salas, 2011). Organizations that place an emphasis of learning and development also yield increased job satisfaction, motivation to train, and perceived training validity (Egan et al., 2004).

Validated Instruments

Learning Transfer System Inventory

The LTSI is a theoretically-based instrument that was empirically developed as a tool that can be used to identify and evaluate factors affecting a trainee's outcome (Chen et al., 2005). The LTSI was originally designed to address improve upon previously used instruments, such as the four-level evaluation model by Kirkpatrick (1976), that failed to address various issues in the transfer of training (Holton, 1996; Bates et al., 2012). The early works from Rouiller and Goldstien (1993) on organizational transfer climate and the development of the Learning Transfer Questionnaire (LTQ) by Holton et al. (1997) paved the way for the development of the LTSI (Devos et al., 2007). The LTSI is a self-report instrument that is comprised of 16 factors, which encompass two construct domains and include 45 items (Chen et al., 2005; Holton et al., 2000). Since its development, the LTSI has been validated in 17 countries, including the United States, Ukraine, Taiwan, Portugal, Jordan, Germany, and Greece (Bates et al., 2012). The LTSI has also been successfully translated to over 14 languages (e.g., French, Arabic, Portuguese, Thai, German, and Greek).

The LTSI measures transfer of training factors that include learner readiness, motivation to transfer, positive personal outcome, negative personal outcomes, personal capacity for transfer, peer support, supervisory support, perceived content validity, transfer design, and opportunity to use (Chen et al., 2005). It also includes effort-performance expectation, performance outcome expectation, resistance/openness to change, performance self-efficacy, and performance coaching. Figure 5 shows the conceptual model of the LTSI put forth by Holton et al. (2000).

Figure 5. Learning Transfer System Inventory, Conceptual Model (Holton et al., 2000).

The LTSI was originally administered to over 1,600 individuals upon completing a work-related training program (Holton et al., 2000). To create a generalizable instrument with broad applications, researchers elected to utilize a heterogeneous population from diverse industries that included respondents from the field of computer science, insurance, chemistry, industrial manufacturing, non-profit organizations, and municipal and state governments (Holton et al., 2000). Within these industries, participants held various positions such as clerical, manufacturing, technicians, engineering, sales, and law enforcement participated in the study (Holton et al., 2000). Still, the measure was not designed specifically for use with law enforcement personnel or any other specific occupation for that matter. Instead, in Holton et al.'s initial validation efforts, the purpose was to get as heterogeneous sample as possible to facilitate the early stages of instrument development. Participants were selected from training

programs geared towards sales, safety, management, computer, technical skills, leadership and supervision (Holton et al.). Table 1 provides further demographic information.

<i>Organization Type</i>	<i>n</i>	<i>Percentage</i>	<i>Training Type</i>	<i>n</i>	<i>Percentage</i>
Government	676	41.8	Technical skills	544	33.7
State (175)			Sales/Customer service	434	26.9
Local (501)			Volunteer management	192	11.9
For-profit organization	432	26.7	Leadership/Management	175	10.8
Nonprofit organization	192	11.9	Professional skills	80	5.0
Public training classes (mostly for-profit)	316	19.6	Supervisory skills	67	4.1
			Clerical	62	3.8
			Communication	44	2.7
			Computer	18	1.1
Total	1616		Total	1616	

Table 1. *Demographic Information (Holton et al. 2000)*

To test the validity of the LTSI, Holton et al. (2000) conducted a first and second-order factor analysis. Exploratory or first-order factor analysis involves the investigation of a set of items that measure a smaller subset of constructs (Keith, 2015). In the Holton et al. study, items in the LTSI were organized under two constructs of interest: program-specific transfer of training and general transfer of training. The researchers used SPSS statistical software to analyze their first research question. Results indicated that the average Cronbach's alpha reliability was .62 for the major items and .05 for the non-major items. The majority of the subscales, with the exception of three (α s = .63, .68, and .69), met the criterion of .70 or higher. The researchers preserved sixty-eight items that assessed sixteen constructs outlined in Table 2. With regards to the training-specific scales, Holton et al. performed a Kaiser's measure of sampling adequacy (MSA) and determined that the level of suitability for factor analysis was .94. Being that all of their

items were within acceptable ranges, researchers elected to keep all of the items except one. Due to the use of negative wording, researchers also removed an item originally intended for the transfer effort-performance scale to reduce possible response errors. The researchers were ultimately left with five factors that measured twenty-three items, all of which had a factor loading cutoff of .40 and acceptable levels of reliability. Table 2 further describes the names, definition, sample items, and reliability values.

Table 2.

Learning Transfer of Training Scales (Holton et al., 2000)

Factor	Definition	# of items	α	Average Major Factor	Average Other Factors
Learner Readiness	The extent to which individuals are prepared to enter and participate in training	4	.73	.64	.04
Motivation to Transfer	The direction intensity and persistence of effort toward utilizing in a work setting skills and knowledge	4	.83	.65	.04
Positive Personal Outcome	The degree to which applying training on the job leads to outcomes that are positive for the individual	3	.69	.56	.05
Negative personal Outcome	The extent to which individuals believe that not applying skills and knowledge learned in training will lead to outcomes that are negative	4	.76	.65	.04
Personal Capacity for Transfer	The extent to which individual have the time, energy, and mental space in their work lives to make changes required to transfer learning on the job.	4	.68	.56	.04
Peer Support	The extent to which peers reinforce and support use of learning on the job	4	.83	.66	.04

Supervisor Support	The extent to which supervisors/managers support and reinforce use of training on the job	6	.91	.75	.04
Supervisory Sanctions	The extent to which individuals perceive negative response from supervisors /manager when applying skills learned in training	3	.63	.46	.06
Perceived content validity	The extent to which trainees' judge training content to accurately reflect job requirements	5	.84	.58	.05
Transfer Design	The degree to which 1) training has been designed and delivered to give trainees the ability to transfer learning to the job and 2) training instructions match job requirements	4	.85	.70	.03
Opportunity to Use	The extent to which trainees are provided with or obtain resources and tasks on the job enabling them to use training on the job	4	.70	.54	.06
Transfer Efforts	The expectation that effort devoted to transferring learning will lead to changes in job performance	4	.81	.65	.05
Performance Outcomes	The expectation that changes in job performance will lead to valued outcomes	5	.83	.65	.06
Resistance Openness to Change	The extent to which prevailing group norms are perceived by individuals to resist or discourage the use of skills and knowledge acquired in training	6	.85	.70	.04
Performance Self-efficacy	An individual's general belief that they are able to change their performance when they want to	4	.76	.65	.04
Performance Coaching	Formal and informal indicators from an organization about an individual's job performance	4	.68	.56	.04

A second-order factor analysis involves making predictions of the constructs measured by the items and then comparing these predictions to the analysis results (Keith, 2015). Researchers utilized SPSS and UniMult computer software to further determine which items to retain for each construct based on factor loading, item reliability, and theoretical consistency. After attempting to use three or four second-order factors, the researchers decided to do a two-factor model. As shown in table 3, results revealed that 8 of the 11 originally proposed scales had acceptable factor loading values. For the first factor, Job Utility, these scales were opportunity to use learning, transfer design, content validity, personal capacity for transfer, peer support, learner readiness, supervisor-manager sanctions, and motivation to transfer learning (Holton et al., 2010). On the second factor, Rewards, the scales of personal outcomes-positive, personal outcomes-negative, and supervisor support also resulted in acceptable factor loadings. Supervisory support also played a role in job utility and rewards being that the support served as a catalyst to encourage employees to learn. Trainee characteristics, such as learner readiness and performance self-efficacy did not produce a strong second-order factor.

Table 3

Second-Order Factor Loading Results (Holton et al., 2000)

First-Order Factor	Second-Order Factor	
	1	2
	Job Utility	Rewards
Opportunity to use learning	-.87	.24
Transfer design	.86	-.06
Content validity	.74	-.11
Personal capacity for transfer	.72	-.04
Peer Support	.62	.26
Learner readiness	.62	.13
Supervisor sanctions	-.62	.11

Motivation to transfer learning	.54	.15
Supervisor support	.45	.39
Personal outcomes-positive	-.23	.74
Personal outcomes-negative	-.07	.67
Eigenvalue	4.83	1.64

The study completed by Holton et al. (2000) ultimately identified 16 factors that affected the transfer of learning, with 11 factors used to evaluate specific training programs and five factor representing general training aspects. All scales developed within these sixteen factors produced acceptable loading values and yielded reliability values approximate to .70 (Holton et al.). Researchers reported the results of two high-order factors from the second-order analysis for program-specific items. This corresponds with past research of Baldwin and Ford (1988) on transfer of training. These results were able to satisfy the researchers' purpose of consistent and valid results.

Dimension of Learning Organization Questionnaire (DLOQ-A)

The DLOQ was initially developed by Marsick and Watkins (1993), based on the theories of informal and incidental learning from Dewey (1938) and Lewin (1946). The DLOQ incorporated the principle that a significant portion of learning in the workplace occurs in an informal setting in which a worker undergoes learning via on-the-job training and through their interactions with their fellow workers (Marsick & Watkins, 1993). The process of learning occurs when an individual's response is stimulated based on a challenge that the must have to develop a strategy or action to overcome (Marsick & Watkins, 2003). Certain factors such as perceptions, values, and beliefs towards learning are shaped by their prior experiences and social contexts (Marsick & Watkins, 2003). An organization's climate and culture have a significant role in supporting the learning

process that occurs through experiences and influences of others in the workplace and results in a collective learning experience (Marsick & Watkins, 2003). Therefore, the DLOQ was developed to measure changes within an organization's climate, culture, systems, and structures that can affect how an individual learns (Marsick & Watkins, 2003).

Figure 6. Structural model for Dimension of Learning Organization Questionnaire (Yang et al., 2003).

The original version of the DLOQ included 43 items to measure seven dimensions; however, Yang (2003) refined the instrument based on empirical validation and developed the DLOQ-A. The DLOQ-A is comprised of 21 items that measure organizational learning culture based on individual, group, and organization (Yang et al., 2003). The DLOQ-A was created as a self-reported instrument that utilized a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*) (Yang et al., 2003). The DLOQ-A was created three stages of field testing that incorporated the participation of 310 individuals (Yang et al., 2003). The researchers elected to complete a confirmatory factor analysis to assess the construct validity and adequacy of the item to factor associations and the number of dimensions underlying the constructs (Yang et al., 2003).

Structural equation modeling was also utilized to determine the relations between dimensions of learning organization and organization performance measures.

Due to a relatively large sample population ($N = 836$) and to create a means for cross-validating, the researchers elected to create two separate exploratory/confirmatory sample pools (Yang et al., 2003). The instrument was refined through the use of a model generation method and a congeneric model and a confirmatory factor analysis was performed to examining the instrument reliability (Yang et al., 2003). Overall, all the DLOQ-A's subscales measured adequately within one standard deviation on a six-point scale and all the correlation coefficients were significant at the level of .001.

The DLOQ-A has shown to be a reliable and validated measure of learning in various countries and cultural contexts (e.g., United States, China, Korea, Colombia, and Taiwan) (Song et al., 2009). The DLOQ-A has yielded an internal consistency for each item with a coefficient alpha range of .71 to .91 (Song et al., 2009). The seven measures included creating continuous learning opportunities, promoting inquiry and dialogue, encouraging collaboration and team learning, creating systems to capture and share learning, empowering people towards a collective vision, connecting an organization to its environment, and providing strategic leadership for learning (see Table 4) (Marsick & Watkins, 2003).

Table 4

Dimension of Learning Organization Questionnaire (Marsick & Watkins, 2003)

Factor	Dimension	Question #
Individual Level	Continuous Learning Dialogue and Inquiry	1-6
Team Level	Team Learning Collaboration	7-9
Organizational Level	Embedded Systems Systems Connection Empowerment Provide Leadership	10-21

Table 5

Fit Indices for Dimensions of Learning Organization (Yang et al., 2003)

Fit Index	Simple Factor Structure			Complex Structure
	Null Model	One-Factor	Seven-Factor	Seven-Factor
Exploratory Sample				
χ^2	11211.06	3630.98	2740.77	2031.88
df	861	819	798	778
χ^2/df	13.02	4.43	3.43	2.61
RMSEA	.17	.09	.08	.06
RMSR	.39	.06	.05	.05
GFI	.13	.67	.76	.82
AGFI	.09	.64	.73	.79
NNFI (TLI)	0	.71	.80	.87
CFI	0	.73	.81	.88
Confirmatory Sample				
χ^2	12378.21	3517.09	2904.96	2746.29
df	861	819	798	778
χ^2/df	14.38	4.29	3.64	3.53
RMSEA	.18	.09	.08	.08
RMSR	.43	.06	.06	.06
GFI	.11	.67	.73	.75
AGFI	.07	.64	.69	.71
NNFI (TLI)	0	.75	.80	.81
CFI	0	.77	.82	.83

Work-Related Curiosity Scale

The Work-Related Curiosity Scale was originally developed by Mussel et al. (2011) with the hopes of addressing the gap in literature and absence of a work-specific curiosity scale. Trainees' level of motivation affects their intentions to attend to and apply skills and knowledge learned to their perspective roles (Burke & Hutchin, 2007;

Yamhill & McLean, 2001). Motivation has also been shown to affect job satisfaction and employee turnover (Egan et al., 2003). Motivation, which is considered to be comprised of both extrinsic and intrinsic components, is affected by curiosity (Mussel, 2012).

Curiosity is considered to be a key element in intrinsic motivation to learn (Mussel, 2012). Curiosity has been viewed as an important aspect of workplace training as it supports trainee desire to learn, solve problems, adapt to hurdles in the workplace (Mussel, 2012; Reio & Callahan, 2004; Reio & Wiswell, 2000; Reio et al., 2006).

Curiosity is an important measure within a trainee's level of motivation as it not only reinforces workplace learning, but it also affects task proficiency, emotions, socialization, and ultimately job performance (Mussel, 2012). Socialization is an important aspect of work-related learning as it allows new employees that ability to adapt and adjust to their environment. Socialization also allows for the proactive search of information and facilitates the learning of organization values and norms.

As a result, socialization is vital to employee ability to adequately perform as it affects aptitude to gather information needed to master a respective workplace role (Reio & Wiswell, 2000). Curiosity is considered to be both an indirect and direct mediating factor in the role of socialization (Reio & Callahan, 2004). In turn, work environments that foster curiosity and knowledge seeking ultimately yield positive job performance outcomes. Otherwise, job performance and employee learning is negatively affected if curiosity is not nurtured. This is noteworthy in the field of law enforcement, as socialization and curiosity can play a significant role due to a strong organizational commitment and group mentality (Woody, 2005).

To capture this phenomenon, Mussel et al. (2012) designed a scale that can be specifically used in a workplace setting to assess behaviors that are related to curiosity. The researchers originally developed 38 items and later reduced the scale to 10 items and incorporated the use of personality traits, achievement motivation, and general mental ability as construct validity measures (Mussel et al., 2012). The first measure was originally administered to 251 individuals in the finance and banking industries. The Work-Related Curiosity scale was refined through the use of factor analysis that yielded adequate results as shown in Table 12. Following the first study, the researchers administered a refined 10-item scale to 395 participants who were employed at a university setting. The results revealed a normal scale distribution with skewness ranging between -0.80 to -0.19 and kurtosis from -0.23 to 0.85 (see Table 7). Overall, exploratory and confirmatory factor analysis revealed acceptable and reliable internal consistency for the 10-item scale.

Table 6
Work-Related Curiosity Scale Construct Validity (Mussel et al., 2012)

	1	2	3	4	5	6	7	8	9	10	11	12	13
01) Curiosity (WRC)													
Training performance													
02) Knowledge-check	.26												
03) Intermediate examination	.09	.44											
04) Vocational school grades	.01	.44	.56										
Job Performance													
05) Goal-related achievement	-.02	.29	.41	.28									
06) Supervisory ratings	-.04	.48	.48	.41	.61								
Construct-related evidence													
07) Neuroticism	-.25	-.08	-.21	-.07	-.26	-.25							
08) Extraversion	.40	.20	.16	.12	.18	.20	-.43						
09) Openness to experience	.60	.34	.17	.09	.04	.03	-.27	.33					
10) Agreeableness	.15	-.05	-.08	-.03	-.09	-.07	-.18	.03	.09				
11) Conscientiousness	.57	-.01	.04	.00	.03	.02	-.26	.29	.40	.31			
12) Achievement motivation	.54	.08	.03	-.11	.02	-.01	-.27	.38	.41	.08	.52		
13) General mental ability	-.03	.31	.34	.34	.14	.19	-.13	.13	.07	-.03	.01	-.09	
N	251	79	227	170	251	219	251	251	251	251	251	250	251

Table 7

Work-Related Curiosity Scale 10 items (Mussel et al., 2012)

Items	Items in English	<i>N</i>	<i>M</i>	<i>SD</i>	Min	Max	Skew ¹	Kurto- sis ²	Discrimi- natory power	Factor load
1) Es interessiert mich, wie sich meine Leistung auf das Unternehmen auswirkt.	I am interested in how my contribution impacts the company.	251	6.04	0.87	3	7	-0.70	0.22	.51	.55
2) Es macht mir Freude, neue Strategien zu erarbeiten.	I enjoy developing new strategies.	251	5.35	1.10	1	7	-0.76	1.32	.67	.73
3) An praktischen Lösungen interessiert mich auch die dahinter stehende Theorie.	Regarding practical problems, I'm also interested in the underlying theory.	251	5.18	1.09	2	7	-0.61	0.64	.63	.69
4) Bei komplexen Problemen beschreibe ich gerne neue Lösungswege.	When confronted with complex problems, I like to look for new solutions.	251	5.42	0.97	2	7	-0.38	-0.11	.68	.75
5) Ich habe Spaß am Tüfteln und Denken.	I enjoy pondering and thinking.	251	5.81	1.01	2	7	-0.74	0.42	.57	.62
6) Ich bin wissbegierig.	I am eager to learn.	251	6.31	0.88	1	7	-1.80	5.61	.39	.43
7) Ich durchdenke ein Problem solange, bis ich es gelöst habe.	I keep thinking about a problem until I've solved it.	251	5.82	0.95	3	7	-0.61	-0.08	.56	.61
8) Ich hinterfrage schon bestehende Theorien kritisch.	I challenge already existing theories critically.	251	4.55	1.29	1	7	-0.13	-0.29	.50	.54
9) Ich informiere mich solange, bis ich auch komplexe Zusammenhänge verstanden habe.	I carry on seeking information until I am able to understand complex issues.	251	6.02	0.95	1	7	-1.32	3.35	.59	.64
10) Prozesse im Betrieb versuche ich durch innovative Vorschläge zu verbessern.	I try to improve work processes by making innovative suggestions.	251	5.20	1.21	2	7	-0.65	0.18	.53	.57

¹*SD*_{Skewness}: .154; ²*SD*_{Kurtosis}: .306. This measure is nonproprietary (free) and may be used without permission. English items were translated from original German items using a translation/backtranslation procedure; empirical evidence regarding the English version is still pending. Norm values on scale level across the two studies: *M* = 52.6, *SD* = 7.89 (*N* = 644). Gender-specific norms: female: *M* = 52.1, *SD* = 7.83 (*N* = 343); male: *M* = 53.1, *SD* = 8.14 (*N* = 301).

Summary

Chapter 2 explored literature pertaining to theories of policing, with an emphasis on the adoption and progression of training in law enforcement, as well as the research on transfer of training, training design, and trainee characteristics. Theories such as the goal-setting theory, expectancy theory, and identical elements theory, in addition to models such as the conceptual evaluation and transfer of training models were also

presented. Last, the components to be included in the new learning transfer instrument are presented. Chapter 3 will discuss the methodology and Chapter 4 will present the findings of the present study. Chapter 5 will conclude with an overview of the study, its' implications, and recommendations for future research.

CHAPTER III

METHODOLOGY

The purpose of this study was to develop and validate an instrument to assess factors that can influence the transfer of training in law enforcement agencies. To examine these variables, this study employed a quantitative nonexperimental research design utilizing survey methods to address the research questions. The following research questions were developed:

1. Does the law enforcement transfer of training self-assessment instrument yield valid inferences?
2. Does the law enforcement transfer of training self-assessment instrument yield reliable inferences?

Scale Development

This study was built on over 30 years of empirical research that was paved by a wide range of social science researchers (i.e., Baldwin, 1992; Baldwin & Ford, 1988; Bates et al., 2012; Burke & Baldwin, 1999; Elangovan & Karakowsky, 1999; Facticeau et al., 1995; Garavaglia, 1993; Goldstien & Gilliam, 1990; Grossman & Salas, 2011; Holton, 1996; Holton, 2009; Holton et al., 2000; Holton et al., 2010, Kotter & Heskett, 1992; Kraiger, Ford, & Salas, 1992; Marsick & Watkin, 1993; Mussel, 2013; Mussel et al. 2011; Reio & Callahan, 2004; Reio & Wiswell, 2000; Sak, 2002; Schneider, Ehrhart, & Macey, 2013; Tziner, Haccoun, & Kadish, 1991; Yang, Marsick & Watkins, 2003). Furthermore, previously validated instruments such as the Dimension of Learning Organization Questionnaire (Yang, Marsick, & Watkins, 2003), Work-Related Curiosity Scale (Mussel et al., 2011), and the Learning Transfer System Inventory (Holton et al.,

2000) were also used as a basis to develop the Transfer of Training Inventory for Law Enforcement.

The LTSI has been shown to be a reliable and valid instrument that can be used to measure transfer of training across various training/employment settings (e.g., Bates, Holton, & Hatala, 2012; Chen, Holton, & Bates, 2005; Devos, Dumay, Bonami, Bates, & Holton, 2007; Holton et al., 2000; Holton, Bates, Bookter, Yamkovenko, 2007; Velada, Caetano, Bates, Holton, 2009; Yaghi, Goodman, Holton, Bates, 2008; Yamkovenko, Holton, & Bates, 2007). This survey was also based on the Dimension of Learning Organization Questionnaire (DLOQ-A) developed by Marsick and Watkins (2003), which has also been shown to be a valid instrument across a multitude of studies (i.e., Chermack, 2009; Ellinger, Ellinger, Yang, & Howton, 2002; Hernandez, 2000; Lien, Hung, Yang, Li, 2006; Song, Joo, & Chermack, 2008; Song, Kim, & Chermack, 2009, Yang 2006). Lastly, this study also built on the work of Mussel et al. (2011) who developed a valid and reliable work-related curiosity scale.

Instrument Development Methodology

Four phases of researcher-based scale development originally established by Benson and Clark (1982) and later expanded by other researchers (e.g., Devellis, 2003; Netemeyer, Bearden, & Sharma, 2003; Groves, Fowler, Couper, Lepkowski, Singer, & Tourangeau, 2011) were utilized during the planning, construction and validation process of this measure. Based on the prior research, this study measured transfer of training with the following seven subscales: trainee's motivation/curiosity, peer support, supervisor support, opportunity to use, perceived context validity, organization learning climate, and job satisfaction. Although several instruments have been developed for

transfer of training, this instrument was specifically developed to be validated for law enforcement officers. This instrument also focused on combined-preselected scales that had not been previously explored. For example, the LTSI places a significant emphasis on the effects on individual-level factors (i.e., learner readiness, motivation to transfer, posited outcome, personal capacity for transfer, openness to change, opportunity to use, and performance expectation), in comparison to other factors, such as the organization. Conversely, the DLOQ focuses on organizations-level factors such as climate, culture, and structures. Job satisfactions and trainees' level of curiosity as a proposed level of motivation have not been widely explored in the aforementioned scales, especially in law enforcement.

Understanding that the entire research process will be informed by Florida International University's Institutional Review Board, the following describes the four phases of instrument development for this study.

Phase 1. As suggested by Devellis (2003), a large pool of items was initially developed for review by subject experts' review to establish related evidence. The content area were identified based on previously cited literature and scales of transfer of training and curiosity (e.g., Baldwin, 1992; Baldwin & Ford, 1988; Bates et al., 2012; Burke & Baldwin, 1999; Elangovan & Karakowsky, 1999; Fecteau et. al., 1995; Garavaglia, 1993; Goldstien & Gilliam, 1990; Grossman & Salas, 2011; Holton, 1996; Holton, 2009; Holton et al., 2000; Holton et al., 2010, Kotter & Heskett, 1992; Kraiger, Ford, & Salas, 1992; Marsick & Watkin, 1993; Mussel, 2013; Mussel et al. 2011; Reio & Callahan, 2004; Reio & Wiswell, 2000; Sak, 2002; Schneider, Ehrhart, & Macey, 2013; Tziner, Haccoun, & Kadish, 1991; Yang, Marsick & Watkins, 2003). Items from

existing scales were examined, and as appropriate, modified to reflect a law enforcement setting. For example, in the Work-Related Curiosity Scale (Mussel et al., 2012), the item “I am eager to learn” was modified to “I am eager to learn more about law enforcement.”

Besides finding existing scales, research was also consulted to develop a large item pool for each facet of the training transfer research measure; that is, curiosity, peer support, supervisor support, opportunity to use, perceived context validity, organization learning climate, and job satisfaction. These factors were selected in part from the work by Baldwin and Ford (1988, 1992) who revealed the importance of training design (e.g., learning principles, sequencing, and content), trainee characteristics (e.g., ability, personality, and motivation) and work environment (e.g., support and opportunity to use) on the transfer of training. Holton (1996), Holton et al. (2000), and Marsick and Watkins (1993) further demonstrated the significance of trainee characteristics, training design, and work environment (i.e., climate and culture) on the transfer of training. Egan et al., (2004) also established the importance of job satisfaction and its relationship to the learning culture, motivation to train, transfer of training, and ultimately employee turnover. Lastly, researchers (Mussel et al. 2011; Mussel, 2012; Reio & Callahan, 2004; Reio & Wiswell, 2000; Reio et al., 2006) showed that curiosity is a fundamental component in motivating a trainee’s desire to learn. Thus, when considering the literature reviewed, a series of items for this instrument was based upon the aforementioned seven areas of interest related to transfer of training.

Phase 2. Once the items were developed, an expert review process was utilized to validate the content. Researchers (i.e., Lynn, 1986; Weger, Tebb, & Rauch, 2003)

recommend the use of at least three to ten experts who are professionals to establish related evidence. The criteria for selecting experts for this study was based on their experience working in the field of law enforcement or having academic experience in the field. For the expert panel, five experts were contacted in person and invited to participate in the review process. These individuals included a patrol officer, an officer in the training department, a psychometrician, an educational psychologist, and a person in the field of criminal justice. As directed by Waltz, Strickland, & Lenz (2005), the expert panel was instructed to review the items and provide their perception on related evidence based on a 4-point Likert scale (1 = *not clear*, 2 = *major needs revisions*, 3 = *needs minor revisions*, 4 = *clear*). Expert members were also encouraged to provide comments for each item to determine if items should be kept, modified, or removed. They were encouraged to highlight potential areas or subject content that might have been overlooked.

Phase 3. Following the recommendations from the expert panel and pilot study, a final instrument was created and subsequently distributed in an effort to validate the new research scale. To address potential factors in law enforcement that can affect the transfer of training, the target population for this study was active law enforcement officers. Due to the relatively large sampling population of police officers in the United States, this study utilized purposeful sampling to recruit law enforcement officers within the state of Florida who are members of the Fraternal Order of Police. The Fraternal Order of Police is a professional organization for law enforcement officers within the United States. Since its establishment in 1915, the Fraternal Order of Police, with a membership of over 330,000 police officers, has grown to become the largest police

organization in the United States (FOP, 2018). The Fraternal Order of Police provides officers with resources, training, and legal/civil representation at the state and national level (FOP, 2018). Within the state of Florida, the Fraternal of Police is comprised of about 19,000 members who are actively employed with sheriff, police, and state law enforcement agencies.

According to previous research on using surveys as a research method, participant response rates typically vary widely from between 3% to 50% (Dillman, 2009). To be conservative, this researcher aimed to collect 250 survey responses to have the statistical power to facilitate optimal statistical analysis. For instrument development work, having a sample of at least 200 would be acceptable to adequately address the factor-analytic work required to validate the measure (Tabachnick & Fidell, 2001).

To ensure that the respondents were be able to address potential factors that can hinder the transfer process in law enforcement, participants were only those who are actively employed at a law enforcement agency. Furthermore, respondents were required also to be certified as law enforcement officers by the Florida Department of Law Enforcement. A Florida certified law enforcement officer must be at least 21 years of age, must have completed a 770-hour police academy course, and must have passed the state certification exam. Law enforcement officers solicited for this survey were those who are responsible for responding to calls of service, conducting investigations, and enforcing state and local laws.

An online survey was employed to recruit participants. Participants were contacted via email through the Fraternal Order of Police and asked to participate in the online survey. Guided by Dillman's (2009) Tailored Design Method of survey

distribution to increase the response rate, prospective participants were contacted first via email to alert them they have been selected to participate in the online survey. After a three-day period, an email with the survey URL link was distributed. After one week, a follow-up email with the URL link was sent to participants who did not complete the survey. Subsequently, a second and final follow-up with URL link was sent one week later to the remaining individuals who had not participated to date. Thus, overall, the actual survey was sent three times to prospective participants to maximize the response rate.

Qualtrics was the online survey tool used to distribute the instrument. The data collected was collated in the form of an Excel spreadsheet, which was then be converted to an SPSS spreadsheet to allow statistical analysis. Further, to increase the likelihood of participation, participants were kept anonymous (Dillman, 2009). The use of an online survey was chosen over a paper-and-pencil survey because its use more closely aligns with the often hectic and unpredictable nature of law enforcement (e.g., unplanned calls for service), thereby increasing the likelihood of being completed.

Phase 4. Once the final version of the measure was administered, the data collected was statistically analyzed to develop evidence for reliability and scale validity. The Standards of Education and Psychological Testing defines reliability as the ability to replicate consistent scores throughout the testing procedure (AERA, 2014). Thus, Cronbach's alpha coefficients was computed to provide evidence of internal consistency (Devallis, 2003). Validity is defined as to the degree of evidence that supports the interpretation of test scores for proposed use (AERA, 2014). To accomplish the validation task, the use of oblique exploratory factor analysis with principal axis rotation

was employed to ascertain evidence of construct validity (Reio, 2016). Exploratory factor analysis was elected as it is considered to be more appropriate in early stages of scale development (Holton et al., 2000; Williams et al., 2010). Furthermore, exploratory factor analysis allows the opportunity to establish underlying dimensions between variables being measured (Williams et al., 2010). The average variance extracted per factor was computed as it provides a more stringent test of internal structure and stability to assess the amount of variance due to measurement error (Netemeyer, Bearden, & Sharma, 2003). The data collected was analyzed through the Statistical Package for the Social Sciences (SPSS) software.

Summary

Chapter 3 presents an overview of the methods used to develop and validate the Law Enforcement Transfer of Training Inventory. Sampling methods, phases of instrument development, data collection, and analysis were also examined in Chapter 3. Chapter 4 reports the findings of the factor analysis and measures of internal consistency. Chapter 5 concludes with an overview of the study, its implications for theory and practices, and recommendations for future research.

CHAPTER IV

RESULTS

The objective of this study was to develop an instrument with both valid and reliable inferences that can be used to measure components that can influence the transfer of training in law enforcement agencies. This chapter presents the phases and statistical analysis performed and their findings for each of the following research questions:

1. Does the law enforcement transfer of training self-assessment instrument yield valid inferences?
2. Does the law enforcement transfer of training self-assessment instrument yield reliable inferences?

Scale Development

This study utilized a four-phase approach established by Benson and Clark (1982) to develop and validate the law enforcement transfer of training self-assessment instrument. The first step in this study was to identify specific training content areas based on previously established literature and validated instruments. Seminal studies (e.g., Baldwin & Ford, 1988; Holton et al., 2000; Marsick & Watkin, 1993) and previously developed instruments (e.g., Learning Transfer System Inventory; Dimensions of Learning Questionnaire; Work Curiosity Scale) were used as a model to identify subscale related to the transfer of training. Certain factors such as supervisor support, peer support, and opportunity to use were modeled after the Learning Transfer System Inventory. Other subscales such as organization learning climate were drawn from the Dimensions of Learning Questionnaire. The Work Curiosity Scale was used as an example to develop the curiosity items for the subscale of motivation/curiosity. The

components of motivation, job satisfaction, and training content and instruction were shaped from the body of literature.

In turn, seven categories were identified (motivation/ curiosity, peer support, supervisor support, opportunity to use, perceived context validity, organization learning climate, and job satisfaction) and made up the original instrument. Once the categories were delineated, a pool of 49 original items were developed by the researcher (see Appendix A). After item creation, an expert panel comprised of five experts (i.e., law enforcement officer, law enforcement training sergeant, a psychometrician, an educational psychologist, and a person within the field of criminal justice) were contacted via email. The expert panel members were explained the purpose and process of review the proposed content. Expert panel members were provided with a brief summary (see Appendix B) and content validation forms (see Appendix C). The content validation forms delineated the components and provided a conceptual definition for each. Expert panel members were provided with directions for rating items based on

After receiving and analyzing the content validation forms and feedback, the law enforcement transfer of training scale was revised from 49 items to 35 items. The final version incorporated less items due to redundancy and ambiguity. Several wording changes to the items were completed based on the expert panel feedback. For example, the wording on one item was corrected to remove two different ideas in one question stem (e.g., well-planned and purposeful while questions utilizing two words (e.g., apply and use) were edited. In sum, employee level of curiosity/motivation was comprised of six items; job satisfaction, organization learning climate, opportunity to use training,

training context and instruction, and supervisor support each had 5 items; and peer support was comprised of 4 items (see Appendix D).

Additional demographic items were added to ensure that the instrument was being distributed to the target population. For example, participants were asked whether they were currently employed as a law enforcement officer in the state of Florida and their current employment status (i.e., full time or part-time). Being that this questionnaire was distributed to agencies throughout the state of Florida, participants were further asked to report on their type of agency, size of agency, and current position. Information on the number of years working in the field of law enforcement and highest level of education was also gathered as the research shows that this may have an influence on the transfer of training (Garavaglia, 1996). Lastly, demographic information such as participants' gender, age, and military background was also gathered (see Appendix E).

Data Collection

Active law enforcement participants who are members of the Fraternal Order of Police in the state of Florida were contacted via email to participate in the study. Participants completed the survey in an online format using Qualtrics (see Appendix E). The recruitment email (see Appendix F) was sent to approximately 19,000 active law enforcement officers via the state FOP administrative assistant to the president. The actual number of law enforcement officers recruited for this study is approximated because it is difficult to tell how many individuals actually received the recruitment email. Respondents who were either part-time law enforcement officers or correctional officers were excluded from the study. Only one response was identified as being excluded due to having the same response to all items giving. In total, 297 participants

responded to the survey; however, only 288 individuals met the criteria for inclusion and completed the survey. The final sample was 288 law enforcement officers.

Description of Sample

Descriptive analysis of the demographic variables indicated that over 80% of the participants were males and 18% were females. These results are representative of the national law enforcement population 87% of police officers are male and 12% are females (US DOJ FBI, 2016). The average age of respondents was 40 years of age ($SD = 8.61$). The average years of service for respondents was 14 years of service ($SD = 8.17$). Participants reported working for local police agencies ($n = 211$; 71%), sheriff offices ($n = 61$; 20%), and state universities or state attorney's offices ($n = 14$; 9%). Most participants worked in agencies with 100 to 249 officers ($n = 171$; 58%). Other agency sizes included 1,000 or more officers ($n = 26$; 9%), 500 to 999 officers ($n = 16$; 5%), 250 to 499 officers ($n = 48$; 16%), and less than 100 officers ($n = 25$; 12%). Patrol and investigations each accounted for over 63% ($n = 181$) of the positions held. Participants also reported holding supervisory positions ($n = 44$; 15%) and working in specialty units ($n = 59$; 21%). Specialty units included administration, personnel, marine, intelligence, aviation, public affairs, training, special operations, and traffic. Twenty percent ($n = 63$) of respondents also reported having served in the armed forces. The highest level of education attained by participants was a master's degree ($n = 31$; 11%), yet a bachelor's degree was the most common degree earned ($n = 124$; 42%). Twenty-seven percent ($n = 80$) reported having an associate's degree; 16% ($n = 48$) reported having earned some college credit; and 1% ($n = 3$) reported at least a high school diploma.

Data Analysis

To ensure the validity of these results, data was screened to identify any extreme values, particular response patterns, and irregularities (Tabachnick & Fidell, 2001). Data was analyzed using SPSS. Some items (e.g., I am often denied training opportunity due to staffing constraints) with negative wording were re-coded in SPSS where 1-5, 2-4, 3-3, 4-2, and 5-1. Certain responses contained missing data, which appeared to be random and could possibly be attributed to individuals accidentally missing questions as they were completing the survey. For respondents who had a missing data point, no more than one missing value in any component was present. Therefore, the principle component analysis was conducted only using data from participants ($N = 262$) who answered all 35 survey items (listwise deletion was used to exclude the participants with missing data). This sample size was adequate for a principle component analysis as indicated by Comrey and Lee (2013).

Construct Validity

A Principal component analysis, Kaiser-Meyer-Olkin (KMO), and Bartlett's Test of Sphericity were conducted to examine the first research question and determine if the law enforcement transfer of training self-assessment instrument yielded valid inferences. The Kaiser criterion and scree plot as well as the total variances explained were also interpreted to determine the maximum number of components to be extracted. Overall, these results provided evidence of the instrument's validity.

Principal component analysis. A principle component analysis was selected for this study as it is the most commonly used method of choice for interpreting self-reporting questionnaires (Onsman & Brown, 2010). Principal component analysis (PCA)

provides the ability to reduce a large number of variables into smaller factors and it can establish underlying dimensions between variables. Lastly, a PCA can also provide construct validity evidence in self-reported scales. Tabachnick & Fidell (2001) tell us that the terms “components” and “factors” are used interchangeably, but they are not quite the same. Principal components analysis analyzes variance; factor analysis analyzes covariance. PCA is typically best when working with new measures such as the one being tested in this research because of its exploratory nature. Thus, from this point onward, we will limit our discussion to components and not factors.

The first step to conducting the PCA was to test the extent to which the data were suitable for a PCA. Two statistical tests were performed to examine the factorability of the dataset: the Kaiser’s measure of sampling adequacy and the Bartlett’s Test of Sphericity. A Kaiser-Meyer-Olkin (KMO) test yielded a value of .92 suggesting the dataset was appropriate for a PCA (Kaiser, 1974). Kaiser reference values below 0.50 are considered unacceptable, 0.50 to .80 are considered meritorious, and .80 to 1.00 are considered excellent. The Bartlett Test of Sphericity was statistically significant ($\chi^2 = 4686.72$, $df = 351$, $p < .001$), suggesting the items were interrelated and therefore appropriate for PCA work. The total number of respondents was 262 and the total number of items was 35, resulting in a person-to-item ratio of 7.5:1.

The Eigenvalues-Greater-than-One-Rule, also known as the Kaiser criterion, is the most commonly used method for determining the number of components (Fabrigar & Wegener, 2011). This procedure involves examining values that are greater than one from the unreduced correlation matrix. Eigenvalues that exceed one are then translated to the number of common factors or principal components that is outlined in the model. The

scree test, which illustrates eigenvalues plotted in descending order, is the second most commonly used method for determining the number of components (Fabrigar & Wegener, 2011). The point at which the curve begins to plateau indicates the maximum number of components to be extracted. The Kaiser criterion along with the scree plot (see Table 8) suggests retaining six components with an eigenvalue greater than 1, the initial eigenvalues for components 1 to 6 were 10.89, 2.66, 2.04, 1.58, 1.381 and 1.00, respectively. The percentages of variance for Components 1 to 6 were 40%, 10%, 8%, 6%, 5%, and 4%, respectively. These six components were extracted, and a varimax rotation was performed that helped yield more interpretable results (see Table 9).

Table 8
Scree Plot

Table 9
Rotated Component Matrix^a

	Supervisor Support	Motivation/ Curiosity	Training Satisfaction	Organization Support	Peer Support
I am motivated to excel in my career		.772			
I am enthusiastic to learn new skills.		.816			
I enjoy thinking about new concepts.		.780			
I continue to think about a problem until I solve it.		.732			
Exceeding expectation in my job is important to me.		.807			
I am satisfied with working at my agency.			.772		
I am likely to recommend this agency as a good place to work.			.803		
I feel appreciated by my agency.			.819		
My agency recognizes when I do a good job.			.718		
My agency provides me with optional training opportunities to enhance my job				.675	
My agency encourages me to attend optional training courses.				.724	
My agency supports continued education.				.727	
Training offered at my agency is applicable to my job				.559	
I often put into practice what I have learned during training.		.564			
I believe in the effectiveness of training		.622			
Training offered at my agency has helped me perform my duties better.		.597			
Training scenarios allow me to be better prepared for my job requirements.		.662			
Trainers at my agency are knowledgeable.		.824			

Training at my agency is well planned.	.770	
My supervisor makes suggestions about how I can improve my work performance.	.849	
My supervisor encourages me to attend training.	.823	
My supervisors allocate time on duty for me to apply training as appropriate	.713	
My supervisor cares about my career development.	.809	
My supervisors believe in the effectiveness of training.	.724	
My coworkers show interest in what I have learned in training.		.745
My coworkers support me when try to use training in the field.		.825
My coworkers believe in the effectiveness of training.		.823

Of the original 35 items, 27 items had a component loading score of .50 or higher. Items that did not meet the criterion of a minimum component coefficient of .40 were subsequently removed (i.e., Mot6, Sat5, Org2, Org 3, Opp1, Opp 4, train5, & Peer2) (See Appendix G). Items omitted were done so one item at a time and the PCA was performed again to obtain a statistically stronger structure. The component loadings of items retained ranged from .564 to .849. Motivation (Mot) items 1 through 5 had a mean component loading score of .781, job satisfaction (Sat) items 1-4 had a mean component loading score of .778, training (training) items 1-6 had an overall component loading score of .673, and organization (Org) items 1-4 had an overall component loading score of .671. Supervisory support (Sup) items 1-5 had a mean component score of .784 and peer support (peer) items 1-3 had a total mean component score of .798. Overall, these components accounted for 72.44% of the total variance explained (Table 10).

Table 10

Total Variance Explained

Component	Total	% of Variance	Cumulative %
1	3.908	14.473	14.473
2	3.808	14.105	28.577
3	3.656	13.541	42.118
4	3.066	11.356	53.474
5	2.574	9.532	63.006
6	2.547	9.433	72.438

Note. 1=Motivation/Curiosity; 2=Job satisfaction; 3=Organizational Learning Climate; 4=Training Category; 5=Supervisor Support; 6=Peer Support.

A seven-component model (motivation/curiosity, job satisfaction, organizational learning climate, opportunity to use, training content and instruction, supervisor support, and peer support) were originally theorized to affect the transfer of training in a law enforcement setting. However, the components that were extracted and confirmed via the varimax rotation resulted in a six-component model. These components are motivation/curiosity, satisfaction, organization, training, supervisory support, and peer support. Several items within the components of opportunity to use and training content/instructions were combined as they cross-loaded. Further, certain items such as Oppt2 (e.g., training offered at my agency is applicable to my job) loaded under the component of organization. This is perhaps due to the wording of organization used in the instrument (see Table 11).

Table 11

Six-Component Transfer of Training Model

Item
Component 1: Motivation/Curiosity
I am motivated to excel in my career. (mot1)
I am enthusiastic to learn new skills. (mot2)
I enjoy thinking about new concepts. (mot3)
I continue to think about a problem until I solve it. (mot4)
Exceeding expectation in my job is important to me. (mot5)
Component 2: Job Satisfaction
I am satisfied with working at my agency. (sat1)
I am likely to recommend this agency as a good place to work. (sat2)
I feel appreciated by my agency. (sat3)
My agency recognizes when I do a good job. (sat4)
Component 3: Organization Learning Climate
My agency provides me with optional training opportunities to enhance my job. (org1)
My agency encourages me to attend optional training courses. (org4)
My agency supports continued education. (org5)
Training offered at my agency is applicable to my job. (oppt2)
Component 4: Training Category
I often put into practice what I have learned during training. (oppt3)
I believe in the effectiveness of training (oppt5)

Training offered at my agency has helped me perform my duties better. (train1)

Training scenarios allow me to be better prepared for my job requirements. (train2)

Trainers at my agency are knowledgeable. (train3)

Training at my agency is well planned. (train4)

Component 5: Supervisory Support

My supervisor makes suggestions about how I can improve my work performance.

(sup1)

My supervisor encourages me to attend training. (sup2)

My supervisors allocate time on duty for me to apply training as appropriate. (sup4)

My supervisor cares about my career development. (sup3)

My supervisors believe in the effectiveness of training. (sup5)

Component 6: Peer Support

My coworkers show interest in what I have learned in training. (cowork1)

My coworkers support me when I try to use training in the field. (cowork3)

My coworkers believe in the effectiveness of training. (cowork4)

Results of Reliability Analysis

Pearson's r , Spearman's rho, and Cronbach's alpha coefficient were examined to answer the second research question: Does the law enforcement transfer of training self-assessment instrument yield reliable inferences? As a whole, these results yielded strong evidence of reliability.

Correlational analysis. A Pearson's r correlation was performed to explore the relationship between the total score for the Law Enforcement Transfer of Training

Instrument items ($M = 3.99$, $SD = .799$) and participants' overall perceptions of training in their law enforcement agencies ($M = 115.27$, $SD = 17.16$). As shown in Table 12, there was a positive correlation between these components ($r = .54$, $p \leq .01$). This indicates that the overall rating of the respondent's perception of training (i.e., 0 = *Terrible* to 5 = *Exceptional*) was correlated to the Law Enforcement Transfer of Training Instrument score. To examine the relationship among the six components, Spearman's rho was calculated. The results indicated a significant positive correlation between the various components, including motivation, satisfaction, organizational, training, supervisory support, and peer support. Table 13 delineates individual results.

Table 12

Pearson r Correlation of Total Scores and Overall Training Perception

	<i>M</i>	<i>SD</i>	<i>r</i>	<i>p</i>
Total	3.99	.799	.542*	.000
Overall	115.2691	17.15932		
Perception				

* Significant at $p < .01$

Cronbach's alpha. Cronbach's alpha coefficient was calculated as it is one of the most widely accepted statistical analysis for determining reliability (Bonnett & Wright, 2015). The motivation/curiosity subscale consisted of 5 items ($\alpha = .881$), the job satisfaction subscale consisted of 4 items ($\alpha = .903$), and organization learning climate consisted of 4 items ($\alpha = .831$). The training subscale was comprised at 6 items ($\alpha = .885$), supervisor support consisted of 5 items ($\alpha = .910$), and peer support consisted of 3 items ($\alpha = .823$). The alpha coefficients for each subscale indicated high reliability.

Table 13

Spearman rho Component Correlations

Component						
Component	1	2	3	4	5	6
1	1.000	.519**	.416**	.433**	.352**	.301**
2		1.000	.657**	.545**	.527**	.398**
3			1.000	.582**	.670**	.404**
4				1.000	.471**	.492**
5					1.000	.453**
6						1.000

Note. 1=Motivation/Curiosity; 2=Job satisfaction; 3=Organizational Learning Climate; 4=Training Category; 5=Supervisor Support; 6=Peer Support.

*Correlation is significant at the 0.01 level (2-tailed)

Cronbach's alpha. Cronbach's alpha coefficient was further calculated as it is one of the most widely accepted statistical analysis for determining reliability (Bonnett & Wright, 2015). The motivation/curiosity subscale consisted of 5 items ($\alpha = .881$), the job satisfaction subscale was comprised of 4 items ($\alpha = .903$), and the organization learning climate contained 4 items ($\alpha = .831$). The training subscale was comprised at 6 items ($\alpha = .885$), supervisor support consisted of 5 items ($\alpha = .910$), and lastly, peer support consisted of 3 items ($\alpha = .823$). Overall, the alpha coefficients for each respective subscale indicated high reliability.

Table 14

Cronbach's Alpha Values

Scale	α
Motivation/curiosity (5 items)	.831
Job satisfaction (4 items)	.903
Organization learning climate (4 items)	.831
Training (6 items)	.885
Supervisor Support (5 items)	.910
Peer Support (3 items)	.823

Summary

The Law Enforcement Transfer of Training Instrument developed for this study underwent construct validity and reliability testing. This included a principle component analysis and analysis of internal consistency. Overall, the results supported the research questions proposed for this study and a six-component construct emerged; that is, motivation/curiosity, satisfaction, organization, training category, supervisory support, and peer support. The next chapter concludes with an overview of the study, its implications for theory and practice, and recommendations for future research.

CHAPTER V

DISCUSSION

This chapter summarizes the study and discusses the findings, conclusions, recommendations, and implications for future research. The objective of this study was to design and develop an instrument to assess components that can influence the transfer of training in law enforcement agencies. The content validity for this instrument was based on over 30 years of empirical research coupled with the consensus of five expert panel members. The construct validity of this instrument was examined and ultimately confirmed via principle component analysis. Evidence of instrument reliability was determined through analysis of Pearson's r , Spearman's ρ , and Cronbach's alpha coefficient.

Summary of the Study

In an effort to overcome economic hardships and improve overall performance, organizations have resorted to effective human resource strategies and training methods (Hutchins, 2010; Saks & Belcourt, 2006). Theoretical and empirical research indicates that personnel and workplace training are key elements to the sustainability of organizations (Bulut & Culha, 2010; Yang, 2006). Workplace training is also a vital aspect in promoting employee skills, motivation, and knowledge, which can in turn have a favorable effect on organizational commitment. An organization's learning culture has also been associated with certain organizational outcomes such as employee turnover, satisfaction, and motivation. As a result, employee training programs have increased in popularity and has become a \$160 billion-dollar annual industry (Miller, 2013).

When organizations components the cost of employee training, they do so with the hopes of improving the performance of their employees and inevitably the productivity of the organization (Yamhill & McLean, 2001). Effective training in law enforcement has shown to reduce unnecessary use of force and increase officers' ability to carry out their daily duties, such as managing situations involving individuals with mental illnesses (Lee et al., 2010; Israel, Harkness, Delucio, Ledbetter, Avellar, 2013; Hanafi, Bahora, Demir, & Compton, 2008). Training deficits in law enforcement, however, have led to critical issues and liabilities during the arrest process, police involved use of force, vehicle operations, false arrests and unlawful detentions, search and seizures, and medical complications (Ross, 2000).

Despite the advancements and expenditures made by organizations, only 10% of training provided to employees is actually transferred to their respective roles (Grossman & Salas, 2011). As a result, training inadequacies has led to what is known as the transfer problem, one that has cost organizations over \$183 billion due to employee errors, injuries, and lawsuits (Grossman & Salas, 2011; Saks & Belcourt, 2006). Similarly, the law enforcement community has also been affected by the transfer problem, where the inability to transfer training can even result in the loss of life. The average failure-to-train lawsuit in law enforcement due to wrongful deaths complaints has averaged \$450,000 along with \$60,000 in attorney fees (Fishel et al., 2007). Additionally, over 200 law enforcement agencies have reported a cost of over \$4.3 billion due to failures in training (Ross, 2000). Subsequently, these lawsuits have affected police department budgets and in turn the police services offered to the community (Vaughn, Cooper, & Del Carmen, 2001).

Since its origin of over 50 years ago, formal law enforcement training was created with the goals of addressing the needs of the community (Birzer & Tannehill, 2001; Glasgow & Lepatski, 2012; Walker, 1999). However, law enforcement training in the United States has evolved to become inconsistent, due to discrepancies in the number of hours and requirements that are set by their prospective states, (Oliva & Compton, 2010). Despite the emphasis put forth by organizations on training and improving overall performance, organizations often adopt training programs without developing predetermined goals, nor do they evaluate the transferability or effectiveness of the training (Yang, 2006). Other components such as work environment, supervisor support, employee's motivation, and curiosity amongst other factors can influence the transfer of training. This in turn has led to errors, injuries, and lawsuits and organizations have paid an estimated billions of dollars due to training inadequacies (Grossman & Salas, 2011).

Within in the realm of law enforcement, training inadequacies can be viewed as a ripple effect. The inability to transfer training cannot only affect the officer's career, but it can also lead to the loss of life and ultimately affect the perception of law enforcement within the community. A review of the literature indicates a significant body of research on the transfer of training with seminal studies dating back to over 30 years ago. However, research specifically geared towards the field of law enforcement in the United States is not as prevalent and a transfer of training instrument specific to law enforcement setting has yet to be created.

Therefore, the purpose of this study was to develop and validate an instrument to assess components that can influence that transfer of training in law enforcement agencies. Existing literature and validated instruments were used as a foundation to

develop and ultimately validate a transfer of training instrument specific to law enforcement. This study was guided by the following research questions:

1. Does the law enforcement transfer of training self-assessment instrument yield valid inferences?
2. Does the law enforcement transfer of training self-assessment instrument yield reliable inferences?

Discussion of Results

This study drew upon several theories in the field of adult education and human resource development (e.g., transfer of training model, effects of learning culture and job satisfaction, and goal-setting). Previously validated instruments such as the Dimension of Learning Organization Questionnaire (Yang et al., 2003), Work-Related Curiosity Scale (Mussel et al., 2011), and the Learning Transfer System Inventory (Holton et al., 2000) were also used as a basis for the development of the new instrument. As a result of the statistical analysis, six components were found to be related to transfer of training in the field of law enforcement: motivation/curiosity, satisfaction, organization, training category, supervisory support, and peer support.

Research Question 1

The first research question examined the instrument's validity, which was assessed via the use of a principle component analysis (PCA) with varimax rotation. The first analysis completed was the Kaiser-Meyer-Olkin (KMO) test determined the suitability of the data for principal component analysis. The Kaiser-Meyer-Olkin (KMO) value of .92 indicated that the data was well suited for the PCA. Construct validity was evaluated subsequently using a PCA with varimax rotation. The Bartlett Test of

Sphericity results also indicated that items within six components were interrelated. The results were statistically significant ($c^2 = 4686.72$, $df = 351$, $p < .001$). Finally, the combination of the Kaiser criteria and the scree plot suggested retaining the six components.

The initial eigenvalues for components 1 to 6 were 10.89, 2.66, 2.04, 1.58, 1.38, and 1.00, respectively. The percentages of variance for components 1 to 6 were 40%, 10%, 8%, 6%, 5%, and 4%, respectively. Once the six components were extracted, a varimax rotation was performed. Out of the original proposed seven-components item, six components emerged: motivation/curiosity, satisfaction, organization, training category, supervisory support, and peer support. Several items within the components of opportunity to use and training content/instructions cross-loaded. Therefore, these two separate components were joined into the training category component. The components explained 72.44% of the variance ($> 50\%$ is best; Tabachnick & Fidell, 2001). Evidence obtained through these statistical analyses supported the Law Enforcement Transfer of Training Instrument's construct validity and therefore the measure yielded valid inferences.

Research Question 2

The second research question examined whether the instrument yielded reliable inferences. Evidence to support these findings was done so through the use of Pearson r , correlations, Spearman's rho correlations, and a Cronbach's alphas. The results of the Pearson r correlations revealed a positive correlation between the instrument and participant's overall perception of training in their agencies ($r = .54$, $p \leq .01$). A significant positive correlation amongst the six components was examined and

demonstrated through the use of a Spearman's rho correlation (see Table 13). A Cronbach's alpha was also used to measure the degree of interrelatedness amongst the set of items in question. The Cronbach's alpha performed yielded the following values: motivation/curiosity ($\alpha = .881$), satisfaction ($\alpha = .903$), organization ($\alpha = .885$), training category ($\alpha = .885$), supervisory support ($\alpha = .910$), and peer support ($\alpha = .823$). These results suggested that the scales had high internal consistency and therefore reliability. Overall, these correlational analyses provided significant evidence to substantiate that the Law Enforcement Transfer of Training Instrument yielded reliable inferences.

Interpretation and Analysis of Results

As a result of the statistical analysis performed, the originally proposed instrument which incorporated 35 items was delimited down to 27 items. The proposed 27-item instrument yielded adequate components loading scores. Several items (i.e., Opp3, Opp5, Train1, Train2, Train3, and Train4; see Appendix F) in the original scales of opportunity to use training and training content/instructions were combined. It is possible that these items loaded together due to the similarity in their context and wording. Similarly, questions within both components also revolved around agency training. Furthermore, item Opp2 that was originally under the component of opportunity to training loaded better under organization learning climate. It is possible that Opp2 loaded well under a different component due to the wording in the question. Overall, the six-component structure model that emerged as a result of the analyses was consistent with the body of literature.

Subscales of the Instrument

Motivation. Within a training context, motivation has been defined as trainees' desire to apply what is learned to their work environment (Noe, 1986; Yamnill & McLean, 2001). A number of researchers (e.g., Baldwin & Ford, 1988; Garavaglia, 1996; Machin & Fogarty, 2004) have examined the effects of motivation on the transfer process. A series of early studies completed by Noe (1986), Noe & Schmidt (1986), Fecteau et al., (1995) all came to the conclusion that a trainee's level of motivation has a positive effect the rate of transfer of training. Motivation has shown to be a strong linking factor between multiple training aspects such as trainee characteristics and perceived validity of training.

When a trainee has a high level of motivation, their overall training expectation may increase, as it makes the context more meaningful and useful to their respective roles (Tharenou, 2001). In turn, when training is viewed as more meaningful and useful, the transfer of training will likely increase. Although research is scarce in the field of transfer implementation intent, motivation along with self-efficacy has been shown to significantly affect transfer intentions of a trainee (Machin & Fogarty, 2004). Holton's (1996) transfer of training model further demonstrated the importance of motivation as it affects a trainee's learning behavior and overall performance change. Fulfillment, learning outcomes, job attitude, and expected utility are influenced by the level of motivation.

Intrinsic and extrinsic motivational factors have also shown to affect the transfer process (Burke & Hutchins, 2007). Curiosity formulates an important role within a trainee's level of intrinsic motivation (Reeve, 1992). The works of Mussel et al. (2012),

Reio & Callahan (2004), and Reio & Wiswell (2000) have all demonstrated the importance of curiosity in the learning process. Level of curiosity has been associated with cognitive development, learning, problem solving, and socialization. Curiosity has also shown to affect a trainee's level of emotion which can either instill anger and anxiety and deter the transfer process. An individual's cognitive development of interpersonal skills is also aided by curiosity. This is of noteworthy as this could potentially affect interaction between trainees during a group learning process or application of learned material to their jobs. Overall, the results for the component of motivation and curiosity which consisted of 5 items yielded a mean component score of .781. Therefore, the law enforcement respondents viewed motivation and curiosity as significant in the transfer of training process. This result is consistent with the body of literature that indicates that motivational factors like curiosity can affect the transfer process and performance outcomes. These results particularly add to the transfer of training literature by including curiosity as a motivation variable, which has not been previously done.

Job Satisfaction. The second component, job satisfaction, exhibited a mean component loading score of .778 for the 4-item subscale. Job satisfaction is an employees' affective reaction based on their comparison of desired outcomes to actual outcomes (Egan et al., 2004). As outlined by the works of Egan et al. (2004), job satisfaction is affected by an organizational learning culture and in turn can have either a positive or negative effect on organizational outcomes. This component is therefore relevant to the transfer of training. The transfer of training can have three potential outcomes: positive, negative, and zero transfer of training (Werner & De Simone, 2001). These training outcomes are all associated with affecting a trainee's level of job

satisfaction (Bulut & Culha, 2010). Furthermore, an employee's level of job satisfaction can be affected by organization and learning customs. For example, organizations that place a greater importance on learning and career develop tend to experience an increase in overall job satisfaction (Egan et al., 2004). This has a direct impact on an agency's productivity and profitability as well. Indirectly, this also affects a company's job turnover. Furthermore, organizations that foster good training habits and learning culture tend to have increased employee productivity and overall profitability. These results relate to the transfer of training literature, which emphasizes the importance of job satisfaction in the transfer of training process.

Organizational Climate. The third component encompassed the organizational learning climate with a mean component loading score of .671 for the 4-item subscale. Baldwin and Ford (1988, 1992) emphasized the importance of training and work environment on the transfer process. Organization learning climate encompasses the shared perceptions by employees regarding policies, practices, and procedures that are perceived as rewarded behaviors within the organization is defined (Schneider et al., 2013). An organization's climate has been divided into the following sub-categories: support (peer and supervisor), transfer climate, and organizational constraint (Blume et al., 2010). Certain factors such as organizational support and opportunity to take and apply training can have shown to affect the transfer of training.

Other researchers (e.g., Egan et al., 2004; Holton, 1996; Holton et al., 2000; Marsick & Watkins, 1993) have expanded on the original work of Baldwin and Ford and further demonstrated the importance of a work environment. Job satisfaction, motivation to train, and ultimately the transfer process is interconnected with a trainee's

organizational climate. The transfer climate has shown to be a prominent factor that in either contributing or hiding the transfer of training. Gumuseli and Ergin (2002) conceptualized five types of climates (e.g., preventive, discouraging, impartial, encouraging, and forceful) that all have a direct relationship with the transfer process. Little or no transfer of training occurs with the climate that foster a preventative or discouraging attitude towards training. On the other hand, learning climate that are viewed as encouraging or forceful tend to experience the highest levels of transfer of training. Participants' responses for this subscale is consistent with the body of literature that notes the important role organizational climate plays on the transfer of training process.

Training Category. The fourth component detailed in this instrument is comprised of the 6-item training category, which yielded a mean overall component loading score of .673. The training category identified in this instrument encompasses the trainee's perceived training applicability of content and validity of material being instructed and is relevant to training transfer. Training content and validity is defined as the degree to which a trainee judges training content to their job requirement (Holton et al., 2000). Training design also contributes to the transfer process and is comprised of a mixture of learning principles, instructional sequencing, and training content (Baldwin & Ford, 1988). This component is consistent with the works of Baldwin and Ford's (1988) six linkage factors. The generalization and maintenance of material learned, and transfer is directly affected by the relevance of training provided to trainees. Certain factors such as realistic training environment, training designs, instructors, opportunity to use, and learning cues all affect the transfer process. Over 64% of respondents reported lack of

opportunity to apply trainee as a significant inhibitor in applying their training (Lim & Johnson, 2002). Other elements such as the sequence of training and instructional methods can also influence the transfer of training. As they are linked with learning, retention, generalization, and maintenance of learned context. This is of importance because assuming the job relevance of training provided to trainees can have a determinate effect in the transfer process. This study provided evidence of the important role that trainee's perceived training applicability of content and validity of material being instructed to the transfer of training.

Supervisor support. Supervisors encompass the category of work-environment characteristics conceptualized by Baldwin and Ford (1988). Results of the principal components analysis revealed that supervisory support resulted in the second highest mean component score of .784. Supervisor support is defined as the extent to which a supervisor either supports or reinforces a trainee's desire to either attend and ultimately use training received to their perspective roles. The transfer of training is augmented when a supervisor encourages their employees to use newly acquired skills, model the content learned in their workplace, and provide feedback and reinforcement when trainees use newly acquired skills (Nijman et al., 2006). Supervisors have also been linked to have a positive effect on a trainee level of motivation to attend training and overall job satisfaction (Buckingham & Coffman, 2002). Cromwell and Kolk (2004) further highlighted the important role of a supervisor on the transfer process as it yielded as strong correlations amongst the two. Supervisors can increase the transfer of training by allocating resource and time for their employees to apply learned material. This is viewed as a vital and necessary aspect in the transfer process. This is significant because

in the field of law enforcement, the culture amongst officers and supervisors is based on uniformity and discipline due to being in essence a paramilitary organization. If training is met with negative connotation or not supported by supervisors, it could potentially impact the transfer of training process among law enforcement officers.

Peer Support. The degree to which peers support and reinforce the use of training on the job is a vital aspect in the transfer of process. Peer support also encompasses a trainee work environment and can affect situational factors such as motivation (Colquitt et al., 2000). Researchers (e.g., Burke & Hutchins, 2007; Chaiburu & Marinova, 2005; Hutchins, 2007) have demonstrated the positive effects that peer support has on the transfer process. Peer support has also been linked to aiding the transfer of training due to peer networking and sharing of ideas (Cromwell & Kolb, 2004; Hawley & Barnard, 2005). This process helps trainees to continue to learn and practice the content a year after attending training. Cromwell & Kolb (2004) and Colquitt et al. (2000) also cited social support from a trainee's peers as the most significant enabling factor that affect the transfer of training. This is of noteworthy and coincides with the results of this study. The peer support demonstrated a mean component loading score of .798, the highest scores amongst all the other factors. This is important in the field of law enforcement because police officers often develop an "us against them" mentality due to their strong allegiance and commitment to their peers and the organization (Woody, 2005). This mindset of "us" versus "them" present in police culture is ingrained as early as the police academy (Chappell & Lanza-Kaduc, 2010). This is noteworthy because socialization, the process of learning to fit in (Reio & Callahan, 2004), is an important aspect in the field of law enforcement that could negatively affect the transfer of training.

Limitations of the Study

Although the final sample size was sufficient for PCA work (Tabachnick & Fidell, 2001), a possible limitation is the relatively low response rate that could potentially restrict the interpretation and generalizability of results. About 19,000 participants were recruited from the FOP in the state of Florida; only 296 individuals completed the study. It is impossible to tell how many individuals actually received the recruitment email for this study. Despite the email being forwarded by the FOP President, recipients might have viewed the email as either spam or suspicious in nature. Having access to the membership email or notifying agencies ahead of time could potentially mediate low response rates. Furthermore, it is possible that agencies might have also directed their employees not to participate in the study, as the FOP may have been an entity outside of their agency.

Another possible limitation to this study is the relatively high response rate (71%) for local police departments. This could be a potential limitation to the study being that perhaps local police departments have a different culture than state or county agencies. Therefore, these results could be more applicable to local police departments with agency sizes from 100 to 249 officers, which encompassed 60% of the results. Due to sample size and agency constraints, a larger sample size would enable a more sophisticated analysis.

Common method variance is another potential threat to this study, which has been associated with systematic bias. Studies that incorporate the use of self-reported questionnaires and other factors such as item context, item characteristics, and measurement context can all potentially lead to common method variance (Reio, 2010).

Common method variance is the difference attributed to the measures and can threaten this study by inflating or deflating the correlation between variables (Reio, 2010). This may affect potential conclusions drawn from this study. To minimize the potential threats associated with common method variance, the questions were written clearly and precisely to minimize bias. Further, particular attention was placed on excluding double-barreled questions and double negatives. Participants were also presented with clear and concise instructions and assured of their confidentiality during the process.

Another possible limitation to the study may be the lack of random sampling. Although purposeful sampling allows the ability to target a large group of individuals who meet the inclusion criteria in a cost-effective manner, it does yield limitations. This sampling method does not allow the ability to measure or control for variability and bias (Acharya, Prakash, & Nigam, 2013). The inability to identify or control for subgroup differences within a sociodemographic factor may be further limiting (Bornstein, Jager, & Putnick, 2013). Another limitation to this study is that results may be limited to Fraternal Order of Police members within the state of Florida. The Fraternal Order of Police is a voluntary organization and it may not include police officers who are not members. Furthermore, findings may not potentially be applied to law enforcement personnel in other states or countries.

Recommendations for Future Research

Although this study was able to develop and validate a law enforcement specific instrument, future research could potentially expand on these findings. This study was conducted on law enforcement in the state of Florida who were members of the Fraternal Order of Police. A comparative study could be conducted with law enforcement

personnel outside the Fraternal Order of Police. Expanding the sample to other states would also serve to determine if the instrument is valid and reliable with this expanded population. Furthermore, a larger sample size could also expand upon these findings and provide further construct validity evidence of the measure.

Administering the Law Enforcement Transfer of Training Instrument to entire agencies can also serve to examine how the factor/component structure performs within a homogeneous group as well as make comparisons across different agencies (e.g., rural versus urban agency). This instrument can also serve as a means to explore demographic differences in participants' training transfer responses. This instrument can also be utilized as a pre and post measure to evaluate respondents' perceptions of a training intervention at their agency and determine the effectiveness of their training program. As illustrated by the results of the supervisory and peer support component, it may be worthwhile to explore the effects of police subcultures on the transfer of training.

Implications for Theory

This study drew upon two different, yet comparable and widely known conceptual frameworks as a foundation to develop the law enforcement specific instrument. Baldwin and Ford (1988, 1992) identified factors such as training design (e.g., learning principles, sequencing, and content), trainee characteristics (e.g., ability, personality, and motivation), and work environment (e.g., support and opportunity to use). The second theory from Egan et al., (2004) conceptualized a model that incorporated the effects of learning culture, job satisfaction, and motivation on the transfer of training.

In an attempt to expand on these landmark studies and address a gap in the literature, this study also incorporated other factors that could potentially influence the

transfer of training such as curiosity and job satisfaction. Research in the field of adult education and human resource development has not widely explored the effects of curiosity and job satisfaction on a trainee's level of motivation to attend and apply training. Furthermore, to the researcher's knowledge, no study has yet to evaluate the effects of curiosity and job satisfaction in a law enforcement setting. After reviewing the literature, this is the first kind of instrument to address transfer of training in law enforcement within the United States, specifically as it relates to the state of Florida.

This is noteworthy because curiosity has been shown to be a key element in motivation to learn and apply training to the workplace as it encourages the desire to learn and, adapt, and solve problems (Mussel, 2012; Reio & Callahan, 2004; Reio & Wiswell, 2000; Reio et al., 2006). Curiosity has also shown to affect task skill, employee emotions, socialization, and their overall workplace performance (Mussel et al., 2012). Job satisfaction is also an important measure in the transfer process as it is interconnected with organizational learning climate and motivation and it affects the transfer process (Egan et al., 2004). It has shown to have an effect on overall productivity, profitability, and job turnover.

In turn, this study sought to contribute to the theory building in the field of adult education and human resource development by developing an instrument that not only supported preexisting models, but also captured new phenomenon in a law enforcement setting. Results from this study were in part able to provide additional evidence to support preexisting transfer of training theories to a law enforcement specific setting. This study also sought to incorporate curiosity and job satisfaction in an instrument with the hopes of expanding a lens that can be used to better gauge factors affecting transfer of

training in a law enforcement. Results indicated that items developed for motivation/curiosity and job satisfaction yielded high internal consistency, respectively.

Implications for Practice

The concept of organizational learning and organizational effects on the training process is an essential aspect of any organization (e.g., Baldwin & Ford, 1988; Egan, 2008; Holton, 1996; Rouiller & Goldstien, 1999). The disconnect between the ability to generalize and maintain learned behaviors by a trainee has historically led to the transfer problem (Baldwin & Ford, 1988; Saks & Belcourt, 2006). Within the realm of law enforcement, the inability to identify training barriers can be met with disastrous consequences. In turn, this study sought to develop and validate an instrument that can be specifically utilized in a law enforcement arena to identify factors that can influence the transfer of training. The findings from this study can have potential implications for law enforcement agencies and practitioners in the field of Adult Education and human resource development.

This instrument can assist agencies in identifying and addressing training barriers within law enforcement. Trainers can then use the information obtained through surveying their agencies to tailor their training content, sequences, and delivery to ensure a positive transfer of training. Human resource personnel can also use the instrument as a tool to examine the level of peer and supervisory support within agencies. As outlined in the literature, supervisory support and peer support are two crucial elements in the transfer process that cannot only directly affect the transfer of training but also other outcomes such as organizational climate. As previously discussed, motivation/curiosity and job satisfaction are two crucial aspect in the transfer of training. Therefore, human

resource personnel can utilize this instrument to evaluate their law enforcement officer's degree of job satisfaction and or motivation. In turn, this instrument can potentially be used by practitioners to intertwine policies with training at their agencies. For example, by identifying areas of deficiency at their agency, incentive programs for training or having keynote speakers could be implanted to improve motivation or job satisfaction. As the role and duties of a police officer continue evolve, it is imperative for training offered to law enforcement officers to assimilate and evolve with the needs of the agencies and communities served as a whole. Countless legal cases due to failure to train highlight how the transfer problem in law enforcement can have detrimental effects on life and the community as a whole.

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APPENDICES

Appendix A
Original 49 Item Survey

Law Enforcement Transfer of Training Instrument

Section 1 - Job Satisfaction

1) I am satisfied with my current position.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) I feel proud to work for this agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) I am likely to recommend this agency as a good place to work.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) I enjoy going to work.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) I feel appreciated by my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) My agency recognizes when I do a good job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

7) There are adequate chances for promotion at my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 2 – Organization Learning Climate

1) My agency provides me with training opportunities to enhance my job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) Training is rewarded in my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) My agency sets clear learning goals to enhance my career.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) My agency encourage me to attend training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) My agency supports continued education.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) My agency disciplines me if I do not apply/use my training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly

7) My work performance improves when I apply newly acquired skills

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 3- Opportunity to Train/Use

1) I am unable to apply newly acquired skills due to my workload.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) Training offered at my agency is applicable to my job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) I often put into practice what I have learned during training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) Due to minimal staffing I am unable use newly attained training

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) I am often denied training opportunity due to staffing constraints.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) I am often denied training class due to budget limitations.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

7) My agency rewards me when I use skills learned at training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 4- Training Content Validity

1) Training offered at my agency has helped me perform my duties better.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) In-service training is very useful to my current position.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) Instructional methods used in training allow me the opportunity to learn best.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) Training scenarios allow me to be better prepared for my job requirements.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) Trainers at my agency are knowledgeable.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) Training at my agency is well planned and purposeful.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

7) Training held at the police academy is very useful and applicable to my current position.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 5- Supervisor Support

- 1) My supervisor makes suggestions about how I can improve my work performance.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 2) My supervisor encourages me to attend training.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 3) My supervisors allocates time on duty for me to apply training.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 4) My supervisor cares about my career development.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 5) My supervisor recognizes when I apply training.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 6) My supervisor feels that applying newly acquired skills is counterproductive.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 7) My supervisor thinks highly of training offered at my agency.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 6- Peer Support

- 1) My coworkers get upset when I attempt to use newly acquired skills.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

- 2) My coworkers show interest in what I have learned in training.**

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) My coworkers feel that attending training is counterproductive and affects staffing.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) My coworkers support me when I try to use training in the field.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) My coworkers think highly of in-service training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) My coworkers are reluctant to attend training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

7) My coworkers are willing to apply recently learned skills.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 7- Employee Curiosity/Motivation

1) I am motivated to excel in my career.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) I am motivated to attend in service training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) I am enthusiastic to learn.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) I enjoy thinking about new concepts.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) I continue to think about a problem until I solve it.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) I often have suggestions on how to improve my job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

7) Exceeding expectation in my job is important to me.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Appendix B
Summary of Study Provided to Expert Panel

Introduction

The theory of transfer of training is defined as the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in a training context to the job (Baldwin & Ford, 1988). Despite its effect on overall organizational performance and sustainability, not all training is transferred to the workplace and this has led to the transfer problem (Saks & Belcourt, 2006). Within the realm of law enforcement, training inadequacies can lead to errors, injuries, and to the loss of life (Ross, 2000). Despite a considerable amount of research on transfer of training, there is limited literature that focuses on transfer of training in law enforcement agencies. Furthermore, there are no instruments that have been specifically designed to assess transfer of training in a law enforcement setting.

Scale Development

The purpose of this study is to develop and validate an instrument using empirical research on transfer of training from the past thirty years. The instrument will be used to explore factors that can influence the transfer of training in law enforcement agencies. Factors of interest include curiosity (Reio & Wiswell, 2000), peer support (Baldwin & Ford, 1988), supervisor support (Baldwin & Ford, 1988), opportunity to use (Baldwin & Ford, 1988), perceived context validity (Grossman & Salas, 2011), organization learning climate and job satisfaction (Egan et al., 2004). Items for these factors were organized into an instrument reflecting concepts of transfer of training and learning.

In their seminal study, Baldwin and Ford (1988) identified multidimensional factors that can influence the transfer of training. These factors were identified as training design (e.g., learning principles, sequencing, and content), trainee characteristics

(e.g., ability, personality, and motivation), and work environment (e.g., support and opportunity to use). Egan et al. (2004) conceptualized a model that added job satisfaction as a factor influencing transfer of training. This research found a strong correlation between job satisfaction, motivation to train, and the transfer process, which in turn had an effect on employee turnover (Egan et al., 2004). Motivation was also a strong linking factor between trainee characteristics, perceived validity of training, and the transfer process (Grohmann et al., 2014). Curiosity has also been shown to be a contributing factor in the intrinsic motivation to train. Curiosity has been associated with cognitive development, learning, and certain emotions that can either aid or thwart the learning process (Mussel et al., 2012; Reio & Callahan, 2004; Reio & Wiswell, 2000). Workplace learning, problem solving, socialization, and ultimately job performance have all been associated with curiosity.

Grossman and Salas (2011) also demonstrated the importance of a supportive environment in the transfer process. Factors within an organization's climate such as situational cues which include goal cues, social cues, task cues, and self-control cues can aid the transfer process by reminding trainees of their training and affording them with the opportunity to apply their learned skills (Rouiller & Goldstein, 1993). Research has also indicated that supervisory and peer support can yield positive transfer outcomes (e.g., Baldwin & Ford, 1988; Rouiller & Goldstien, 1993; Velada et al., 2009). The opportunity to apply training has further shown to encourage learning in the workplace and allow trainees the ability to rehearse their learned skills on the job (Cromwell & Kolb, 2004; Lim & Johnson, 2002). Training incentives and performance feedback are all significant predictors of the transfer outcome (Grossman & Salas, 2011).

Organizations that place an emphasis of learning and development also yield increased job satisfaction, motivation to train, and perceived training validity (Egan et al., 2004).

For the purpose of this scale development, curiosity is defined as the state of emotional arousal in which an individual seeks to obtain information or explore certain behaviors in order to answer a conflict or degree of uncertainty (Reio & Callahan, 2004). Supervisor and peer support is the extent to which supervisor/peer support is present and reinforces the use of training on the job (Baldwin & Ford 1988). Providing trainees with the resource or on the job tasks enables them the opportunity to use their training on the job (Holton et al., 2000). Perceived content validity is the degree to which a trainee judges training content to their job requirement. Organizational climate is the shared perceptions by employees regarding policies, practices, and procedures that are perceived as rewarded behaviors within the organization (Schneider et al., 2013). Lastly, job satisfaction is described as an employee's affective reaction to a job based on comparing desired outcomes with actual outcomes (Egan et al., 2004).

Furthermore, previously validated instruments such as the Dimension of Learning Organization Questionnaire (DLOQ) (Yang, Marsick, & Watkins, 2003), Work-Related Curiosity Scale (Mussel et al., 2011), and the Learning Transfer System Inventory (LTSI) (Holton et al., 2000) were also used as a basis to develop the Transfer of Training Inventory for Law Enforcement. The LTSI places a significant emphasis on the effects on individual-level factors (i.e., learner readiness, motivation to transfer, posited outcome, personal capacity for transfer, openness to change, opportunity to use, and performance expectation). Conversely, the DLOQ focuses on organizations-level factors such as climate, culture, and structures. Job satisfactions and trainees' level of curiosity

as a proposed level of motivation have not been widely explored in the aforementioned scales, especially in law enforcement. To capture this phenomenon, the work-related scale was used as a foundation` to assess behaviors related to curiosity. The work-related scale incorporated the use of personality traits, achievement motivation, and general mental ability as construct validity measures (Mussel et al., 2012).

Appendix C

Content Validation Forms Provided to Expert Panel

Content Validation: Law Enforcement Transfer of Training

#	Factor	Conceptual Definition
1	Job Satisfaction	An employee's affective reaction to a job based on the comparison of desired outcomes to actual outcomes.
2	Organization Learning Climate	The shared perceptions by employees regarding policies, practices, and procedures that are perceived as rewarded behaviors within the organization.
3	Opportunity to Use/Train	Providing trainees with resources or on-the-job tasks to enable them the opportunity to use their training on the job.
4	Training Content/Validity	The degree to which trainees judge the training content to their job requirement.
5	Supervisor Support	The extent to which supervisors support and reinforce the use of training on the job.
6	Peer Support	The extent to which peers support and reinforce the use of training on the job.
7	Employee Curiosity/Motivation	State of emotional arousal in which an individual seeks to obtain information or explore certain behaviors in order to answer a conflict or degree of uncertainty.

Directions for Rating the Items

Please complete the content validation steps as described below.

1. Specify the **clarity** of the statement in the selected factor using the following number codes: 1 = Not clear, 2 = Item needs some revision, 3 = Clear but need minor revision, 4 = Very clear.
2. Specify how **relevant** you believe each item is to the selected factor by using the following number codes: 1 = Not relevant, 2 = Item needs some revision, 3 = Relevant but need minor revision, 4 = Very relevant.
3. In addition, you may choose to respond to any of the open-ended questions at the end of this document to provide further feedback. If you prefer, you may also insert comments throughout the document if you have suggestions (e.g., wording changes) regarding specific factors or items.

Note: The word agency refers to a law enforcing organization that a law enforcement officer is primarily employed by. *Thank you for your time and feedback!*

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Job Satisfaction	Clarity	Relevance
1	I am satisfied with working at my agency.		
2	I am likely to recommend this agency as a good place to work.		
3	I feel appreciated by my agency.		
4	My agency recognizes when I do a good job.		
5	There are adequate chances for promotion at my agency.		

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Organization Learning Climate	Clarity	Relevance
1	My agency provides me with optional training opportunities to enhance my job.		
2	Training is rewarded (i.e., promotion/special position/recognition) in my agency.		
3	My agency sets clear learning goals to enhance my career.		
4	My agency encourages me to attend optional training courses.		
5	My agency supports continued education.		

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Opportunity to Use Training	Clarity	Relevance
1	I am unable to apply newly acquired skills when opportunities are presented due to my workload.		
2	Training offered at my agency is applicable to my job.		
3	I often put into practice what I have learned during training.		
4	I am often denied training opportunities due to staffing constraints.		
5	I am often denied training class due to budget limitations.		

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Training Content and Instructions	Clarity	Relevance
1	Training offered at my agency has helped me perform my duties better.		
2	Training scenarios allow me to be better prepared for my job requirements.		
3	Trainers at my agency are knowledgeable.		
4	Training at my agency is well planned.		
5	Optional training provides me with the skills necessary to achieve my career goals.		

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Supervisor Support	Clarity	Relevance
1	My supervisor makes suggestions about how I can improve my work performance.		
2	My supervisor encourages me to attend training.		
3	My supervisors allocate time on duty for me to apply training as appropriate.		
4	My supervisor cares about my career development.		
5	My supervisors believe in the effectiveness of training.		

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Peer Support	Clarity	Relevance
1	My coworkers show interest in what I have learned in training.		
2	My coworkers believe that attending training negatively affects staffing.		
3	My coworkers support me when I try to use training in the field.		
4	My coworkers believe in the effectiveness of training.		

		1 = Not clear 2 = Item needs some revision 3 = Clear but need minor revision 4 = Very clear	1 = Not relevant 2 = Item needs some revision 3 = Relevant but need minor revision 4 = Very relevant
#	Employee Curiosity/Motivation	Clarity	Relevance
1	I am motivated to excel in my career.		
2	I am enthusiastic to learn new skills.		
3	I enjoy thinking about new concepts.		
4	I continue to think about a problem until I solve it.		
5	Exceeding expectation in my job is important to me.		
6	I enjoy going to work.		

1. Do you have any suggestions regarding the factor definitions?
2. Do you feel the items cover the range of content for each factor as they are defined?
If not, do you have any suggestions for additional items to improve content coverage?
3. Do you feel any of the items should be reworded or deleted?
4. Please feel free to add any additional thoughts or comments.

Appendix D

35 Item Survey Post Expert Panel Feedback

Law Enforcement Transfer of Training Instrument

Section 1- Employee Curiosity/Motivation

1) I am motivated to excel in my career.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) I am enthusiastic to learn new skills.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) I enjoy thinking about new concepts.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) I continue to think about a problem until I solve it.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) Exceeding expectation in my job is important to me.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

6) I enjoy going to work.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 2 - Job Satisfaction

1) I am satisfied with working at my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) I am likely to recommend this agency as a good place to work.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) I feel appreciated by my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) My agency recognizes when I do a good job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) There are adequate chances for promotion at my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 3 – Organization Learning Climate

1) My agency provides me with optional training opportunities to enhance my job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) Training is rewarded (i.e., promotion/special position/recognition) in my agency.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) My agency sets clear learning goals to enhance my career.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) My agency encourages me to attend optional training courses.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) My agency supports continued education.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 4- Opportunity to Use Training

1) I am unable to apply newly acquired skills when opportunities are presented due to my workload.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) Training offered at my agency is applicable to my job.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) I often put into practice what I have learned during training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) I am often denied training opportunities due to staffing constraints.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) I am often denied training class due to budget limitations.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 5- Training Content and Instructions

1) Training offered at my agency has helped me perform my duties better.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) Training scenarios allow me to be better prepared for my job requirements.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) Trainers at my agency are knowledgeable.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) Training at my agency is well planned.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) Optional training provides me with the skills necessary to achieve my career goals.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 6- Supervisor Support

1) My supervisor makes suggestions about how I can improve my work performance.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) My supervisor encourages me to attend training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) My supervisors allocate time on duty for me to apply training as appropriate.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) My supervisor cares about my career development.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

5) My supervisor believe in the effectiveness of training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Section 7- Peer Support

1) My coworkers show interest in what I have learned in training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

2) My coworkers believe that attending training negatively affects staffing.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

3) My coworkers support me when I try to use training in the field.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

4) My coworkers believe in the effectiveness of training.

Strongly Disagree Somewhat disagree Neither Agree nor Disagree Somewhat Agree

Strongly Agree

Appendix E
Final Instrument in Qualtrics

Law Enforcement Transfer of Training Instrument

Q13 Are you a currently employed law enforcement officer in the state of Florida?

- ☐ Yes (1)
- ☐ No (4)
-

Q16 Indicate your employment status as a Florida law enforcement officer

- ☐ Full-time (1)
- ☐ Part-time (2)
-

Page

Break

Q1 Number of years working as a full-time law enforcement officer:

Q12 Type of agency you work for:

- ☐ Local police (1)
- ☐ Sheriff's office (2)
- ☐ Primary state (3)
- ☐ Special jurisdiction (4)
- ☐ Constable/marshal (5)
- ☐ Other (6) _____

Q14 How many full-time law enforcement officers currently work at your agency?

- ☐ 1,000 or more officers (1)
 - ☐ 500-999 (2)
 - ☐ 250-499 (3)
 - ☐ 100-249 (4)
 - ☐ 50-99 (5)
 - ☐ 25-49 (6)
 - ☐ 10-24 (7)
 - ☐ 5-9 (8)
 - ☐ 2-4 (9)
 - ☐ 0-1 (10)
-

Q4 What category best describes your current position?

- ☐ Patrol (1)
- ☐ Investigations (2)
- ☐ Supervision (3)
- ☐ School Resource Officer (SRO) (6)
- ☐ Specialty Unit (please describe) (5)

☐ Other (please describe) (4)

Q5 What is your highest level of education?

- ☐ High School (1)
 - ☐ Some college credits (6)
 - ☐ Associates Degree or 60 college credits (2)
 - ☐ Bachelor's Degree (3)
 - ☐ Master's Degree (4)
 - ☐ Doctoral Degree (5)
-

Q2 What is your gender?

- ☐ Female (2)
 - ☐ Male (1)
-

Q3 What is your age?

Q6 Did you serve in the United States Armed Forces?

- ☐ No (1)
 - ☐ Yes (2)
-

Page

Break

Display This Question:

If Did you serve in the United States Armed Forces? = Yes

Q8 Which branch of the Armed Forces of the United States did you serve?

- ☐ Air Force (1)
- ☐ Army (2)
- ☐ Coast Guard (3)
- ☐ Marine Corps (4)
- ☐ Navy (5)

Display This Question:

If Did you serve in the United States Armed Forces? = Yes

Q18 Number of years served:

Display This Question:

If Did you serve in the United States Armed Forces? = Yes

Q9 Indicate your current status with the United States Military

- ☐ Honorable discharge (1)
- ☐ Retired (2)
- ☐ Army National Guard (3)
- ☐ Army Reserve (4)
- ☐ Navy Reserve (5)
- ☐ Marine Corps Reserve (6)
- ☐ Air National Guard (7)
- ☐ Air Force Reserve (8)
- ☐ Coast Guard Reserve (9)

Page

Break

Q10						
Indicate your level of agreement with the following set of statements.	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (4)	Agree (5)	Strongly Agree (6)	
I am motivated to excel in my career. (1)	C	C	C	C	C	
I am enthusiastic to learn new skills. (2)	C	C	C	C	C	
I enjoy thinking about new concepts. (3)	C	C	C	C	C	
I continue to think about a problem until I solve it. (4)	C	C	C	C	C	

Exceeding expectation in my job is important to me. (5)	C	C	C	C	C
I enjoy going to work. (6)	C	C	C	C	C
I am satisfied with working at my agency. (7)	C	C	C	C	C
I am likely to recommend this agency as a good place to work. (8)	C	C	C	C	C
I feel appreciated by my agency. (9)	C	C	C	C	C
My agency recognizes when I do a good job. (10)	C	C	C	C	C

There
are adequate
chances for
promotion at
my agency. (11)

C

C

C

C

C

Q7 Indicate your level of agreement with the following set of statements.	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (4)	Agree (5)	Strongly Agree (6)
My agency provides me with optional training opportunities to enhance my job. (12)	☐	☐	☐	☐	☐
Training is rewarded (i.e., promotion/ special position/ recognition) in my agency. (13)	☐	☐	☐	☐	☐
My agency sets clear learning goals to enhance my career. (14)	☐	☐	☐	☐	☐
My agency encourages me to attend optional training courses.	☐	☐	☐	☐	☐

(15)

My agency

supports continued
education. (16)

C

C

C

C

C

I am unable to

apply newly

acquired skills

when opportunities

are presented due to

my workload. (17)

C

C

C

C

C

Training offered at

my agency is

applicable to my

job. (18)

C

C

C

C

C

I often put into

practice what I

have learned during

training. (19)

C

C

C

C

C

I believe in the

effectiveness of

training (36)

C

C

C

C

C

I am often denied

training

C

C

C

C

C

opportunities due to
staffing constraints.

(20)

I am often denied
training class due to
budget limitations.

(21)

C

C

C

C

C

Page

Break

Q11 Indicate your level of agreement with the following set of statements.	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (4)	Agree (5)	Strongly Agree (6)
Training offered at my agency has helped me perform my duties better. (22)	C	C	C	C	C
Training scenarios allow me to be better prepared for my job requirements. (23)	C	C	C	C	C
Trainers at my agency are knowledgeable. (24)	C	C	C	C	C

Training at my agency is well planned. (25)

C

C

C

C

C

Optional training provides me with the skills necessary to achieve my career goals. (26)

C

C

C

C

C

My supervisor makes suggestions about how I can improve my work performance. (27)

C

C

C

C

C

My supervisor encourages me to attend training. (28)

C

C

C

C

C

My supervisors
allocate time on
duty for me to
apply training
as appropriate.
(29)

C C C C C

My supervisor
cares about my
career
development.
(30)

C C C C C

My supervisors
believe in the
effectiveness of
training. (31)

C C C C C

My coworkers
show interest in
what I have
learned in
training. (32)

C C C C C

My coworkers
believe that
attending
training
negatively
affects staffing.
(33)

C

C

C

C

C

My coworkers
support me
when I try to
use training in
the field. (34)

C

C

C

C

C

My coworkers
believe in the
effectiveness of
training. (35)

C

C

C

C

C

Q17. 17. Please rate your overall perception of training at your law enforcement agency.

Training includes formal training activities, as well as attitudes, values, and informal

“beliefs” conveyed by individuals with whom law enforcement comes into contact.

1. Terrible (not officer-centered, no opportunity for reflection, authoritarian, not trustworthy disrespectful of diversity and alternative perspective, predominantly negative aspects, positive aspect few and not mediated by negative ones)

2. Poor (overall mostly negative environment with some positive aspects)

3. Fair (equal mix of positive and negative features)

4. Good (overall mostly positive with some negative aspects)

5. Exceptional (environment marked by safety, trust, respect, welcoming of diversity, provides opportunities for officers to challenge themselves with appropriate supervision and feedback, opportunities to reflect, predominantly positive aspects which mediate negative aspects).

☐ Terrible (1)

☐ Poor (2)

☐ Fair (3)

☐ Good (4)

☐ Exceptional (5)

Appendix F
Recruitment Email

Hello everyone,

My name is Daniel Costa and I am an officer with Cape Coral Police Department a FOP member of Lodge 33.

Currently, I am conducting research for my dissertation at Florida International University and would like to ask for the participation of *active sworn law enforcement* in completing an online survey. The purpose of my dissertation is to develop and validate an instrument to assess factors that can influence training in law enforcement agencies. The goal of this study is to identify perceived training issues and supply key insights into a new research field that currently lacks literature. The survey should take about 5-10 minutes to complete.

If you choose to participate, your answers will remain confidential and I will not elicit any identifiable information from you or about your agency. The survey is also mobile friendly, so you can access it through your phone.

To access the survey, please follow the link provided below:
https://fiu.qualtrics.com/jfe/form/SV_dhUTYA6qDsEGA2V

I know you are extremely busy, so I truly appreciate you taking the time to help me out with this.

Daniel Costa

Appendix G
Scale Abbreviations

Section 1- Motivation/Curiosity

- Mot1- I am motivated to excel in my career.
- Mot2- I am enthusiastic to learn new skills.
- Mot3- I enjoy thinking about new concepts.
- Mot4- I continue to think about a problem until I solve it.
- Mot5- Exceeding expectation in my job is important to me.
- Mot6- I enjoy going to work.

Section 2 - Job Satisfaction

- Sat1- I am satisfied with working at my agency.
- Sat2- I am likely to recommend this agency as a good place to work.
- Sat3- I feel appreciated by my agency.
- Sat4- My agency recognizes when I do a good job.
- Sat5- There are adequate chances for promotion at my agency.

Section 3 – Organization Learning Climate

- Org1- My agency provides me with optional training opportunities to enhance my job
- Org2- Training is rewarded (i.e., promotion/special position/recognition) in my agency
- Org3- My agency sets clear learning goals to enhance my career.
- Org4- My agency encourages me to attend optional training courses.
- Org5- My agency supports continued education.

Section 4- Opportunity to Use Training

- Opp1- I am unable to apply newly acquired skills when opportunities are presented due to my workload.
- Opp2- Training offered at my agency is applicable to my job.
- Opp3- I often put into practice what I have learned during training.
- Opp4- I am often denied training opportunities due to staffing constraints.
- Opp5- I am often denied training class due to budget limitations.

Section 5- Training Content and Instructions

- Train1- Training offered at my agency has helped me perform my duties better.
- Train2- Training scenarios allow me to be better prepared for my job requirements.
- Train3- Trainers at my agency are knowledgeable.
- Train4- Training at my agency is well planned.
- Train5- Optional training provides me with the skills necessary to achieve my career goals.

Section 6- Supervisor Support

Sup1- My supervisor makes suggestions about how I can improve my work performance.

Sup2- My supervisor encourages me to attend training.

Sup3- My supervisors allocate time on duty for me to apply training as appropriate.

Sup4- My supervisor cares about my career development.

Sup5- My supervisor believes in the effectiveness of training.

Section 7- Peer Support

Per1- My coworkers show interest in what I have learned in training.

Per2- My coworkers believe that attending training negatively affects staffing.

Per3- My coworkers support me when I try to use training in the field.

Per4- My coworkers believe in the effectiveness of training.

VITA

DANIEL COSTA

Born, Miami, Florida

2003-2005	A.A., Associates in Arts Edison College Fort Myers, Florida
2005-2007	B.S., Criminal Forensic and Criminal Justice Florida Gulf Coast University Fort Myers, Florida
2007-2009	M.S., Criminal Forensic Studies: Medico-Legal Death Investigations Florida Gulf Coast University Fort Myers, Florida
2009-Present	Detective / Police Officer, Field Training Officer, and Crisis Negotiator Cape Coral Police Department Cape Coral, Florida
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