

A LONGITUDINAL STUDY EXAMINING PREDICTORS OF POLICE OFFICERS'
TRAINING MOTIVATION, RECEPTIVITY, AND OUTCOMES

By

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ABSTRACT

The purpose of this study is to move beyond a simple understanding of whether a training program works and to have a better understanding of how and why it works. To do so, the study builds on the theoretical framework of officer training motivation, receptivity, and outcome by addressing several gaps in the existing literature. To that end, this study aims to conduct longitudinal police training evaluation research exploring the factors that motivate officers to complete training programs, which, in turn, impacts training receptivity and, ultimately, training outcomes. The study also examines the contribution of organizational justice theory in producing beneficial training outcomes. In addition, drawing on the group-value model of procedural justice and the relational model of authority, the study tests whether the effect of training motivation on training receptivity is moderated by organizational justice. Furthermore, gender issues in policing are covered, and the moderating effect of gender is discussed in terms of uncertainty management theory. The sample for this study comes from 351 newly hired police officers who participated in online surveys conducted in two different time periods. The first survey was distributed at the beginning of the academy (during the first few weeks of the beginning of the academy), and the second survey was distributed after graduation (during the first few weeks when the officers were assigned to their workplace after they were done with both the in-school education and field training). Several factors motivated officers to complete training programs, which, in turn, impacted training receptivity and, ultimately, training outcomes. The findings from this study help us understand the conditions under which training is successful or why training programs fail.

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This dissertation is dedicated to Mom SK Park and Dad YO Nam.
To my wonderful wife Haeun.
Thank you for always supporting me.

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CHAPTER 1: INTRODUCTION

1.1: Police Training

Over the past several decades, a series of incidents in which police shot unarmed Black men and women have prompted calls for police reform. The endless efforts to reform policing are part of law enforcement history in the United States. However, the recent high-profile killings of Black people by police officers, including the shooting of Michael Brown and the murder of George Floyd, have ignited waves of civil unrest, prompting calls for an overall reform of the U.S. criminal justice system. The Black Lives Matter (BLM) movement returned to national headlines and obtained increasing attention. In addition, racial/ethnic health disparities and economic inequality worsened by COVID-19 exacerbated the civil unrest situation (Buzby, 2020; CDC, 2021; Van Beusekom, 2021). Amid incessant civil unrest, public trust in the police reached its lowest point in at least 27 years (Brenan, 2021; Ortiz, 2020).

In line with the recommendations provided by President Obama's Task Force on 21st Century Policing (2015), policymakers, practitioners, and scholars have emphasized the expansion of training for law enforcement officers as one of the ways to implement critical reforms and build public trust (Marcus, 2016). With the expectation that law enforcement training academies and in-service programs may be able to teach officers different skill sets to better adapt to changing environments to serve the community more effectively and prepare themselves for an appropriate response to both normal and emergency situations (Birzer, 1999; Haberfeld, 2002), billions of dollars in law enforcement training are spent each year (Mihalek, 2020).

Similar to policing in the United States, the Korean National Police Agency (KNPA) is not exempt from public criticism. Due to the political instability that plagued Korea throughout the twentieth century, the KNPA was unable to maintain political impartiality

(Moon, 2004). Instead, the police have often wielded their power in support of illegitimate ruling governments and have often been utilized as a political instrument (Lee, 1990; 2002). The KNPA has even been known to manipulate elections, including the presidential elections in the 1960s and 1970s (Nahm, 1988). This misuse of police personnel and resources has resulted in the neglect of the fundamental responsibilities of the police, such as crime prevention and public service (Moon, 2004). The police have frequently resorted to excessive force and committed numerous human rights violations, further straining their already tense relationship with the citizens they are meant to protect (Cohen & Baker, 1991).

These practices have eroded public trust in law enforcement, and citizens have become increasingly critical of the police (Lee, 2002; Pyo, 2001a). In some cases, citizens have taken to the streets to protest police brutality and corruption, demanding greater accountability and transparency from law enforcement (Hoffman, 1982). One particularly significant protest of the police occurred in 1987 following the death of a student named Park Jong-Chul, who was tortured to death by police officers while in custody. The incident sparked widespread public outrage and led to a series of protests and riots calling for greater accountability and transparency in the police force (Cohen & Baker, 1991). The protests were met with a heavy-handed response from the government, with police using tear gas and violence to disperse the crowds (Pyo, 2001b). However, the protests ultimately succeeded in bringing attention to the issue of police brutality and spurring demands for reform (Kim, 2000; Moon, 2004).

In the years that followed, there were significant efforts to reform the police force and improve its relationship with the public. These included measures to increase transparency and accountability in police investigations and disciplinary proceedings. One of the means to implement critical reforms and build public trust was to expand the training for law enforcement. Since then, hundreds of millions of dollars have been spent annually for

training and education purposes. For example, according to the Korean National Police Agency's budget report for 2021, approximately 1.2 trillion Korean won (equivalent to around 1 billion US dollars) was allocated for training and education. This represents an increase of 6.8% compared to the previous year's budget.

The problem, however, is that there is little empirical evidence about "what works" in police training. Different training programs have been offered as instruments of police reform, but less attention has been paid to whether training programs actually address the problems they are intended to solve. The good news is that a growing body of evaluation research has started to focus on the association between training programs and officers' attitudes and behaviors. For instance, various procedural justice training programs have produced promising results (i.e., increased officer support for the procedural justice dimensions, a diminished number of complaints received, and reduced use of force) in a variety of policing contexts, including in Chicago (Rosenbaum & Lawrence, 2017; Skogan et al., 2015), Louisville (Schaefer & Hughes, 2016), Seattle (Owens et al., 2016), and the U.K. (Wheller et al., 2013). In particular, Rosenbaum and Lawrence (2017) demonstrated that participation in Chicago's Quality Interaction Program (QIP) increased officers' likelihood of more respectful and reassuring behaviors during videotaped role-playing scenarios. More importantly, officers who completed the training program showed fewer intentions to use force or arrest the person relative to controls when interacting with rebellious youths in a scenario.

Relatedly, as one of the ways to reduce excessive use of force, the Task Force emphasized the need for de-escalation training. Accordingly, training programs have examined the effect of social interaction training on officers' attitudinal and behavioral changes when interacting with citizens (Hansson & Markström, 2014; Krameddine et al., 2013; McLean et al., 2020). McLean and colleagues (2020), for instance, conducted a

randomized-controlled trial of a social interaction training program in two mid-size police departments in the United States. Although their results provided no evidence that the training program changed officer behavior, the program effectively increased the priority officers place on procedurally fair communication and self-control while being less likely to prioritize physical control in hypothetical scenarios. In another study by Engel and colleagues (2020), the authors examined the effect of Integrating Communication, Assessment, and Tactics (ICAT) training using a stepped-wedge RCT design. They found that officers who received the training held positive perceptions and receptivity to training. In addition, the ICAT also impacted officers' attitudes and behaviors. These officers showed fewer intentions to use force during police-citizen interactions, and most of them used de-escalation tactics in the field.

The problem, however, is the literature has primarily focused on examining the impact of training programs on officers' attitudes and/or behavior and has spent much less time exploring the factors that predict officers' receptivity to training programs (Krameddine et al., 2013; Rosenbaum & Lawrence, 2017; Wolfe et al., 2022). According to Wolfe and colleagues (2022, p. 202), "simply knowing whether a training program impacted officer attitudes or behaviors may provide little information regarding the reasons for its success or failure or suggestions for modifications to make success more likely in other settings." In order to develop effective evidence-based police training programs, police training evaluation research needs to examine not only "what works" but also how and why it works.

In the organizational behavior literature (Alliger et al., 1997; Kirkpatrick, 1959), employees' receptivity to training programs (i.e., employees' reactions to training and perceived learning from training) is a key element determining the success or failure of such programs (i.e., transfer of training and improved job performance). Perceived skill acquisition and training satisfaction are measures often used to capture training receptivity (Colquitt et

al., 2000; Wolfe et al., 2022). Research shows that employees receptive (i.e., employees with high perceived skill acquisition and satisfaction with training) to training programs are more likely to apply newly learned skills to the actual work setting and show improved behavioral performance (Colquitt et al., 2000; Velada & Caetano, 2007). While the importance of employees' receptivity to training programs in determining the training outcomes is evident, it is not the sole antecedent.

Research demonstrates that work environment characteristics, such as supervisory and peer support for training, also are critical factors predicting the success of training (Baldwin & Ford, 1988; Tannenbaum & Yukl, 1992). Work environments unsupportive of applying newly learned skills and knowledge may hinder employees' transference of learning into their job. Empirical evidence demonstrates that low supervisory and peer support for training can lead to an unsupportive organizational environment impeding the successful transfer of training skills (Fleishman et al., 1955; Goldstein, 1986; McGehee & Thayer, 1961; Marx, 1982; Michalak, 1981; Mosel, 1957). This speaks to the possibility that even when trainees are receptive to training programs, they may be less willing to transfer newly learned skills into actual work when confronted by an unsupportive organizational climate with supervisors and peers who do not appreciate training. Considering that training happens within a dynamic organizational environment and involves individuals with different experiences, the success of training depends on different types of factors. With this in mind, it is important to examine the independent and simultaneous effects of employees' receptivity to training programs and the impact of work environment characteristics on training outcomes.

Given the positive effect of employees' training receptivity on achieving intended training goals, it is important to have a solid understanding of the factors related to such receptivity. The literature has identified two groups of factors that predict employees' receptivity to training programs: (1) individual characteristics such as gender, age, education

level, locus of control, self-efficacy, organizational commitment, and self-legitimacy, and (2) situational characteristics such as organizational justice, climate, manager support, and peer support (Colquitt et al., 2000; Wolfe et al., 2022). On top of these two groups of factors (i.e., individual and situational characteristics) that influence training receptivity, training motivation has been identified as a critical variable that not only predicts training receptivity but also partially or fully mediates the relationship between the two groups of factors and training receptivity (Baldwin & Magjuka, 1997; Colquitt et al., 2000; Mathieu & Martineau, 1997; Wolfe et al., 2022).

Training motivation refers to "the direction, intensity, and persistence of learning-directed behavior in training contexts" (Colquitt et al., 2000, p. 678). Previous studies have found strong relationships between training motivation and training receptivity in a variety of work contexts (Colquitt et al., 2000; Mathieu & Martineau, 1997; Noe, 1986). Employees who are more motivated to complete training programs tend to be more receptive to training (i.e., more training satisfaction and/or stronger perceived skill acquisition). Applying this concept in a policing context, Wolfe and colleagues (2022) found that officer training motivation was significantly and positively related to training receptivity. However, a small body of research on police training has found an effect of training motivation on training receptivity using cross-sectional data and by measuring the two concepts on the same survey after officers complete a training program. This makes it difficult to establish proper temporal ordering of the key variables and determine whether training motivation has an effect on training receptivity measured at a later time. Accordingly, research needs to utilize data that enable the longitudinal evaluation of police training to establish a correct sequence of events.

Despite the need for longitudinal research on police training, a long line of organizational behavior and human relations research clearly identifies employees' training motivation as a robust predictor of their receptivity to training, even when a longitudinal

survey was used for the analyses (Kodwani & Kodwani, 2021; Mathieu et al., 1992; Noe & Schmitt, 1986; Rowold, 2007; Sitzmann et al., 2009; Switzer et al., 2005; Tai, 2006; Tannenbaum et al., 1993). To that end, the organizational behavior literature has made suggestions to help guide organizations in finding ways to bolster employees' training motivation (Ford & Noe, 1992; Noe et al., 1997; Rowold, 2007; Salas & Canon-Bowers, 2001; Tannenbaum et al., 1993). However, because training involves employees whose histories and experiences vary, employees may perceive training differently. Given that the primary predictors of training motivation (i.e., locus of control, self-efficacy, organizational commitment, and self-legitimacy) are factors associated with individual characteristics, the level of training motivation may vary among employees who participate in training. In fact, those employees with higher training motivation will be more receptive to training, and ultimately, they may be more successful in the training. However, what about the less motivated employees who believe their efforts are unlikely to improve their performance and are less willing to put effort into training? In this case, if the trainees are already less motivated to complete training programs, can something be done to encourage trainees to demonstrate more training receptivity? On the one hand, organizational behavior literature reveals that employees' perceptions of fairness in the workplace (i.e., organizational justice) generally bolster their receptivity to training. On the other hand, it remains unclear whether organizational justice can mitigate the negative effects that low training motivation has on training receptivity. This is valuable from a practical standpoint because, while police supervisors often cannot have a direct influence on several predictors of training motivation, they can always treat their employees in an organizationally fair manner.

To this end, in order to promote evidence-based knowledge about police training, it is important to examine the independent and simultaneous effects of employees' receptivity to training programs and work environment characteristics on training outcomes, conduct

longitudinal evaluation research of police training, and explore whether organizational justice can mitigate the harmful effect of low training motivation on training receptivity. Moreover, it is equally important not to overlook issues relevant to women in policing when discussing training effectiveness. In other words, if we fail to center gender in this discussion, we are likely to miss the mark. Women are underrepresented and undervalued in law enforcement (Todak et al., 2021; Silvestri, 2017). Policing culture largely remains resistant to women in law enforcement, so female police officers often face barriers, including salary disparities and a lack of promotional opportunities (Rabe-Hemp, 2008; 2009). Female police officers often experience a male-dominated police subculture that creates adverse or hostile environments for them (Huff & Todak, 2022; Starheim, 2019). Gender discrimination creates general workplace uncertainty for female officers regarding their role and job security (Brown, 1998; Martin, 1994). In the training context, women police officers may be more likely to experience psychological uncertainty due to their belief that they are least likely to succeed in training programs that seem more tailored to male officers (Cordner & Cordner, 2011). Uncertainty revolving around their success in training programs may increase female officers' anxiety and stress about the training, and thus may reduce female police officers' satisfaction with the training and perceived skill acquisition. This raises two related empirical questions: (1) are female officers less motivated and/or receptive to training, and (2) are female officers always less receptive to training, or can organizational experiences moderate this relationship? Fortunately, there may be an organizational factor (i.e., organizational justice) that female officers may place more emphasis on to reduce uncertainty. With that said, research is needed to examine whether female officers will focus more attention on organizational justice evaluations to reduce their concerns about uncertainty.

To explore these issues, this dissertation builds on the theoretical framework of officer training motivation and receptivity by addressing several gaps in the existing literature

(Colquitt et al., 2000; Wolfe et al., 2022). In the broadest sense, the framework moves beyond a simple understanding of whether a training program works, to enrich our understanding of how and why it works. Further, based on organizational justice-based theoretical approaches, this study seeks to understand numerous beneficial work-related outcomes that organizational justice produces. To do so, the current study moves the literature on the subject of police training evaluation and organizational justice forward by (1) examining the independent and simultaneous effects of training receptivity and work environment characteristics on training outcomes, (2) exploring the longitudinal effect of training motivation on training receptivity, (3) testing the moderating effect of organizational justice on the relationship between training motivation and training receptivity, and (4) examining whether gender moderates the effect of organizational justice on training receptivity. The study accomplished this using longitudinal (i.e., pre-training and post-training) survey data from a sample of Korean police cadets ($N = 351$). The overarching goal of this study is to extend the literature by conducting longitudinal police training evaluation research exploring different predictors of training motivation, training receptivity, and training outcomes while examining potential moderating effects.

Figure 1 demonstrates a visual depiction of an analytical model of police training motivation, receptivity, and outcomes adapted from Colquitt et al.'s (2000) and Wolfe et al.'s (2022) frameworks. While their theoretical frameworks have been examined in the context of in-service training settings, they have not been as thoroughly explored in pre-service training settings. Pre-service training and in-service training are two types of training that refer to different stages in an employee's career development. Pre-service training refers to training that occurs before a person begins their professional work. This type of training is typically provided through educational institutions, such as training academies or vocational schools. It is designed to prepare individuals for their future careers by providing them with the

knowledge, skills, and competencies they will need to perform their job duties. In-service training, on the other hand, refers to training that is provided to individuals who are already employed in a particular profession or organization. This type of training is designed to enhance the knowledge, skills, and competencies of employees to improve their performance, support their career development, and increase their job satisfaction. Both pre-service training and in-service training are important for professional development, and they serve different purposes depending on the stage of the individual's career. Pre-service training provides the foundational knowledge and skills needed for entry-level positions, while in-service training supports ongoing career development and growth. Thus, it is important to investigate the application and efficacy of theoretical frameworks in the pre-service training context as well.

Therefore, the purpose of this study is to build on the theoretical framework of training motivation and receptivity by exploring the utility and applicability of these frameworks in the context of pre-service training settings to better understand their potential impact on training outcomes. Therefore, I propose an analytical model in Figure 1 that suits the purpose of this study. The next chapter of this study will discuss in detail each step of the model, the empirical research surrounding the concepts, gaps in the research literature, and the relevant hypothesis that will be examined in the dissertation. The readers of this study should be aware that the study will often refer back to Figure 1 throughout the paper. In addition, the readers will notice that Chapter 2 of the current study starts with a discussion of job performance. This is because the ultimate goal of training is to improve employees' job performance. Subsequent to the discussion about job performance, other important key variables of training outcomes, receptivity, and motivation will be discussed.

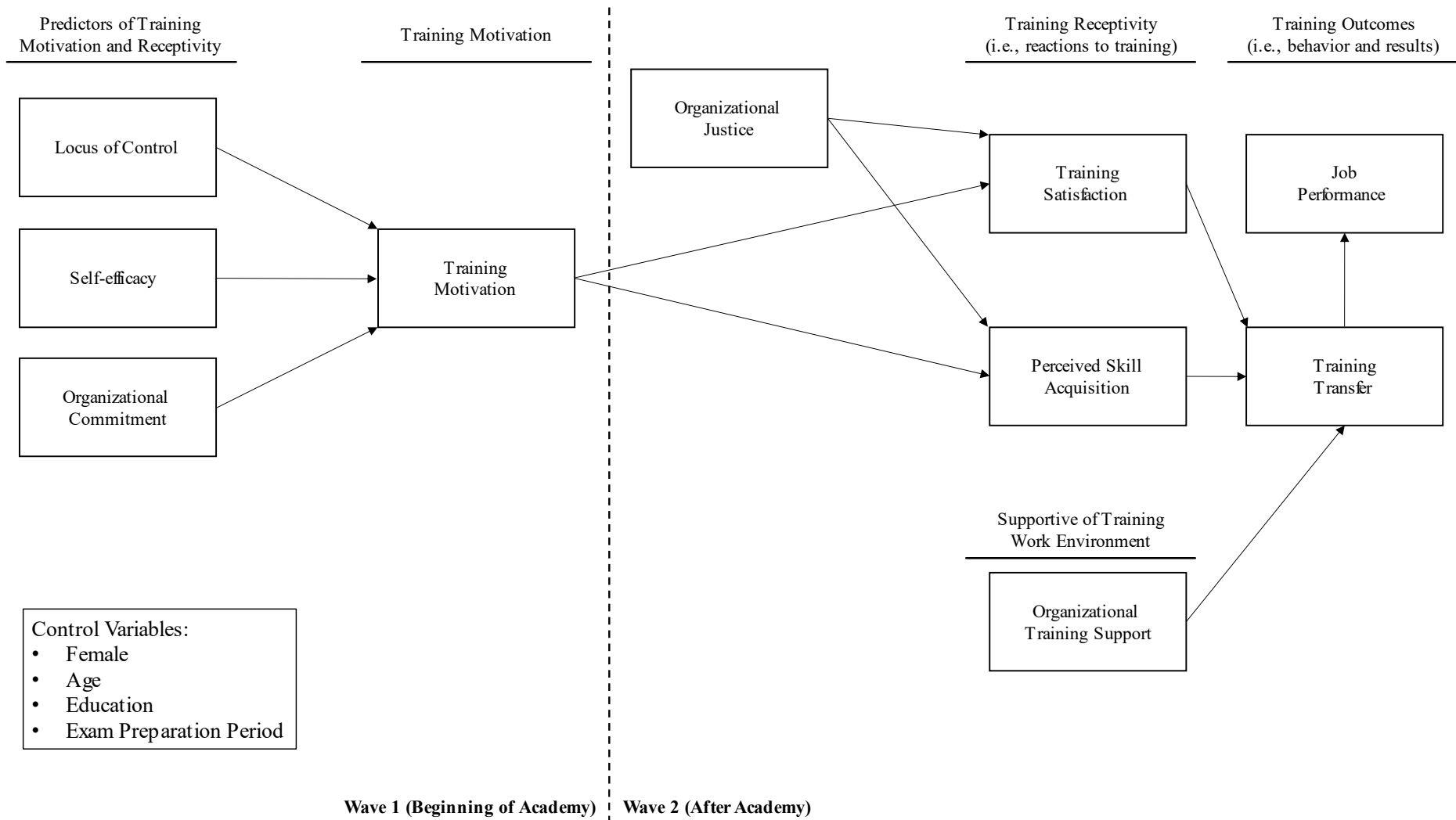


Figure 1. Analytical Model

1.2: Organization of Dissertation

The remainder of this dissertation is divided into four chapters. Chapter Two reviews the research literature in several sections. This chapter also presents a series of research hypotheses derived from the literature and the analytical model in Figure 1. The first section of Chapter Two presents the key variables of training outcomes (i.e., job performance and transfer of training) and discusses the relationship between these variables. The second section of the chapter reviews the literature on work environment characteristics (i.e., (un)supportive of training work environment) and their influence on the transfer of training. In the third section of the chapter, training receptivity and its effect on the transfer of training are discussed. The fourth section of the chapter reviews the literature on training motivation and the role of training motivation on training receptivity. In the fifth section of the chapter, organizational justice is defined and discussed in terms of existing research and its relationship with training receptivity. With the discussion of the key propositions of the group-value model and the relational model of authority, this section offers insight into why organizational justice matters for police officers. This section also discusses the role of organizational justice as a moderator. In addition, gender issues in policing are covered, and the moderating effect of gender is discussed in terms of uncertainty management theory. In the final section of Chapter Two, the key predictors of training motivation and receptivity (i.e., locus of control, self-efficacy, and organizational commitment) are defined and discussed. Chapter Four describes the research design, data, and variables used in this study. Chapter Five presents the results of the analyses. Finally, Chapter Six describes the significance of the findings and considers the policy implications of the results.

CHAPTER 2: THEORETICAL ORIENTATION

2.1: Training Outcomes

2.1.1: Job Performance

Organizational training has primarily been used to enhance employees' productivity and performance by providing skills employees need for the development and success of the organization (Khan et al., 2011; Olaniyan & Ojo, 2008; Tharenou et al., 2007). With a good amount of budget being spent on training to improve employee performance, organizational policymakers are paying growing attention to the assessment of training effectiveness (Phillips & Stone, 2002; Pontefract, 2019). Considering that job performance is a function of knowledge, skills, abilities, and motivation directed at role-prescribed behavior, such as formal job responsibilities (Campbell, 1999), employee performance is related to actions or behaviors tied to meeting organizational goals (Campbell et al., 1993). Thus, the nature of job performance is based on the mission and purpose of the organization, tied to specific job positions, and focused on the goals and priorities of the organization (Motowidlo & Schmit, 1999). Due to its importance, training program evaluation research has often been conducted to assess post-training job performance (Alden, 1976; Bartel, 1995; Impelman, 2007).

Post-training job performance is one common metric used to assess training effectiveness that involves measuring the impact of training on the trainee's knowledge, skill acquisition, and behavioral outcomes (Cannon-Bowers et al., 1993; Kirkpatrick, 1959). While early studies defined the concept of training effectiveness as a relatively simple, unidimensional construct, Kirkpatrick's (1959) four-level training evaluation model separated the concept of training effectiveness into four criteria that can be used to evaluate a training program: reactions, learning, behavior, and results. The Kirkpatrick model suggests that training can influence any or all criteria. In other words, training can lead to separate but related training outcomes. Cannon-Bowers and colleagues (1993) extended Kirkpatrick's

(1959) hierarchy of training evaluation by presenting a model with behavioral changes happening at two levels: performance in training and performance on the job. The former is related to behavioral changes during training and measured at the conclusion of training. For example, simulations or role plays can be used at the conclusion of training to observe whether trainees can act out skills learned in training if confronted with simulated situations similar to those of the actual work setting. While a meaningful way to measure training effectiveness, this type of training performance happens outside the real work setting (Cannon-Bowers et al., 1993; Martineau, 1995).

On the other hand, performance on the job is related to actual behavioral changes within the work setting. This type of training-related performance is assessed after a trainee returns or is assigned to the job and, therefore, has real-world consequences. For example, performance on the job is based on trainees being comfortable with their skills learned in training and thus reacting and behaving appropriately when faced with real work situations. However, in reality, trainees must find a balance between practicing the skills acquired during training and handling regular work duties (Burke & Hutchins, 2007; Ford & Weissbein, 1997; Grossman & Salas, 2011). The trainees may be confronted with various factors (i.e., unfriendly training climate in the organization and gap between the training and operational environment) that may hinder them from applying newly learned skills on the job. Even if the training program itself was well designed and implemented, and trainees demonstrate targeted skills during simulated situations at the end of the training, due to many factors, they may not be able to apply skills and knowledge learned in training to the real work setting (Baldwin & Ford, 1988). As such, training assessments must be conducted "in the context of the organization in which the trainees will be performing their skills, rather than only in terms of the training session itself" (Martineau, 1995, p. 25). Given the importance of employees' performance on the job, it is valuable to understand what explains

such performance, which is the topic the current study turns to next.

2.1.2: Transfer of Training

The term transfer of training is used to describe "the process of successfully applying the knowledge, skills, and attitudes gained in a training context to the work setting" (Martineau, 1995, p. 33; see also Newstrom, 1986; Wexley & Latham, 1981). Successful transfer of training happens when trainees apply the knowledge and skills learned in training to the job and maintain them over a period of time (Baldwin & Ford, 1988). Thus, without the transference of the learning to the actual work setting, it is nearly impossible for the training to improve employee performance and bring the desired impact on organizational results (Broad, 2005). However, previous studies found instances where the learning (i.e., skills and knowledge learned in training) was not being transferred to the job even when the training program was well designed and implemented (Atkinson, 1972; Baldwin & Ford, 1988; Fleishman, 1953). In other words, even after the implementation of well-structured training that results in learning targeted skills and knowledge, the overall training program may still be considered ineffective because employees fail to apply skills to the job, which ultimately has a null effect on increasing job productivity and performance (Alliger & Janak, 1989). In this respect, based on the literature and the analytical model in Figure 1, I hypothesize that the transfer of training will be positively associated with job performance (H1).

Given the importance of the transfer of training, it is valuable to explore predictors of training transfer. Empirical evidence demonstrates that different factors play an essential role as predictors of training transfer, but no single factor can assure the successful transfer of training (Baldwin & Ford, 1988; Colquitt et al., 2000; Dopyera & Pitone, 1983). In their discussion of various factors of training transfer, previous studies have identified the work environment characteristics trainees face when they return to work and trainees' reactions to training as significant predictors of training transfer (EA Ruona et al., 2002; Fecteau et al.

1995; Lim & Morris, 2006; Mathieu et al., 1993). Work environment characteristics are generally measured through (un)supportive of training work environment, and trainees' reactions to training typically involve measuring affective and utility reactions. Accordingly, exploring the factors that explain the transfer of training is worthwhile, which is the topic the current study turns to next.

2.2: Predictors of Training Outcomes

2.2.1: (Un)Supportive of Training Work Environment

Early research on the success of training focused on examining the characteristics of a training program's content and trainee characteristics. In addition to these two factors, studies have identified a critical factor, work environment characteristics, that influences the transfer of training (Baldwin & Ford, 1988; Tannenbaum & Yukl, 1992). Among different characteristics of trainees' work environment, supervisory and peer support for training have been identified as significant predictors of the transfer of training (Fleishman et al., 1955; Goldstein, 1986; McGehee & Thayer, 1961; Marx, 1982; Michalak, 1981; Mosel, 1957). Supervisory and peer support are defined as the degree to which the trainee's supervisor or colleagues help the trainee to set performance goals, provide opportunities and space in the organization to use newly learned skills, and recognize the use of the skills on the job (Cromwell, 2000).

Trainees leaving a training program with positive reactions (i.e., feeling satisfied with the training and perceptions that the training has improved their skills) will be more willing to apply the newly acquired skills and knowledge to the job (Alliger et al., 1997; Bray et al., 2014; Dawes-Diaz, 2007; Kirkpatrick, 1959; Kirkpatrick & Kirkpatrick, 2016; Sullivan et al., 2009). However, trainees will be returning or assigned to a work environment that is (or is not) supportive of applying newly learned skills. For example, trainees could be working in an environment where their managers and peers are not supportive of applying new skills and

knowledge learned in training. After leaving the academy, the new officers could hear a field training officer or senior partner utter the phrase, “Once you get on the street, you will need to forget everything you learned at the academy” (Ford, 2003; Sherman, 1982). In this case, those assigned to work environments with an unsupportive organizational climate are less likely to practice and refine their new skills in their job after returning from training (Rouiller & Goldstein, 1993; Huczynski & Lewis, 1980; Wexley & Baldwin, 1986). Thus, the period immediately after the trainees return or are assigned to the workplace is critical in determining whether training transfer will occur (Wexley & Baldwin, 1986). So, during this time, supervisors and peers have a significant influence on whether trainees will ever apply newly learned knowledge and skills on the job.

Empirical evidence has shown that supervisor and peer support promotes the transfer of training (Cromwell & Kolb, 2004; Ford et al., 1992; Ford & Fisher, 1994; Huczynski & Lewis, 1980; Kozlowski & Farr, 1988; Lim & Johnson, 2002; Saks & Belcourt, 2006). For example, in their study of the transfer of safety training in work organizations, Ford and Fisher (1994) suggested the immediate job context surrounding the trainees as a significant predictor of training transfer. This job context included supervisors' and peers' supportive behaviors such as promoting creativity, rewarding training, and encouraging updating.

In another study, Cromwell and Kolb (2004) used a sample of 63 supervisors from a large university in the northeastern United States who attended an extensive skill development program in order to measure training transfer at 1-month, 6-month, and 1-year intervals following training. Similar to other studies, they found a positive relationship between supervisory support for training and the transfer of skills learned in training. To examine the effect of supervisory and peer support on training transfer from a cross-cultural setting, Lim and Johnson (2002) conducted qualitative research on ten Korean human resource development (HRD) practitioners who completed a 3-week HRD training program

offered by a U.S. university. Multiple data collection methods (i.e., a multi-phase structured interview, questionnaires, and document review) were used to develop ten individual case studies to explore the unique pattern of training transfer. Among various factors, supervisory support was identified as the principal reason for training transfer. Thus, based on the literature and the analytical model in Figure 1, I hypothesize that the supportive of training work environment will be positively associated with the transfer of training (H2). While a culture supportive (or unsupportive) of training is an important predictor of successful (or failed) training programs, according to the literature, both affective and utility reactions to training may be equally important predictors of training transfer as the work environment.

2.2.2: Training Receptivity

Another significant predictor of training transfer is the trainees' reactions to the training (Colquitt et al., 2000; Martineau, 1995). For example, Kirkpatrick and Kirkpatrick (2006, p. 27) suggest that "if training is going to be effective, it is important that trainees react favorably to it." The Kirkpatrick model is a widely used framework to evaluate training effectiveness, and the first criterion used for training evaluation in this model is "reactions." The reaction component of the Kirkpatrick model principally focuses on addressing emotionally based opinions, which involves asking trainees how they liked and felt about training. For example, consider a police officer participating in department-mandated use-of-force training. The first criterion of the Kirkpatrick model solicits an officer's personal opinion on the learning experience following the use of force training (i.e., how much they liked the training).

According to Kirkpatrick, trainees' reactions are important because they affect other components of the model (Kirkpatrick, 1998). Thus, trainees who felt the training was valuable and were satisfied with the training tend to produce better outcomes on the subsequent components of the model (Kirkpatrick, 1959; see also Kirkpatrick & Kirkpatrick,

2016). In a more recent study, Alliger and colleagues (1997) presented an augmented framework of the Kirkpatrick model by decomposing the reaction component into two parts, affective and utility reactions (see also Warr & Bunce, 1995), based on the difference identified between affective and more behaviorally evaluative responses (Eagly & Chaiken, 1992).

Alliger and colleagues' (1997) first reaction component, affective reactions, is similar to the first component of the Kirkpatrick training evaluation model. Measuring affective reactions involves capturing how much trainees enjoyed the training, whether they felt engaged, and whether the training was worth the time. It is crucial to measure trainees' appreciation of training not only because the trainees can be "considered one of the 'customers' of training" (Alliger et al., 1997, p. 4) but also because appreciation can act as an important predictor of distant outcomes (i.e., transfer of training and future training attendance). Relatedly, training evaluation research often has measured trainees' satisfaction with the training to capture affective reactions.

Training satisfaction is defined as "how people feel about aspects of the job training they receive ... and is the extent to which people like or dislike the set of planned activities organized to develop the knowledge, skills, and attitudes required to effectively perform a given task or job" (Schmidt, 2007, p. 483). Trainees who are satisfied with the training tend to perceive that the training program was valuable, the method used to deliver the training was proper, and the amount of time spent on training was appropriate (Holgado Tello et al., 2006; Wolfe et al., 2022). Satisfaction is an affective construct that is impossible to observe directly in other humans (McCoach et al., 2013). Rather, it is a latent construct and accounts for an attitudinal response that can fall on a continuum ranging from negative to positive or unsatisfied to satisfied (Huang & Su, 2016; McCoach et al., 2013).

Considering that training satisfaction is one of the most important predictors of

transfer of training, it is an essential evaluation metric to consider when evaluating training program effectiveness (Chute et al., 1999; Zumrah & Boyle, 2015). Empirical evidence demonstrates a positive relationship between trainees' satisfaction with training and various training outcome-based measures (Bray et al., 2014; Dawes-Diaz, 2007; Sullivan et al., 2009). For instance, Bray and colleagues (2014) used a sample of 95 medical residents from two pediatric residency areas in Houston, Texas, who participated in a program that trains residents in evidence-based screening, brief intervention, and referral to treatment methods for alcohol and substance use problems over a period of 4 years. The study demonstrates that residents' high levels of satisfaction with training were positively related to the improvement of skills and use of attained knowledge in their practices. In another study by Sullivan and colleagues (2009) using a sample of 623 public welfare workers who participated in a training program, the authors found that welfare workers' satisfaction with training significantly and positively influenced their transference of learning to the job.

The second reaction component of Alliger and colleagues' (1997) model, utility reactions, can be operationalized by asking questions about the practical value of training, whether the training was job relevant, whether the trainee believed the training led to skill acquisition and the extent to which the training will influence their ability to perform their job. As such, perceived skill acquisition has often been used to measure utility reactions. Trainees' perceived skill acquisition focuses on their own evaluations of the skills and knowledge they acquired in the course of training. Perceived skill acquisition can be best assessed by measuring the extent to which trainees perceive that participation in the training has improved their skills and knowledge related to specific useful competencies. Previous research has identified trainees' perceived skill acquisition as a significant predictor of effective training. For example, using a sample of 185 Portuguese teachers who attended a professional training program, Velada and Caetano (2007) found that perceived skill

acquisition positively and significantly correlated with training transfer. Returning to the department-mandated use-of-force training example mentioned above, while affective reactions assess whether trainees liked the training, utility reactions capture whether trainees believed the training improved their skills related to the use of force. For the current study purpose, officers who are more satisfied with the training program and believe they gained skills and knowledge will be more likely to transfer newly learned skills and knowledge to their job. Thus, based on the literature and the analytical model in Figure 1, I hypothesize that training receptivity—measured with training satisfaction and perceived skill acquisition—will be positively associated with the transfer of training (H3). Next, I discuss the factors that predict employees' training receptivity.

2.3: Predictors of Training Receptivity

2.3.1: Training Motivation

Motivation is the reason why humans or even animals start, continue, or stop engaging in certain actions (Atkinson, 1964; Heckhausen & Heckhausen, 2008; Peters, 1958). In other words, motivation is an essential element that drives individuals to behave in certain ways. Motivation is individuals' general desire or willingness to exert physical or mental effort to accomplish targets and objectives (Danish & Usman, 2010; Komarraju et al., 2009; Pintrich, 2003). For instance, Pintrich (2003) found that motivated students tended to be engaged, have better skill acquisition, and outperform other students on standardized achievement tests. Relatedly, employee motivation is a significant predictor of prosocial behaviors in the workplace (Dobre, 2013; Ramlall, 2004; Said et al., 2015; Shahzadi et al., 2014). Previous studies have shown that motivated employees with high levels of job involvement were more likely to engage in organizational citizenship behavior (Barbuto Jr & Story, 2011) and effective contextual performance (Yousaf, Yang, & Sanders, 2015).

Steers and Porter (1975) have identified components that comprise motivation:

energizing and directing (see also Mathieu et al., 1992; Noe & Schmitt, 1986; Tannenbaum et al., 1991). In the training context, motivation can be seen as a force that drives people to feel enthusiastic about being part of the training program (energizer) and that stimulates people to learn and attempt to master the content of the training program in a particular direction (director). Similarly, training motivation is defined as "a function of psychological arousal and cognitive and attentional abilities that give purpose and direction to a particular behavior or sets of behavior in a training context" (Griffith, 2010, p. 31; see also Colquitt et al., 2000; Fecteau et al., 1995). In other words, training motivation is the energy that drives employees to learn new skills and knowledge.

Colquitt and colleagues (2000) conducted a meta-analysis that summarizes the literature on training motivation, its antecedents, and its relationships with training outcomes. They identified individual characteristics (i.e., gender, age, education level, locus of control, self-efficacy, organizational commitment, and self-legitimacy) and situational characteristics (i.e., organizational justice, climate, manager support, and peer support) that play a key role in influencing individual training motivation. In addition, central to Colquitt et al.'s (2000) framework is the idea that training motivation is the essential predictor of trainees' receptivity to the training, which ultimately has an impact on the training outcomes, including the transference of the learning to the job and increased job performance. Thus, employees motivated to train have higher levels of interest in improving their skills and knowledge through participating in training (Maurer & Tarulli, 1994; Maurer et al., 2003). Therefore, these employees tend to invest more time and attentional effort into the training and find the training worth the time, which in turn results in a positive impact on training receptivity and training effectiveness (Kozlowski & Salas, 2010; Machin & Fogarty, 2004; Noe, 1986; Wolfe et al., 2022).

Empirical evidence demonstrates that training motivation has a positive effect on

receptivity and outcomes (Colquitt et al., 2000; Klein et al., 2006; Kodwani & Prashar, 2019; Noe, 1986; Switzer et al., 2005; Wolfe et al., 2022). For example, in their study of 106 university employees who attended a training program designed to improve proofreading skills, Mathieu and colleagues (1992) found training motivation was positively and significantly related to learning and positive reactions to training. In another study, Klein and colleagues (2006) analyzed a sample of 600 students enrolled in either classroom or blended learning courses. They found that the students more motivated to learn had a higher level of satisfaction with the courses and scored higher. Similarly, Kodwani and Prashar (2019) used a sample of 185 officers and managers employed in a large public sector organization operating in India and revealed that motivation to learn has a positive effect on perceived training effectiveness. In a police-specific training context, Wolfe and colleagues (2022) found a positive relationship between training motivation and training receptivity. Using a sample of 113 patrol officers, they demonstrated that officers motivated to participate in training were more satisfied with the training and perceived the training had improved their skills.

Yet, the organizational behavior literature emphasizes the “need to continue gaining a deeper understanding of training motivation because it is crucial for learning and has direct implications for the design and delivery of training” (Salas & Canon-Bowers, 2001, p. 480; see also Ford & Noe, 1992; Noe et al., 1997; Rowold, 2007; Tannenbaum et al., 1993). Longitudinal studies are also needed because the use of such data not only allows establishing proper temporal ordering of the key variables (i.e., training motivation and training receptivity) but, most importantly, allows the research to examine whether the effect of training motivation impacts training satisfaction, perceived skill acquisition, transfer and/or job performance after the training is completed. Similar to the findings from the studies that used cross-sectional data, longitudinal studies have found a significant relationship between

training motivation, training receptivity, and training outcomes (Kodwani & Kodwani, 2021; Mathieu et al., 1992; Noe & Schmitt, 1986; Rowold, 2007; Sitzmann et al., 2009; Switzer et al., 2005; Tai, 2006; Tannenbaum et al., 1993). For instance, Tannenbaum and colleagues (1993) analyzed a sample of 666 employees participating in an eight-week program designed to train new recruits in general Navy procedures. They found that pre-training motivation significantly and positively impacted post-training reactions. Similarly, in their study of 251 managerial-level personnel who participated in a general management training program that took place over seven days, Kodwani and Kodwani (2021) found that participants more motivated to train (pre-training motivation) tend to perceive that participation in the training has improved their skills and knowledge related to specific useful competencies (measured 45 days after the end of the training program). In a police training context, previous research used a cross-sectional survey for the analyses to reveal a strong relationship between training motivation and training receptivity (Wolfe et al., 2022), but the longitudinal effect of training motivation on training outcomes has yet to be examined. While there has yet to be a longitudinal study, consistent with the organizational behavior literature, I can expect officers' level of motivation at the beginning of the training to impact their receptivity to training after the training. Accordingly, the following hypothesis can be derived from the literature and the analytical model in Figure 1: Training motivation will have a positive and longitudinal effect on training receptivity (H4).

2.3.2: Does Organizational Justice Matter

In addition to training motivation, organizational justice has been identified as one of the significant predictors of training receptivity. Organizational justice revolves around employees' perceptions of whether their supervisors have treated them fairly and involves measuring whether employees perceive organizational procedures and outcomes as fair and equitable (Colquitt, 2001; Cropanzano et al., 2018). Organizational justice is comprised of

four components (Colquitt, 2001; Greenberg, 1990, 1993; Lind, 2001; Lind & Tyler, 1988; Matta et al., 2016): distributive (i.e., pertains to the fairness of outcomes, like promotions), procedural (i.e., pertains to the fairness of decision-making processes, like being allowed a voice in making a decision), interpersonal (i.e., pertains to the interpersonal treatment received, like being treated respectfully), and informational (i.e., pertains to the provision and sharing of information, like being shared adequate information about a decision).

Greenburg (1987) first coined the term organizational justice and conceptualized it as employees' judgement about the behavior of the organization and employees' resulting attitudes and behaviors. Since then, numerous organizational behavior studies have examined the impact of organizational justice on organizational citizenship behavior (Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Karriker & Williams, 2009; Lind & Tyler, 1988).

Empirical evidence reveals that employees who perceive that they are treated organizationally fair by their supervisors tend to make nonrequired contributions and engage in constructive actions that aren't part of their formal contractual tasks that benefit the company. For example, Cohen-Charash and Spector (2001) conducted a meta-analysis that examined 190 study samples, totaling 64,757 participants, and found a positive relationship between organizational justice and organizational citizenship behaviors. Relatedly, based on data collected from 217 employee-supervisor dyads, Karriker and Williams (2009) examined the potential differential effects of multifoci organizational justice perceptions on organizational citizenship behavior. They found that fair interpersonal treatment was the strongest predictor of organizational citizenship behaviors. Furthermore, organizations prioritizing organizational justice found their employees yielding greater productivity, demonstrating a more substantial commitment to organizational goals, and sharing ideas for the success of the organizations (Ambrose & Schminke, 2009; Cohen-Charash & Spector, 2001; Colquitt et al., 2001; McFarlin & Sweeney, 1992).

Over the past few decades, criminal justice research has spent a considerable amount of time examining the effect of organizational justice in police and correctional settings (Bradford & Quinton, 2014; Carr & Maxwell, 2017; Myhill & Bradford, 2013; Tankebe, 2014; Trinkner et al., 2016; Tyler et al., 2007; Wolfe et al., 2022; Wolfe & Nix, 2016; Wolfe & Piquero, 2011; Wolfe et al., 2018). For example, using a sample of patrol officers from four departments in mid-sized locations in a Midwestern state, Carr and Maxwell (2017) found that officers' perceptions of organizational justice positively and significantly predicted trust in the public. Similarly, in their study of 567 sworn deputies from a sheriff's department located in a metropolitan city in the southeastern U.S., Nix and Wolfe (2017) demonstrated that organizational justice had the strongest effect on officers' sense of self-legitimacy. In another study, Wolfe and colleagues (2018) used a sample of 868 Board Patrol agents and demonstrated that organizational justice was a significant predictor of job satisfaction. Additionally, previous studies have identified that organizational justice not only can improve officers' commitment to organizational goals and reduce their cynicism (Bradford & Quinton, 2014) but also can enhance officers' perceptions of community policing (Myhill & Bradford, 2013). Relatedly, an officer who experiences fair supervisory treatment is less likely to engage in activities and behavior that violates agency policies (Wolfe & Piquero, 2011). To establish the empirical status of the organizational justice effect, Wolfe and Lawson (2020) conducted a meta-analysis using 1,924 effect size estimates derived from 143 empirical studies that used 95 independent data sets. They found that organizational justice has a sizeable effect on criminal justice employees' work-related outcomes.

Organizational justice has also been shown to be a significant predictor of training programs' success. For example, treating employees with organizational justice was identified as a significant predictor of employees' training motivation, receptivity, and outcomes (Liao & Tai, 2006; Skarlicki & Latham, 1997). Applying this concept to a police training context

suggests that the development of a workplace environment where officers perceive they are being treated in an organizationally fair manner by their supervisors may make officers more receptive to training programs. In other words, the benefits of organizational justice appear to extend to officers' receptivity to training programs. For instance, in their study of 113 randomly assigned experimental patrol officers who completed a post-training survey, Wolfe and colleagues (2022) found that officers' perceptions of supervisor organizational justice were significantly and positively related to their utility-based receptivity reactions to training (i.e., perceived skill acquisition). In other words, those who believe their supervisor treats officers in an organizationally fair manner are more likely to have a positive reaction to training by holding a perception that the training has improved their skills and knowledge.

The group-value model of procedural justice (Lind & Tyler, 1988) and the relational model of authority (Tyler & Lind, 1992) offer insight into why organizational justice is important to employees like police officers. The basic assumption of these models is that group membership is a powerful aspect of social life. According to Lind and Tyler (1988, p. 231), "humans are by their very nature affiliative creatures, and they devote much of their energy to understanding the functioning of the various groups to which they belong and to participating in social processes within those groups." People seek group membership because groups provide a source of self-validation (Lind & Tyler, 1988; Tyler & Lind, 1992). This leads people to constantly devote themselves to understanding, sustaining, and building social bonds that exist within groups (Tyler & Lind 1992). People tend to establish social relationships even when the presence of a basis for group identification is tenuous. Groups create rules and norms that provide guidelines about appropriate behaviors, attitudes, and values. Thus, the way people think and behave is based on the affective relationships formed within their group and how much respect is tied to those relationships.

Within these established social connections, people are primarily concerned about

procedural nuances because procedures are considered indications of elementary process values in the group, organization, and/or institution that employ procedures (Lind & Tyler, 1988; Tyler & Lind, 1992). In other words, since procedures are considered important symbols of group values, people care more about what happens within the procedure rather than whether the procedure serves some external goal. Both models assert that procedures are ultimately judged in terms of their own qualities rather than in terms of their influence on outcomes or external relationships. This leads to the placement of substantial significance on "the implications of the procedure for one's relationship with the group or authority that enacts the procedure" (Tyler & Lind 1992, p. 140). Thus, if people believe that the procedure indicates that their relationship with the group is positive, these individuals are more likely to perceive the procedure as fair.

Fair procedures matter because they indicate that people have a positive standing within their valued groups. This is important because "people are predisposed to belong to social groups and that they are very attentive to signs and symbols that communicate information about their status within their groups" (Tyler & Lind 1992, p. 141). Information about individuals' standing—whether they hold a high/low-status membership within the group—is communicated during their interactions with those in positions of authority. Therefore, the interpersonal quality of interaction with those in authority communicates information about people's standing within the group and provides them a basis for what can be expected in future interactions with the authorities (Tyler & Lind, 1992). As such, people who perceive that they have been treated fairly and with respect by those in authority are more likely to view themselves as holding high status within the group, which validates their self-identity.

Applying these concepts to a policing context suggests that police executives and supervisors are considered important representatives whose actions speak for the group. The

quality of treatment and decision-making during their encounters can provide important information related to officers' status and membership in the group (Wolfe et al., 2018). Organizationally fair treatment by the supervisors "signals to recipients that they are valued members of a social group, and consequently enhances their sense of belonging" (Lind & Tyler, 1988, p. 92). Officers are more likely to identify with their organizations and buy into their values, goals, and methods when they believe their supervisors use organizational justice (Bradford & Quinton, 2014; Haas et al., 2015; Van Craen & Skogan, 2017). Thus, dignified, respectful, polite treatment by their supervisors increases the likelihood of officers engaging in organizational citizenship behavior and complying with agency rules (Myhill & Bradford, 2013; Tankebe, 2014; Trinkner et al., 2016; Wolfe & Nix, 2016; Wolfe & Piquero, 2011). This creates "a departmental climate where employees believe they are working for something greater than themselves" (Wolfe et al., 2022, p. 206). Officers working in such a departmental climate seek to contribute positively to the effectiveness and ambiance of the organization. Relatedly, in the training context, officers who perceive that they are being treated fairly may be more likely to identify with their agency, perceive that they are valued members of the organization, and show a stronger commitment to organizational goals, which could result in officers taking the training more seriously and display extra effort on training. Thus, it may be the case that officers believe the training has increased their knowledge and skills and be more satisfied with the training if they evaluate their supervisors as organizationally fair. Therefore, based on the literature and the analytical model in Figure 1, the following hypothesis can be derived: Organizational justice will be positively associated with training receptivity (H5).

2.3.3: Training Motivation, Organizational Justice, and Training Receptivity

The problem, of course, is this suggests that employees with low motivation are almost always going to be less successful in training programs compared to those with higher

motivation. Yet, the group-value model of procedural justice (Lind & Tyler, 1988) and the relational model of authority (Tyler & Lind, 1992) also suggest that organizational justice may counteract the impact of low training motivation on training receptivity and outcomes. In a policing context, supervisors are considered the authorities who speak for the group and are symbols of the group (Thibaut & Kelley, 1959; Wolfe et al., 2018). Interpersonal interactions with the officers provide the opportunity for authority figures like the supervisors to recognize their officers' status and membership in the group. In turn, this provides officers a basis for what can be expected in future interactions with their supervisors. In this way, officers' desire to be treated fairly by their supervisors underscores the importance they place on group identity. Organizationally fair treatment from their supervisors communicates to officers that they are valued members of the group, which, in turn, cultivates officers' satisfaction with the job, trust in the agency, and commitment to organizational goals. In this way, organizational justice does not only have a direct effect on beneficial work outcomes, but it has also been shown to protect officers from counterproductive work responses influenced by occupational stressors, the uncertainty surrounding the profession, and anxiety surrounding recent negative publicity (Lawson et al., 2022; Nix & Wolfe, 2016; Wolfe et al., 2018). From an empirical standpoint, this suggests that organizational justice should mitigate (i.e., moderate) the adverse impact of low motivation on training receptivity (i.e., training satisfaction and perceived skill acquisition). Based on this evidence and theoretical frameworks (i.e., the group-value model and the relational model of authority), I hypothesize that officers' perceptions of organizational justice will moderate the negative effect of low training motivation on training receptivity (H6). Specifically, I anticipate that the lower training motivation will have a *less* negative relationship on training receptivity for officers who believe their supervisors are more organizationally fair.

2.3.4: Organizational Justice, Gender, and Training Receptivity

Another issue worth considering is that there has been a move to diversifying police departments by hiring and promoting more female law enforcement officers as a way to help solve some of the current problems (i.e., widespread protests and calls for reform) in policing (Ba et al., 2021; Fantz & Tolan, 2020; Starheim, 2019). Consistently, over the past few decades, gender diversification has been a widely proposed reform effort in American policing (Ba et al., 2021; Clinkinbeard & Rief, 2022; Schuck, 2017; Shjarback & Todak, 2019). Gender diversification can help agencies bring “improvements in their workplace environments via changes to (and in some places a dismantling of) the existing culture, as well as greater employee satisfaction via improved work-life balance and family-friendly policies designed for emergency responders and shift workers” (Todak et al., p. 659). Based on representative bureaucracy theory (Shjarback & Todak, 2019), these changes can restore public trust in the police through increased visibility of diverse representation and improved methods for delivering law enforcement services (Black & Kari, 2010; Bolger, 2015; Schuck, 2018; Schuck & Rabe-Hemp, 2007).

Despite the potential benefits of increasing gender diversity in policing, women are still underrepresented and undervalued in law enforcement, especially in supervisory and leadership positions (Shjarback & Todak, 2019; Silvestri, 2017). Women make up just 12% of the law enforcement officers in the U.S. and only 7% of supervision, 7% of management, and 3% of police leadership positions (Corley, 2022). Not only does women's representation in law enforcement not reflect the female share of the population, but women law enforcement officers also are often faced with numerous barriers (i.e., boys club, adverse/hostile environment, explicit and/or hostile harassment, sexism, skewed physical fitness assessment, double standards, and a lack of support or opportunity) throughout the course of their careers (Dodge et al., 2011; Franklin, 2005; Heidensohn, 1992; Rabe-Hemp,

2008; Shelley et al., 2011; Silvestri, 2018; Todak et al., 2021; 2022).

According to Huff and Todak (2022), "policing is considered a gendered organization with policies and structures that facilitate men's successes over women's" (see also Heidensohn, 1992). Gender discrimination creates general workplace uncertainty (i.e., exclusions of women, prominent glass ceiling, and cultural emphasis on masculinity) for female officers regarding their role and job security (Brown, 1998; Martin, 1994). Due to this uncertainty in their organization, women police officers are more likely to experience anxiety and psychological discomfort than their male counterparts (Lind & Van den Bos, 2002). Women police officers may face general workplace uncertainty as well as uncertainty about their success in training.

In the training context, women police officers are more likely to experience psychological uncertainty due to their belief that they are least likely to succeed in training programs that seem more tailored to male officers (Cordner & Cordner, 2011). Academic training, for example, that teaches masculinity as a requirement for the practice of policing can be a source of women officers' uncertainty about their success in the training program (Dodge et al., 2010; Huff & Todak, 2022; Morash & Haarr, 2012; Starheim, 2019; Prokos & Padavic, 2002; Sasson-Levy & Amram-Katz, 2007; Wexler & Quinn, 1985). In addition to the policing culture that can be problematic for women to navigate, male-centric training programs may create general training uncertainty for female officers, increasing their stress and anxiety about the training. Female officers' uncertainty revolving around the training may also threaten their commitment to the training, thus making them less likely to take training seriously, which may contribute to female officers' dissatisfaction with the training and weaker perceived skill acquisition. Accordingly, the following hypotheses can be derived from the literature: female officers will be less motivated to train (H7), and female officers will demonstrate less training receptivity (H8).

Potential alternative arguments for these hypotheses are that female officers will be more motivated to train and demonstrate more training receptivity. It may be that female employees view training as an opportunity to improve their skills and knowledge, which can make them more competitive and better equipped to take on new responsibilities and roles within their organization (Gayani Fernando et al., 2014). Female employees who see clear opportunities for advancement within their organization may be more motivated to engage in training to develop the skills and competencies they need to advance their careers. They may see training as a way to demonstrate their potential for promotion or to qualify for higher-ranking positions. Another argument could be that female employees may be more motivated to engage in training to prove themselves in a traditionally male-dominated field (Bishu & Headley, 2020; Brumley, 2014). Studies show that female employees often have to be more invested in self-improvement and prove themselves in male-dominated fields like law enforcement in order to gain respect and recognition within their organizations and in the broader law enforcement community (Hunt, 1990; Rabe-Hemp, 2008). By excelling in training and acquiring new skills, female officers may believe they can demonstrate that they are just as capable as their male counterparts and overcome gender stereotypes.

The experience of uncertainty is problematic because such feelings of anxiety and psychological discomfort may result in dissatisfaction (Desai et al., 2011, Diekmann et al., 2004), higher levels of stress (Bordia et al., 2004, Mantler et al., 2005, Nixon et al., 2011, O'Driscoll and Beehr, 1994), and counterproductive work behaviors (Thau et al., 2009, Thau et al., 2007). Studies also demonstrate the negative effect of uncertainty on training receptivity and outcomes (Dodge et al., 2010; Huff & Todak, 2022; Morash & Haarr, 2012; Starheim, 2019; Prokos & Padavic, 2002; Wexler & Quinn, 1985). This line of research demonstrates a negative relationship between psychological uncertainty and employees' pro-organizational attitudes and behaviors. The good news, however, is that organizations and

managers can help their employees cope psychologically with uncertainty. A theoretical framework referred to as “uncertainty management theory” by Lind and Van den Bos (2002) speaks to this possibility.

According to uncertainty management theory, people's feelings of uncertainty are a critical part of organizational life, as they play a role in activating fairness judgement processes (Lind & Van den Bos, 2002). The theory posits that "the fairness judgement process itself changes as a function of uncertainty" (Lind & Van den Bos, 2002, p. 184). In other words, people's fairness judgement seems to matter more under conditions where they feel uncertain about themselves and/or their situation. Conversely, in the presence of certainty, fairness effects become weaker. The key takeaway from this framework is that people use fairness judgements to cope with uncertainties that arise in their lives. For example, when employees are experiencing uncertainty within their workplace (i.e., the likelihood of unprecedented mass layoff, potential change in the company's structure, policies, or culture), they tend to rely more heavily on fairness judgement.

At the foundation of the theory lies the assumption that "fairness judgment processes serve a psychological function, and that the triggering of strong fairness effects is a sign that fairness judgments are being employed to resolve some social or psychological question" (Lind & Van den Bos, 2002, p. 195). This, in turn, suggests that employees' anxiety and psychological discomfort stemming from uncertainty are counterbalanced by more emphasis being placed on organizational authorities' actions that provide evidence of fair treatment. Thus, fairness helps employees manage their uncertainty, reducing uncertainty's negative influence on their behaviors, attitudes, and values. For example, even under conditions of uncertainty, employees who experience fair interpersonal processes are more likely to hold positive perceptions about their organization and take actions that promote the company's benefits (i.e., obey supervisors' directives, and follow company policies).

Fair treatment is psychologically valuable for employees, especially for those in uncertain circumstances, because it provides them with the support needed to manage their uncertainty (Lind & Van den Bos, 2002). Therefore, uncertain employees are more attentive to fairness judgements, which can reduce uncertainty about issues in conflict and help produce numerous beneficial work-related outcomes such as improvements in employees' trust and performance aspirations, support for organizational policies and decisions (Lind et al., 2000; Lind & Van den Bos, 2002; Van den Bos et al., 1998), and job satisfaction (Wolfe et al., 2018). For example, using samples of university students (experiment 1: 132 students & experiment 2: 138 students), Van den Bos and colleagues (1998) conducted two experimental studies to demonstrate that perceptions of procedural justice had a more significant influence on people's reactions to an outcome they received from an authority for those who do not have information about authority's trustworthiness. In another study by Wolfe and colleagues (2018), this framework was applied in a policing context. Using a sample of Border Patrol agents ($N = 868$), they found that organizational justice had a stronger influence on job satisfaction for agents facing workplace uncertainty.

While female officers may be less motivated to train and/or demonstrate less training receptivity, consistent with uncertainty management theory, female officers that feel uncertainty about training will likely focus more attention on evaluations of organizational justice. Like other organizational settings, uncertain female officers will pay more attention to organizational justice issues as they attempt to minimize the anxiety stemming from their beliefs that they are less likely to be successful in training and harbor positive affect toward the training program if they perceive supervisors treat subordinates fairly. Based on this evidence and theoretical frameworks (i.e., uncertainty management theory), I hypothesize that organizational justice will have a stronger relationship with training receptivity among female officers (H9).

2.4: Predictors of Training Motivation and Receptivity

2.4.1: Locus of Control

Locus of control is a psychological concept that is defined as "the degree to which persons expect that a reinforcement or an outcome of their behavior is contingent on their own behavior or personal characteristics versus the degree to which persons expect that the reinforcement or outcome is a function of chance, luck, or fate, is under the control of powerful others, or is simply unpredictable" (Rotter, 1990, p. 489). In other words, an internal locus of control refers to people's perceptions about the amount of control they have (as opposed to external forces that are beyond their influence—an external locus of control) over the outcomes or events that influence their lives (Ajzen, 2002; Ng, Sorensen, & Eby, 2006; Rotter, 1966). Locus of control is a component of personality referring to a unidimensional continuum, which ranges from a strong external at one end of the continuum to a strong internal locus of control at the other end, rather than an either/or categorization (Rotter, 1975).

People with a stronger internal locus of control tend to attribute the outcomes of events in their lives to their own actions. Such individuals believe that much of what happens in life is influenced by their own behavior, which makes them accept the consequences of their actions. An internal locus of control is the belief that people's own actions will result in valued reinforcement. Thus, people who operate with an internal locus of control believe their hard work and self-determination will lead to the achievement of positive outcomes. On the other hand, people with a stronger external locus of control tend to attribute the outcomes of events in their lives to external circumstances (i.e., luck, chance, and/or fate). These individuals tend to believe that events in their lives are primarily a result of external factors and even attribute their own actions to external forces beyond their control. Such people are more likely to blame others rather than themselves for the outcomes they receive. Externality

(external locus of control) refers to the belief that one's own actions will not result in valued reinforcement. It is the belief that reinforcement occurs due to external factors, such as fate, luck, and the influence of powerful others. On the other hand, internality (internal locus of control) is principally related to reinforcement contingent on one's own engagement in work tasks or work effort.

As such, the locus of control is an important predictor of training motivation and achievement (Colquitt et al., 2000; Noe, 1986; Noe & Schmitt, 1986; Wolfe et al., 2022). Trainees with an internal locus of control tend to believe participation in and completion of the training will provide them an opportunity to develop new skills and knowledge needed for better job performance. Thus, trainees with a stronger internal locus of control will believe that training can improve their skills and knowledge. Thus, they tend to be more motivated to train by dedicating a greater amount of attentional effort to training. Conversely, trainees who operate with an external locus of control limit further improvements in their skills and knowledge due to the belief that work-related outcomes are uncontrollable. These individuals believe that training will have little impact on work-related outcomes and are, therefore, less motivated to train. In sum, Rotter (1966) claims that people with an internal locus of control tend to be more motivated and experience more training-related success than people with an external locus of control.

Empirical evidence demonstrates a positive relationship between an internal locus of control and training motivation (Bar-Tal & Bar-Zohar, 1977; Colquitt et al., 2000; Kamdron, 2015; c, 1982; Wolfe et al., 2022). For example, in their systemic review of studies that examined the relationship between locus of control and achievement, Bar-Tal and Bar-Zohar (1977) found that an internal locus of control positively affected motivation, which ultimately had a significant impact on academic performance. Similarly, Colquitt and colleagues' (2000) meta-analysis demonstrated that locus of control was strongly related to motivation to learn.

Specifically, they found that the motivation to learn was higher among people with an internal locus of control. In a police-specific training context, Wolfe and colleagues (2022) found that officers with an internal locus of control tend to be more motivated to train. Thus, based on this evidence and the analytical model in Figure 1, I hypothesize that an internal locus of control will be positively associated with training motivation (H10).

2.4.2: Self-efficacy

According to Bandura (1990, p. 9), "self-efficacy is concerned with people's beliefs that they can exert control over their motivation and behavior and over their social environment." The concept refers to people's belief in their ability to execute behaviors (i.e., engaging in carrying out certain tasks) to reach a specific purpose (Bandura, 1977). Self-efficacy has an impact on many areas of human endeavor (Bandura, 1990; 1997). Self-efficacy determines people's perceived amount of capacity and power to affect situations. In other words, self-efficacy is an individual's belief that he/she has the capability to execute actions necessary to succeed in a specific situation. Indeed, such belief has an impact on individuals' actual amount of ability and power to effectively deal with difficulties (Bandura, 1990; 1997).

People with high self-efficacy tend to consider challenges as tasks that are supposed to be mastered and solved rather than threats to avoid (Bandura, 1990; 1997). A strong sense of self-efficacy promotes people's confidence in their skills and knowledge to carry out certain assignments, enhancing their motivation to produce specific performance goals (Bandura, 1977, 1986, 1997). Looking at self-efficacy, specifically in the context of organizational training, employees with high self-efficacy are more likely to be motivated to participate in and complete training and make accomplishments by improving their skills (Colquitt et al., 2000). For example, Wolfe and colleagues (2022) found that police officers with greater self-efficacy concerning citizen interactions had more motivation to attend a

social interaction training program aimed at improving those skills. Conversely, officers who lack self-efficacy tend to be less motivated to complete training that focuses on skills with which they feel deficient. Thus, based on the literature and the analytical model in Figure 1, I hypothesize that self-efficacy will be positively associated with training motivation (H11).

2.4.3: Organizational Commitment

According to Colquitt and colleagues (2000, p. 679), organizational commitment refers to an “individual’s involvement in and identification with an organization.” Since organizational commitment involves an individual’s psychological attachment to his/her organization, the strength of identification with and involvement in the organization varies (Meyer & Allen, 1991). Three components characterize organizational commitment: (1) acceptance and belief in the organization’s goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization (Mowday, Porter, & Steers, 1982; Reichers, 1985). In other words, an employee’s level of commitment toward his/her organization is a critical factor in determining employee satisfaction, employee engagement, and similar outcomes.

Studies have found a significant relationship between organizational commitment and employee job performance, absenteeism, satisfaction, and turnover (Guzeller & Celiker, 2019; Larson & Fukami, 1984; Koch & Steers, 1978; Hom et al., 1979; Jehanzeb, Rasheed, & Rasheed, 2013; Sungu, Weng, & Xu, 2019; Testa, 2001). For example, Guzeller and Celiker’s (2019) meta-analysis revealed that organizational commitment was significantly and negatively related to turnover intentions. In another study, Sungu and colleagues (2001) used a sample of 398 employees and their supervisors to examine the relationship between organizational commitment and job performance. They found that organizational commitment was most strongly correlated with job performance. The benefits of organizational commitment appear to extend to promoting employees’ extra-role behaviors

that are nonrewarded (Van Dick et al., 2006). Using ten samples across different occupational groups and countries, Van Dick and colleagues (2006) showed that employees feeling a strong sense of organizational commitment were more likely to engage in voluntary prosocial organizational behaviors that were not part of the formal requirements of their job.

In the training context, employees with high levels of organizational commitment are more likely to be motivated to learn and transfer newly learned skills to the job because they believe such behaviors are consistent with organizational goals (Colquitt et al., 2000; Von Treuer et al., 2013). These employees tend to view success in training as helpful not only to themselves but to the organization (Colquitt et al., 2000). Research on employee training and development also has found a significant association between organizational commitment and motivation to learn (Colquitt et al., 2000; Cunningham & Mahoney, 2004; Fecteau et al., 1995; Mylona & Mihail, 2020; Von Treuer et al., 2013). For instance, Fecteau and colleagues (1995) used a survey sample of 967 managers and supervisors and found a positive and significant relationship between organizational commitment and pretraining motivation. Similarly, using data from an online questionnaire completed by 105 employees of various organizations, Von Treuer and colleagues (2013) demonstrated that employees with higher levels of commitment were more motivated to learn from a training program compared to those who were less committed to their organization. Accordingly, based on this evidence and the analytical model in Figure 1, I hypothesize that organizational commitment will be positively associated with training motivation in a police training context (H12).

2.5: Current Study

In order to move the police training literature forward, this dissertation builds on the theoretical framework of training motivation, receptivity, and outcome by Colquitt et al. (2000) and Wolfe et al. (2022). As demonstrated in the analytical model in Figure 1, the current study aims to conduct more comprehensive evaluation research on police training that

explores different predictors of training motivation and receptivity, which ultimately impacts training outcomes. The overarching goal is to advance the theoretical framework of officer training by better understanding why training programs succeed or fail but also provide practical implications for police agencies on how to improve training effectiveness. To that end, this dissertation addresses several gaps in the existing literature, first, by examining the independent and simultaneous effects of training receptivity and supportive of training organizational environment on the transfer of training. Considering the dynamic nature of the transfer process, different training-input factors, including trainee characteristics and work-environment characteristics, play equally significant roles in the transference of training. In an organizational context, the presence of supervisors and peers who are unsupportive of applying newly learned skills and knowledge may hinder the transfer of training even when trainees are satisfied with the training and/or believe they gained skills and knowledge. Thus, in addition to testing the independent effects of individual and work-environment characteristics, it is important to compete these predictors against one another to have a better understanding of the complex and dynamic process of transfer.

Another conspicuous gap in the police training evaluation literature is the neglect of whether training motivation has a longitudinal effect on training receptivity. This is important because the use of longitudinal data for the analyses will not only allow establishing proper temporal ordering of the key variables but also allow examining whether the effect of training motivation fades out over time. To that end, longitudinal data consisting of repeated observations of the same unit of analysis (i.e., police trainees) from two-time points (i.e., the beginning of the training and post-training) will be used to examine the relationship between training motivation and training receptivity. This is the first study of its kind using longitudinal survey data, but research conducted utilizing cross-sectional survey data suggests that officers' training motivation is a significant predictor of receptivity to the

training (Wolfe et al., 2022). Should the same finding emerge with the present sample, it would be an indication of a longitudinal relationship between training motivation and training receptivity.

This dissertation further aims to advance organizational justice literature in several ways. For one, a gap in the existing literature is addressed by exploring whether the perception of organizational justice can protect against the adverse effects of low training motivation on training receptivity. Based on the group-value model of procedural justice (Lind & Tyler, 1988) and the relational model of authority (Tyler & Lind, 1992), it is hypothesized that organizational justice may moderate the relationship between training motivation and training receptivity. Second, the current study builds on uncertainty management theory (Lind & Van den Bos, 2002) to examine whether female police officers who face uncertainty within their organization (gender bias in law enforcement, "boys club" environment) but experience fair treatment by supervisors are more likely to be receptive to training programs. Thus, it is hypothesized that gender will moderate the relationship between organizational justice and receptivity to the training.

Furthermore, the present study utilizes a dataset consisting of South Korean police officers. The purpose is to examine the extent to which the findings from police training research conducted in the US generalize to different cultural contexts.

CHAPTER 3: DATA AND METHODS

3.1: Data and Sample

3.1.1: *Sample*

The Korean National Police Agency (KNPA) is the national police organization in South Korea, and the head of the KNPA is Commissioner General. The KNPA oversees 18 regionally divided local police agencies with jurisdiction over metropolitan cities and provinces. In other words, the local police agencies are not independent of the national police. These local police agencies have control over 258 police stations that are responsible for law enforcement in their regions. Depending on the size of the region (mainly the population of the region), the jurisdiction of the police station may vary from having official power over a district to a whole city. The title used for the head of the police station is ‘the chief of a police station.’ The Central Police Academy is one of the affiliated institutions of the KNPA.

To become a police officer in Korea, an applicant should have eligible qualifications. Because applicants must go through a competitive process to become police officers in Korea, it often takes years to pass the exam. People wanting to become police officers have to compete against other applicants taking the exam and score better on the exam to qualify to become police officers. The competition rate to become a police officer in the year that the cadets in the sample took the exam was about 20:1; approximately 50,000 people applied for the exam to become police officers when the agency was hiring about 2,500 officers. In other words, an applicant had to compete against 20 others taking the exam and score better than these 20 people to pass the exam. While it may take less than one to two years for some candidates, in many cases, it may take up to several years to be selected for the hiring process. In some cases, people drop out of the race after a few years of trials. Thus, people who make it to the academy are those who pass the exam by outscoring others in the exam.

The data used for this study comes from 351 newly hired police officers who received their training at the Central Police Academy in Korea. The data were originally collected by researchers in Korea working with KNPA to evaluate the Central Police Academy and the training programs implemented. The use of this data for the purpose of my dissertation was approved by the Institutional Review Board (IRB) at Michigan State University (MSU). The MSU Human Research Protection Program reviewed my IRB submission and determined that the use of this data (secondary data analysis) for my dissertation is not human subject research.

In accordance with the provisions of Article 17 of the Police Officers Act, the academy was established to provide education and training for those who will be appointed as police officers. In Korea, the Central Police Academy is the only institution that provides education and training to police candidates. The training program is designed to train the cadets over a 34-week period, providing cadets with 18 weeks of in-school education (comprised of taking 630 hours of classes and courses) and 16 weeks of field practice (comprised of receiving 640 hours of field training). During this period, police cadets are trained to acquire the skills and knowledge (i.e., legal training, driving skills, vehicle training, equipment training, firearm training, and use of force, among others) required to properly and effectively conduct general duties (i.e., resolving disputes, attending accidents, enforcing traffic law, and submitting paperwork) and specific tasks (i.e., investigating crime, conducting forensic investigations, and running intelligence operations). The academy is designed to prepare police cadets for the police divisions they will join upon graduation.

The sampling frame for this study is 2,294 police cadets who received training from January 2021 to August 2021. These police cadets received their in-school education from January 2021 to May 2021 and field practice from May 2021 to August 2021. Due to a large number of cadets receiving training at the academy, cadets are assigned to the squads at the

beginning of the academy. The purpose of assigning the cadets to the squads is to effectively manage the cadets while they are receiving training at the academy. There were a total of 63 squads, and approximately 36 cadets were assigned to each squad. A cadet from each squad served as the representative of his/her squad. There were 105 instructors responsible for educating and supervising the cadets. Instructors are usually current or retired law enforcement officers. After completing the in-school portion of academy training, police cadets receive their field practice at the police station they will be assigned upon graduation. Unlike in the US, police cadets in Korea do not receive field training from field training officers. In other words, they are not assigned to a specific officer responsible for training and evaluating them. Instead, cadets receive field training from different officers and supervisors with whom they will work upon graduation. Cadets are assigned to different shifts and perform general duties and specific tasks with their future colleagues and supervisors as if they are working on a regular shift. While the cadets returned to the academy during the last two weeks of the training for the graduation ceremony, due to the COVID-19 pandemic, the cadets of the current study did not return to the academy. Instead, the chief of each police station was responsible for conducting the graduation ceremony for the cadets assigned to his/her station.

3.1.2: Procedure

In order to conduct a longitudinal police training evaluation of the factors associated with officers' motivation to complete training programs, which, in turn, impacts training receptivity and, ultimately, training outcomes, police cadets were surveyed at two different time periods. In order to examine the longitudinal effect of training motivation on training receptivity, the first survey was distributed at the beginning of the academy (during the first few weeks of the beginning of the academy), and the second survey was distributed after graduation (during the first few weeks when the officers were assigned to their workplace

after they were done with both the in-school education and field training). The original research plan was to conduct an in-person paper and pencil survey method. Researchers planned to visit the academy and distribute the survey. However, due to the COVID-19 pandemic, the head of the Central Police Academy limited cadets from having any external contacts, thus making it impossible to administer an in-person survey. Additionally, the academy instructors were reluctant to conduct the paper and pencil survey on their own, expressing concerns that it would increase their workload. Therefore, an online survey was used to collect the data.

A web link and QR code that took the participant to the online survey were provided to each supervisory instructor of the 63 squads. The instructor distributed the link and QR code to each of the squads' online group chats and provided an explanation for the survey. The explanation included information about the purpose of the survey and assured the respondents that participation in the survey was absolutely voluntary and that all answers would be completely anonymous. Most importantly, the participants were informed that they will be invited to participate in a follow-up survey after graduation. The cadets could use the link and QR code to participate in the online survey using their cell phones (smartphones) or computers. In the first wave of the online survey, 1,047 cadets completed the online survey, representing a response rate of 45.6%. In order to track the same cadets, survey participants were asked to leave their cell phone numbers. The participants were encouraged to provide their cell phone numbers by notifying them the cell phone number will be entered automatically into a drawing for Starbucks coffee coupons. Similar to the first wave of the online survey, a web link and QR code were distributed to all the squads' online group chats in the second wave of the online survey. This process resulted in 619 cadets completing the second wave of the online survey, which represents a response rate of 27%. Of those who participated in the first wave (1,047 cadets) and second wave (619 cadets) of the online

survey, 351 cadets completed the online surveys and provided their cell phone numbers for both waves. Therefore, the data used for this study comes from 351 cadets who completed and provided their cell phone numbers for both the first and second waves of the online surveys. Approximately two-thirds of the cadets in the sample were male ($n = 240$, 68.4%). The average age of the sample was 28.05, with 22.5% of respondents ($n = 79$) holding a high school diploma or less, 8.5% of respondents ($n = 30$) holding an associate degree or less, 66.1% of respondents holding a bachelor's degree or less, and 2.9% of respondents studying in graduate school or holding a graduate degree. The average time it took cadets to prepare for the exam (exam preparation period) was 2.50 years. While the average age of the sample is slightly higher than that of the population (26.5), the sample provides a representative picture of the gender distribution in the population (male cadets = 1546, 67.4%). Accordingly, the sample reasonably represents the population from which it was drawn.

3.2: Measures

3.2.1: Introduction

This section of the chapter discusses the measurements used in this study. Refer back to the analytical model in Figure 1. Given that the primary goal of training is to improve employee job performance, the current section starts with a discussion of how job performance was measured. After discussing job performance, I will provide explanations about other measurements (i.e., transfer of training, supportive of training work environment, training receptivity, and organizational justice) that were measured in the second wave of the survey and then conclude by discussing measurements (i.e., training motivation and predictors of training motivation and receptivity) from the first wave of the survey and control variables.

3.2.2: Post-training Survey (Wave 2): Training Outcomes

3.2.2.1: Job Performance. A successful assessment of training effectiveness requires

evaluation research to consider whether employees' participation in and completion of training programs has an impact on employees' job performance. This can be measured in several ways, such as by using employees' self-assessment of the training's impact at work. Self-assessment often involves asking employees whether the training program enhanced their quality of work. Accordingly, in the second wave of the survey, the current study assessed employees' perceptions of their own improvements in *job performance* with the following survey item: "Thanks to the knowledge and skills I learned in training, I could handle my work without a flaw." Participants responded to the statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). This item measured how the application of newly learned skills and knowledge from training had produced beneficial work-related outcomes from the respondents' own perspectives. Higher scores on the item suggest that the responding officer thinks that newly learned skills and knowledge from training help them to better perform their job. Table 1 provides descriptive statistics for all variables used in this study.

3.2.2.2: Transfer of Training¹. Assessing whether employees applied newly learned

¹ Exploratory factor analysis for all the items used to create scales for the second wave of the survey can be found in Appendix A. For the purpose of this study, a principal axis factoring (PAF) analysis with promax rotation and Kaiser normalization was used to explore the underlying factor structure of the post-training survey data. The analysis revealed the presence of three distinct factors, each of which explained a significant amount of variance in the data. While these factors were identified based on the pattern of item loadings, they were not consistent with the theoretical expectations and prior research. Although the factor analysis did not reveal the expected structure in terms of item loadings onto five distinct factors, I believe that the items used are still relevant and useful for capturing the five constructs of interest for the purpose of this study. The decision to use these items to capture five constructs (organizational justice, perceived skill acquisition, training satisfaction, and transfer of training) is based on prior research and theoretical expectations, which provided strong justification for their use. For example, the OJ1 item loaded onto the first factor in which the factor loadings of all the organizational training support items (peer and supervisor support) are substantial. However, considering that the OJ1 item has long been used in the literature to capture the procedural component of organizational justice and the fact that it shows a strong loading on the third factor in which all the other organizational justice items load onto, it will be used to create the scale of organizational justice. Another example is that within factor 2, all the items that were expected to load onto 3 separate factors (transfer of training, training satisfaction, and perceived skill acquisition) demonstrate cross factor loadings. However, considering that these constructs represent different aspects of training (i.e., transfer of training – training outcome, training satisfaction – affective reaction, and perceived skill acquisition – utility reaction) and there is a well-established history in the literature of using these specific items to measure each of the constructs, it is important to ensure that the items are used to measure the constructs they are intended to assess. Thus, in this study, the items will be used to measure the intended constructs in line with the previous literature and theoretical expectations.

Table 1. Descriptive Statistics

Variables	Mean	SD	Min	Max
Wave 2				
<i>Training Outcomes:</i>				
Job Performance	3.398	1.134	1	5
Transfer of Training	7.043	1.930	2	10
<i>Supportive of Training Work Environment</i>				
Organizational Training Support	29.994	7.274	8	40
<i>Training Receptivity</i>				
Training Satisfaction	12.974	3.743	4	20
Perceived Skill Acquisition	7.194	1.852	2	10
<i>Organizational Justice</i>	23.000	5.363	6	30
Wave 1				
<i>Training Motivation</i>	21.838	2.987	10	25
<i>Predictors of Training Motivation and Receptivity</i>				
Internal Locus of Control	20.268	2.369	13	25
Self-efficacy	19.664	3.504	7	25
Organizational Commitment	25.453	3.703	12	30
<i>Control Variables</i>				
Female (1 = Yes, 0 = No)	.316	–	0	1
Education	2.493	.871	1	4
Age	28.054	3.898	20	40
Exam Preparation Period	2.501	1.766	1	10

skills and knowledge from training to the job is important. Without the transference of the learning to the actual work setting, it is difficult to assess whether the implementation of the training program has achieved the intended training goals. Accordingly, in the second wave of the survey, the current study used two survey items to measure employees' application of newly learned skills and knowledge to the job: "At work, I am actually using the knowledge

and skills I learned in training” and “I constantly try to apply the knowledge and skills I learned in training to my work.” Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). This is consistent with how previous organizational behavior studies have operationalized the transfer of training (Blume et al., 2010). The items were combined into an additive *job performance* scale and coded so higher scores suggest that the responding officer actually applied the skills and knowledge they have learned from the training to their actual work setting ($r = .698$).

3.2.3: Post-training Survey (Wave 2): Supportive of Training Work Environment

The first predictor of transfer of training in my model is supportive of training work environment. Cadets assigned to new work after completing the training will face an environment that either does or does not appreciate the training. When the work environment is supportive of the training, employees may feel more welcome to apply newly learned skills and knowledge from training to the job. Consistent with Colquitt et al.’s (2000) framework, two sets of questions, peer support and supervisor support, were used to capture a supportive of training work environment. In the second wave of the survey, the current study assessed peer support with three survey items: “My peers compliment me when I apply my training to my job,” “Peers help me utilize newly learned knowledge and skills,” and “My peers are ready to embrace new ideas.” Subsequently, in the second wave of the survey, supervisor support was assessed with five survey items: “My supervisor supports his/her officers in applying newly learned skills and knowledge to the job,” “My supervisor teaches his/her officers how to apply my training knowledge to my job,” “My supervisor considers it important for his/her subordinates to be trained,” “My supervisor makes his/her officers participate in the training to develop their skills and knowledge,” “My supervisor encourages me to apply newly learned knowledge and skills to my work.” Participants responded to each

statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). Eight items were combined into an additive *organizational training support* scale with higher scores indicating a respondent feels the organization (i.e., supervisors and peers) are more supportive of training programs and experiences. For organizational training support, principal-axis factoring (PAF) showed the items loaded on a single factor (eigenvalue = 6.283, factor loadings > .826), and Cronbach's alpha showed the items had strong internal consistency ($\alpha = .961$).

3.2.4: Post-training Survey (Wave 2): Training Receptivity

The second predictor of transfer of training in the theoretical model is training receptivity. Consistent with Colquitt et al.'s (2000) and Wolfe et al.'s (2022) conceptualization of training receptivity, respondents were asked questions intended to capture affective reaction (i.e., training satisfaction) and utility reaction (i.e., perceived skill acquisition). It is important to examine employees' affective and utility reactions to training "because they represent employees' overall receptivity to a training program (Wolfe et al., 2000, p. 213). Measuring affective reactions involves capturing whether an employee was satisfied with the training. Accordingly, in the second wave of the survey, the current study used four survey items to measure how much employees enjoyed the training, whether they felt engaged, whether the delivery methods were appropriate, whether they found the training content valuable, and whether the training was worth the time: "Overall, I am satisfied with the training," "The training satisfied the expectation that I had for the training," "The training reflects the necessary contents of the task I will be in charge of," and "The number of courses offered in training was appropriate." Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). PAF showed the items loaded on a single factor (eigenvalue = 2.766, factor loadings > .814), and Cronbach's alpha showed the items had strong internal consistency ($\alpha = .851$). As such, the

items were used to create an additive *training satisfaction* index with higher scores indicating greater satisfaction with the value, method, and time required for the training.

Next, measuring utility reactions involves capturing whether an employee perceived skill acquisition—how much the employee perceives that the training has improved his/her knowledge, skills, and abilities. In the second wave of the survey, the current study assessed employees' perceived skill acquisition with two survey items: "Through the training, I learned the skills and knowledge that are needed for police work" and "Participation in the training served as an opportunity to acquire skills and knowledge necessary for specific tasks." Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). The items were combined into an additive *perceived skill acquisition* scale and coded so higher scores suggest that the responding officer believed the training increased his/her knowledge, skills, and abilities ($r = .615$).

3.2.5: Post-training Survey (Wave 2): Organizational Justice

According to Colquitt et al.'s (2000) and Wolfe et al.'s (2022) framework, employees' perceptions of supervisor fairness are an important predictor of employees' receptivity to training programs. Consistent with their framework, the analytical model in the current study proposes that officers who believe they are treated in an organizationally fair manner by their supervisors are more likely to be receptive to training programs. Accordingly, in the second wave of the survey, participants were asked the following six questions, which capture the four main components of organizational justice (i.e., distributive, procedural, interpersonal, and informational): "My agency's policies are designed to allow employees to have a say in agency decisions (i.e., assignment changes)" (procedural), "Command staff considers employees' viewpoints" (procedural), "Command staff treats employees with respect" (interpersonal), "Command staff clearly explains the

reasons for their decisions” (informational), “My agency’s policies regarding internal decisions (i.e., promotion, discipline) are applied consistently” (distributive), and “If you work hard, you can get ahead at this agency” (distributive). Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). These items were adapted from prior organizational justice research (Bradford et al., 2014; Colquitt, 2001; Wolfe and Lawson, 2020; Wolfe et al., 2018). PAF showed the items loaded on a single factor (eigenvalue = 4.849, factor loadings > .842), and Cronbach's alpha showed the items had strong internal consistency ($\alpha = .952$). As such, the items were used to create an additive *organizational justice* index with higher scores indicating a higher perception of organizational justice.

3.2.7: Beginning of Academy (Wave 1)²: Training Motivation

The second predictor of training receptivity in the analytical model in the current study is training motivation. According to Wolfe and colleagues (2022, p. 212), officers’ training motivation “can be measured in several ways such as by capturing the direction or intensity of attitudes concerning training” (see also Colquitt et al., 2000). Consistent with their definition, in the first wave of the survey, the current study captured officers’ training motivation with five survey items: “I will try to learn as much as possible in training,” “I will try to learn more from the training than other trainees,” “The purpose of the training is to learn the knowledge and skills necessary to become a police officer,” “Through the training, I want to improve the knowledge and skills needed as a police officer,” and “I will try harder if

² Exploratory factor analysis for all the items used to create scales for the first wave of the survey can be found in Appendix A. For the purpose of this study, a principal axis factoring (PAF) analysis with promax rotation and Kaiser normalization was used to explore the underlying factor structure of the beginning of academy survey data. The analysis revealed the presence of four distinct factors, each of which explained a significant amount of variance in the data. These factors were determined based on the pattern of item loadings, which indicated that certain items were more strongly associated with one factor than with others. The use of promax rotation allowed for correlations between factors, and the Kaiser normalization method helped to identify factors with eigenvalues greater than one. The four factors that emerged from this analysis were consistent with prior research and theoretical expectations, and were labeled as training motivation, organizational commitment, self-efficacy, and internal locus of control.

there is something I do not understand in training.” Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). This is consistent with how previous organizational behavior research has operationalized training motivation (Colquitt et al., 2000; Mathieu & Martineau, 1997). PAF showed the items loaded on a single factor (eigenvalue = 3.789, factor loadings > .840), and Cronbach's alpha showed the items had strong internal consistency ($\alpha = .919$). As such, the items were used to create an additive *training motivation* index with higher scores indicating more motivation to train.

3.2.7: Beginning of Academy (Wave 1): Predictors of Training Motivation and Receptivity

3.2.7.1: Internal Locus of Control. Consistent with Colquitt et al.'s (2000) and Wolfe et al.'s (2022) framework, the first predictor of training motivation in the analytical model in the current study is officers' locus of control. Employees with an internal locus believe that investing time and effort in certain things will provide them an opportunity to obtain favorable outcomes. Accordingly, officers who have an internal locus of control may be more motivated to train. Thus, in the first wave of the survey, the following five survey items were asked: “I can anticipate difficulties and take action to avoid them,” “My mistakes and problems are my responsibility to deal with,” “Becoming a success is a matter of hard work. Luck has little or nothing to do with it,” “I believe a person can really be the master of his fate,” and “I am confident of being able to deal successfully with future problems.” Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). These items were consistent with the locus of control literature (Colquitt et al., 2000; Noe, 1986; Noe & Schmitt, 1986; Rotter, 1990). For this scale, the items loaded on a single factor (eigenvalue = 2.304, PAF factor loadings > .631). The items had strong internal consistency ($\alpha = .702$) and, therefore, were combined into an additive *internal locus of control* index with higher scores signifying that

the respondent believes they control the outcomes of events that influence. On the other hand, lower scores on this scale mean that the officer has an external locus of control (the officer who holds a belief that outcomes of events in their life as a result of external forces beyond their control).

3.2.7.2: Self-efficacy. Self-efficacy is the second predictor of training motivation in the current study's analytical model. This predictor variable concerns people's belief in their ability to execute behaviors to reach a specific purpose. Accordingly, in the first wave of the survey, the current study used the following five survey items to measure officers' confidence in their skills and knowledge to carry out certain assignments, enhancing their motivation to produce specific performance goals: "I am confident that with my training, (1) I could make an arrest involving a violent suspect when I become a police officer, (2) I could carry out a variety of police duties when I become a police officer, (3) I will be able to accurately create police reports about my activities when I become a police officer, (4) I will be able to effectively use my police equipment to interact with suspects when I become a police officer, and (5) I will be able to overcome problems common to police work when I become a police officer. Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). These items were adapted from the broader self-efficacy and training evaluation literatures to fit the current police-specific training context (Ajzen, 2002; Bandura, 1990; Colquitt et al., 2000). PAF showed the items loaded on a single factor (eigenvalue = 3.858, factor loadings > .795), and Cronbach's alpha showed the items had strong internal consistency ($\alpha = .926$). As such, the items were used to create an additive *self-efficacy* index with higher scores corresponding with greater self-efficacy with the training.

3.2.7.3: Organizational Commitment. The final predictor of training motivation in the analytical model is organizational commitment. Employees with high levels of

organizational commitment hold a belief that success in training is helpful for themselves and their organizations. Thus, they tend to be more motivated to learn and transfer learning to the job, considering that this behavior is consistent with organizational goals (Colquitt et al., 2000; Von Treuer, McHardy, & Earl, 2013). Accordingly, in the first wave of the survey, the following six items are used to capture organizational commitment: “I identify strongly as a member of my organization,” “I feel attached to my organization,” “My job is very meaningful to me,” “I am proud to tell others that I am part of this organization,” “This organization is like a family, and I am one of them,” and “I hope to stay with this job until retirement.” Participants responded to each statement on a 5-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree). For this scale, the items loaded on a single factor (eigenvalue = 3.956, PAF factor loadings > .747) and had strong internal consistency ($\alpha = .894$). Therefore, the items were combined into an additive *organizational commitment* index with higher scores signifying that the respondent holds a stronger attachment to his or her organization.

3.2.8: Officer Gender

The current study centered attention on the potential differences between male and female officers. Accordingly, the current study measured respondent gender with a binary variable coded one if the respondent was *Female* (0 = Male).

3.2.9: Control Variables

Previous studies have identified that employee demographic differences could produce differences in training-related outcomes (Colquitt et al., 2000; Wolfe et al., 2022). Thus, I measured the officer’s *education* (an ordered categorical variable, 1 = high school diploma or less, 2 = associate degree or less, 3 = bachelor’s degree or less, and 4 = some graduate school or higher) and *age* in years. Another variable controlled for in the current study was the *exam preparation period* (i.e., the time it took cadets to prepare for the exam)

measured in years.

3.3: Analytical Strategy

Twelve research hypotheses will be examined in this dissertation. They are as follows:

- H1: Transfer of training will be positively associated with job performance.
- H2: Supportive of training work environment will be positively associated with the transfer of training.
- H3: Training receptivity—measured with training satisfaction and perceived skill acquisition—will be positively associated with the transfer of training.
- H4: Training motivation will have a positive and longitudinal effect on training receptivity.
- H5: Organizational justice will be positively associated with training receptivity.
- H6: Organizational justice will moderate the negative effect of low training motivation on training receptivity.
- H7: Female officers will be less motivated to train.
- H8: Female officers will demonstrate less training receptivity.
- H9: Organizational justice will have a stronger relationship with training receptivity among female officers.
- H10: Internal locus of control will be positively associated with training motivation.
- H11: Self-efficacy will be positively associated with training motivation.
- H12: Organizational commitment will be positively associated with training motivation.

The first section of the results chapter examines the effect of transfer of training on job performance while controlling for all other variables. Ordinary least squares (OLS)

regression is used to estimate the effect of training transfer on job performance. As mentioned above, it is hypothesized that the transfer of training will be positively associated with job performance (H1). The second section of the results chapter investigates the independent and simultaneous effects of training receptivity and work environment characteristics on training outcomes. A series of three regression models are used to examine the independent and simultaneous effects. Model 1 examines the independent impact of the supportive of training work environment (i.e., peer support and supervisor support) on the transfer of training by excluding variables related to training receptivity. Model 2 estimates whether measures of training receptivity (i.e., training satisfaction and perceived skill acquisition) independently and significantly impact training transfer by excluding the supportive of training work environment measures. Finally, Model 3 simultaneously includes measurements of supportive of training work environment and training receptivity as predictors of training transfer, holding all else constant. Analyzing the data in this fashion will make it possible to determine the simultaneous effect of supportive of training work environment and training receptivity on the transfer of training (H2 and H3).

The third section of the analyses investigates whether gender (female officer), training motivation, and organizational justice are associated with training receptivity, whether organizational justice moderates the relationship between training motivation and training receptivity, and whether gender moderates the effect of organizational justice on training receptivity. A series of five regression models will be used to address these questions. In the first model, the effect of training motivation on training receptivity will be examined, while controlling for gender and excluding organizational justice from the model. The second model examines the effect of organizational justice on training receptivity while controlling for gender and excluding training motivation from the model. The third model simultaneously examines the effects of training motivation and organizational justice on

training receptivity. This process will make it possible to explore whether the effect of training motivation at the beginning of the training has a significant impact on training receptivity after the end of the training while controlling for other important predictors (i.e., gender and organizational justice) of training receptivity (H4, H5, and H8). The fourth model involves examining whether organizational justice moderates the relationship between training motivation and training receptivity. To do so, an interaction term between organizational justice and training motivation is constructed. Each variable that defines the product is mean-centered before creating the interaction term (Aiken et al., 1991). This allows the current study to determine if organizational justice can serve as a protective factor against the negative effects associated with low training motivation on training receptivity (H6). The final model examines whether gender moderates the effect of organizational justice on training receptivity. To do so, an interaction term between gender and organizational justice was constructed. Again, organizational justice was mean-centered before creating the interaction term (Aiken et al., 1991). Overall, this allows the current study to determine if organizational justice will have a stronger relationship with training receptivity among female officers (H9).

The final section of the results chapter explores the predictors of training motivation. Specifically, the analysis estimates whether gender (female officer), internal locus of control, self-efficacy, and organizational commitment are associated with training motivation. As mentioned above, it is hypothesized that internal locus of control, self-efficacy, and organizational commitment will be positively associated with training motivation (H10, H11, and H12). On the other hand, female officers will be less motivated to train (H7).

3.4: Model Diagnostics

Pearson's correlation coefficients are valuable in providing information about the relationship between variables, which can be beneficial in the construction of multivariate

models. Table 2 shows the Pearson's correlation coefficients between all the variables used in the regression models in this study. Most of the correlation coefficients fell below the traditional threshold of an absolute value of 0.70, which is used as a threshold indicative of potential collinearity (Tabachnick & Fidell, 2007). However, some of the correlation coefficients were above 0.70. The problem with correlation coefficients higher than 0.70 is that they can be an indicator of multicollinearity in regression analyses. Therefore, after fully estimating all of the ordinary least-squares regression (OLS) models, an additional model diagnostic was implemented to determine whether there were any harmful levels of collinearity that could bias parameter estimates. The highest variance inflation factor (VIF) was 3.93, which is below the traditionally accepted threshold of 4 (Tabachnick & Fidell, 2007). In summary, while correlation coefficients above 0.70 indicated the potential presence of multicollinearity, all VIFs falling below the 4 threshold demonstrate that harmful levels of collinearity do not appear to be present in the OLS models presented below.

Table 2. Pearson's Correlation Coefficients of Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Job Performance	1													
2. Transfer of Training	.882**	1												
3. Organizational Training Support	.625**	.623**	1											
4. Training Satisfaction	.766**	.749**	.546**	1										
5. Perceived Skill Acquisition	.824**	.823**	.621**	.770**	1									
6. Organizational Justice	.631**	.639**	.773**	.556**	.635**	1								
7. Training Motivation	.145**	.172**	.189**	.141**	.177**	.170**	1							
8. Internal Locus of Control	.205**	.229**	.231**	.172**	.213**	.204**	.430**	1						
9. Self-efficacy	.247**	.276**	.238**	.242**	.291**	.241**	.557**	.497**	1					
10. Organizational Commitment	.138**	.177**	.199**	.183**	.186**	.201**	.352**	.474**	.437**	1				
11. Female	-.164**	-.107*	-.034	-.107*	-.065	-.087	.008	-.105*	-.080	.009	1			
12. Age	-.060	-.079	-.093	-.080	-.066	-.052	.001	-.024	-.061	-.088	-.257**	1		
13. Education	-.075	-.086	-.023	-.091	-.066	-.089	-.041	-.075	-.018	-.088	.136*	.160**	1	
14. Exam Preparation Period	-.100	-.038	-.163**	-.111*	-.072	-.071	.001	-.047	-.035	.128*	.019	.446**	-.087	1

Note: * $p < .05$ ** $p < .01$

CHAPTER 4: RESULTS

4.1: Predicting Training Outcomes

4.1.1: Predicting Job Performance

Table 3 used Ordinary Least Squares (OLS) regression to explore the effect of training transfer on job performance while controlling for all the other measured variables. The analysis reveals that the F -test for the regression model was significant ($F = 124.892, p < .001$), suggesting that the independent variables included in the model were collectively useful in predicting the dependent variable and that at least one of the independent variables had a statistically significant relationship with the dependent variable. The analysis also reveals that the R^2 value for the regression model is .828, indicating that 82.8% of the variation in the dependent variable can be explained by the independent variables included in the model.

Providing support for H1, the unstandardized regression coefficient (b) suggests that training transfer was associated with job performance in the expected direction ($b = .323, p < .001$). This finding indicates that respondents who believed they applied newly learned skills and knowledge to their job were more likely to perceive that training enhanced their job performance. Other variables that exerted significant effects were training satisfaction, perceived skill acquisition, and female. While training satisfaction ($b = .044, p < .001$) and perceived skill acquisition ($b = .133, p < .001$) were positively and significantly associated with job performance, female ($b = -.169, p < .01$) was negatively and significantly related to job performance. Respondents who felt satisfied with the training and perceived that training had improved their skills and knowledge tended to believe that the training improved their job performance. However, female respondents were less likely than their male counterparts to believe that the training program helped them to better perform their job. A comparison of the standardized regression coefficients shows that training transfer had the strongest effect

on job performance ($\beta = .549$). In fact, this effect was several times larger than perceived skill acquisition ($\beta = .216$), training satisfaction ($\beta = .145$), and female ($\beta = -.069$)³.

Table 3. Predicting Job Performance^a (N = 351)

	<i>b</i> (se)	p-value	β
Training Transfer	.323 (.026)	.000	.549
Organizational Training Support	.008 (.006)	.157	.054
Training Satisfaction	.044 (.011)	.000	.145
Perceived Skill Acquisition	.133 (.028)	.000	.216
Organizational Justice	.005 (.008)	.571	.022
Training Motivation	-.002 (.011)	.829	-.006
Internal Lous of Control	.003 (.014)	.839	.006
Self-efficacy	-.005 (.010)	.646	-.014
Organizational Commitment	-.009 (.009)	.299	-.029
Female	-.169 (.060)	.005	-.069
Age	.003 (.008)	.726	.010
Education	.006 (.031)	.849	.005
Preparation Period	-.023 (.018)	.188	-.036
Intercept	-.428 (.348)	.220	—
<i>F</i> -test (p-value)	124.892 (.000)		
<i>R</i> ²	.828		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

³ To investigate the consistency of the effects observed in the ordinary least squares (OLS) regression, a generalized linear model (GLM) was utilized to perform ordinal logistic regression. The purpose of this analysis was to determine if the predictors that showed significant effects in the OLS regression would also maintain their significance when assessed within the framework of GLMs, specifically employing ordinal logistic regression. By employing GLMs, including ordinal logistic regression, I sought to account for the ordinal nature of the dependent variable and evaluate whether the predictors would retain their significance. This analysis considered the cumulative probabilities of each category and estimated the impact of the predictors on the odds of belonging to a higher category relative to a reference category. After conducting the ordinal logistic regression, the results were compared to those obtained from the previous OLS regression analysis. The objective was to determine if the predictors that demonstrated significance in the OLS regression analysis continued to exhibit significance in the context of ordinal logistic regression. Remarkably, the findings revealed that the predictors that were significant using OLS regression remained significant even when assessed using ordinal logistic regression. This consistency suggests that the effects observed in the OLS regression analysis were robust and in agreement with the GLMs approach, specifically ordinal logistic regression. This outcome provides confidence in the stability and reliability of the predictors' effects observed in the OLS regression. By employing the more appropriate statistical framework of ordinal logistic regression within the GLMs framework, I confirm the significance of the predictors across both regression methods.

4.1.2: Predicting Training Transfer

This section examined the independent and simultaneous effects of training satisfaction, perceived skill acquisition, and organizational training support. Table 4 provides the results from three OLS equations that regressed training transfer on the key predictor variables and statistical controls. In Model 1, training transfer and control variables were regressed onto the organizational training support. The joint association test reveals that the model provided more explanatory power than would be expected by chance alone ($F = 3.589$, $p < .001$), and the coefficient of multiple determination was moderate ($R^2 = .474$). The unstandardized regression coefficient indicates that organizational training support ($b = .086$, $p < .001$) was significantly and positively associated with training transfer. Offering preliminary support for H₂, this finding suggests that respondents who felt that the organization (i.e., supervisors and peers) were more supportive of training programs and experiences tended to apply new skills and knowledge learned in the academy to the actual job. Two control variables that exerted significant effects on training transfer were organizational justice ($b = .129$, $p < .001$) and self-efficacy ($b = .060$, $p < .05$). Respondents who believed they were treated fairly by their supervisors and believed in their capacity to execute behaviors necessary to produce specific performance goals tended to apply newly learned skills and knowledge to the job.

Table 4. Predicting Training Transfer^a (N = 351)

	Model 1			Model 2			Model 3		
	<i>b</i> (se)	p-value	β	<i>b</i> (se)	p-value	β	<i>b</i> (se)	p-value	β
Organizational Training Support	.086 (.017)	.000	.326	–	–	–	.026 (.012)	.034	.100
Training Satisfaction	–	–	–	.134 (.023)	.000	.261	.131 (.023)	.000	.255
Perceived Skill Acquisition	–	–	–	.532 (.050)	.000	.511	.515 (.051)	.000	.494
Organizational Justice	.129 (.023)	.000	.357	.059 (.013)	.000	.163	.037 (.017)	.030	.102
Training Motivation	-.010 (.032)	.745	-.016	.003 (.023)	.883	.005	.001 (.022)	.956	.002
Internal Lous of Control	.039 (.040)	.332	.048	.045 (.029)	.119	.055	.041 (.029)	.153	.050
Self-efficacy	.060 (.029)	.039	.109	.005 (.021)	.802	.009	.007 (.021)	.743	.012
Organizational Commitment	-.023 (.025)	.364	-.044	-.024 (.018)	.187	-.046	-.025 (.018)	.160	-.048
Female	-.296 (.178)	.097	-.071	-.188 (.127)	.138	-.045	-.204 (.126)	.107	-.049
Age	-.040 (.024)	.095	-.082	-.033 (.017)	.054	-.067	-.034 (.017)	.051	-.068
Education	-.033 (.093)	.724	-.015	.024 (.066)	.718	.011	.015 (.066)	.819	.007
Preparation Period	.097 (.052)	.062	.089	.087 (.037)	.018	.080	.098 (.037)	.008	.090
Intercept	1.398 (1.028)	.175	–	.351 (.734)	.632	–	.371 (.730)	.612	–
<i>F</i> -test (p-value)	3.589 (.000)			85.210 (.000)			79.307 (.000)		
<i>R</i> ²	.474			.734			.738		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

In Model 2, training transfer was regressed onto two reaction measures, affective (i.e., training satisfaction) and utility (i.e., perceived skill acquisition) reactions, along with control variables. The model was statistically significant and accounted for roughly 73 percent of the variation in training transfer ($F = 85.210$, $p < .001$; $R^2 = .734$). The unstandardized regression coefficients indicate that both affective and utility reactions were significantly and positively related to training transfer (training satisfaction: $b = .134$, $p < .001$; perceived skill acquisition: $b = .532$, $p < .001$). Providing preliminary support for H₃, this finding suggests that respondents, who were more satisfied with the training program and believed that they had acquired new skills and knowledge as a result of the training program, tended to apply what they learned in training to their job. Among the control variables, organizational justice remained a significant predictor of training transfer, self-efficacy lost its significance, and the preparation period became a significant predictor of training transfer. This indicates that respondents who believed they were treated organizationally fairly by their supervisor and took more time to prepare for the exam were more likely to believe that they transferred their learning to the job.

Model 3 provides the regression estimates from the fully saturated training transfer equation. Training transfer was regressed simultaneously onto organizational training support, training satisfaction, and perceived skill acquisition along with control variables. The model was statistically significant and accounts for about 74 percent of the variation in training transfer ($F = 79.307$, $p < .001$; $R^2 = .738$). The results demonstrate that organizational training support ($b = .026$, $p < .05$), training satisfaction ($b = .131$, $p < .001$), and perceived skill acquisition ($b = .515$, $p < .001$) were positively and significantly associated with training transfer, which suggests that each of these concepts have a significant impact on respondents' application of new skills and knowledge learned in training to the actual job (i.e., this evidence supports Hypotheses 1, 2, and 3). However, the

finding demonstrates that perceived skill acquisition dominated the model, followed by training satisfaction, as evidenced by the size of the standardized regression coefficients (perceived skill acquisition: $\beta = .494, p < .001$; training satisfaction: $\beta = .255, p < .001$) and the reduction in the magnitude of organizational training support coefficient (down 69.3 percent from Model 1: $\beta = .326 \rightarrow \beta = .100$). The test of equality of coefficients (Clogg et al., 1992) shows that this reduction was statistically significant at the $p < .05$ level, which is evidence that the training receptivity measures partially confound the effect of organizational training support on training transfer. Among the control variables, organizational justice ($b = .037, p < .05$) and preparation period ($b = .098, p < .01$) retained statistical significance, which indicates that these concepts were closely associated with training transfer for respondents in this study.

4.2: Predicting Training Receptivity

4.2.1: Predicting Training Satisfaction

Tables 5 and 6 provide the regression estimates for each training receptivity outcome variable, respectively (i.e., training satisfaction and perceived skill acquisition). These OLS regression models aim to explore the longitudinal effect of training motivation (measured at T₁) on training receptivity (measured at T₂) while controlling for organizational justice and the control variables. Starting with Table 5, three OLS equations were used to explore the independent and additive effects of training motivation and organizational justice on training satisfaction along with the control variables. The joint association tests reveal that each of the three models explained more of the variation in training satisfaction than could be expected by chance alone, and the coefficients of multiple determination ranged from low to moderate (i.e., R^2 ranges from .094 to .333). In Model 1, training satisfaction was regressed onto training motivation along with the control variables. Contrary to H₄, the unstandardized regression coefficient indicates that training motivation was not significantly related to

training satisfaction ($b = -.005, p > .05$). The only variable that exerted a significant effect was self-efficacy ($b = .189, p < .05$), which indicates that respondents with a belief in their own ability to perform a specific task and achieved a particular goal tended to demonstrate high levels of satisfaction with the training.

In Model 2, training satisfaction was regressed onto organizational justice. The unstandardized regression coefficient indicates that organizational justice was positively and significantly related to training satisfaction ($b = .358, p < .001$). Providing preliminary support for H₅, this finding suggests that respondents who believed they were treated fairly by their supervisors tended to be more satisfied with the training. Compared to Model 1, self-efficacy lost its statistical significance.

In Model 3, training satisfaction was regressed simultaneously onto training motivation and organizational justice along with the control variables. The results demonstrate that organizational justice ($b = .358, p < .001$) was positively and significantly associated with training satisfaction while training motivation and the control variables were not significantly related to training satisfaction. Taken together, the results from this sample of officers suggest that organizational justice was the only important predictor of training satisfaction in the model (i.e., the evidence supports Hypothesis 5 but does not support Hypothesis 4).

Table 5. Predicting Training Satisfaction^a (N = 351)

	Model 1			Model 2			Model 3		
	<i>b</i> (se)	p-value	β	<i>b</i> (se)	p-value	β	<i>b</i> (se)	p-value	β
Organizational Justice	—	—	—	.358 (.032)	.000	.512	.358 (.032)	.000	.513
Training Motivation	-.005 (.080)	.947	-.004	—	—	—	-.022 (.069)	.745	-.018
Internal Lous of Control	.024 (.102)	.817	.015	-.026 (.086)	.764	-.016	-.021 (.088)	.812	-.013
Self-efficacy	.189 (.073)	.010	.177	.102 (.057)	.075	.096	.111 (.063)	.079	.104
Organizational Commitment	.109 (.064)	.088	.107	.051 (.055)	.351	.050	.052 (.055)	.340	.052
Female	-.681 (.449)	.130	-.085	-.448 (.384)	.244	-.056	-.435 (.387)	.261	-.054
Age	-.018 (.061)	.775	-.018	-.019 (.052)	.715	-.020	-.018 (.053)	.736	-.019
Education	-.312 (.234)	.183	-.073	-.154 (.201)	.444	-.036	-.157 (.202)	.437	-.037
Preparation Period	-.243 (.130)	.062	-.115	-.152 (.112)	.174	-.072	-.153 (.112)	.172	-.072
Intercept	8.228 (2.561)	.001	—	3.413 (2.190)	.120	—	3.562 (.2.240)	.113	—
<i>F</i> -test (p-value)	4.448 (.000)			21.366 (.000)			18.954 (.000)		
<i>R</i> ²	.094			.333			.333		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

Table 6. Predicting Perceived Skill Acquisition^a (N = 351)

	Model 1			Model 2			Model 3		
	<i>b</i> (se)	p-value	β	<i>b</i> (se)	p-value	β	<i>b</i> (se)	p-value	β
Organizational Justice	—	—	—	.206 (.015)	.000	.595	.206 (.015)	.000	.596
Training Motivation	.001 (.040)	.970	.002	—	—	—	-.008 (.032)	.792	-.013
Internal Lous of Control	.046 (.050)	.360	.059	.019 (.040)	.639	.024	.021 (.040)	.611	.026
Self-efficacy	.120 (.036)	.001	.227	.072 (.026)	.006	.136	.075 (.029)	.010	.142
Organizational Commitment	.030 (.031)	.335	.060	-.003 (.025)	.916	-.005	-.002 (.025)	.932	-.004
Female	-.149 (.221)	.502	-.037	-.012 (.177)	.945	-.003	-.007 (.178)	.967	-.002
Age	-.009 (.030)	.777	-.018	-.009 (.024)	.702	-.019	-.009 (.024)	.719	-.018
Education	-.107 (.115)	.356	-.050	-.016 (.092)	.861	-.008	-.017 (.093)	.852	-.008
Preparation Period	-.067 (.064)	.293	-.064	-.015 (.051)	.767	-.014	-.016 (.051)	.762	-.015
Intercept	3.819 (1.262)	.003	—	1.081 (1.007)	.284	—	1.136 (1.030)	.271	—
<i>F</i> -test (p-value)	4.849 (.000)			31.577 (.000)			28.000 (.000)		
<i>R</i> ²	.102			.425			.425		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

4.2.2: Predicting Perceived Skill Acquisition

A similar set of analyses was conducted in Table 6, except with perceived skill acquisition as the dependent variable. Each of the three models in Table 6 provided more explanatory power than could be expected by chance alone, and the coefficients of multiple determination ranged from low to moderate (i.e., R^2 ranges from .102 to .425). Again, contrary to H4, Model 1 in Table 6 reveals that training motivation was not significantly associated with perceived skill acquisition ($b = .001, p > .05$). The only variable that exerted a significant effect was self-efficacy ($b = .120, p < .01$), which indicates that respondents with belief in their capacity to execute behaviors necessary to produce specific performance goals were more likely to believe they gained new skills and knowledge as a result of their academy training. Among the control variables, self-efficacy was the only variable that was significantly associated with perceived skill acquisition and remained a significant predictor of perceived skill acquisition throughout Models 1, 2, and 3. Similarly, offering preliminary support for H5, Model 2 demonstrates that respondents who believed that they were treated in an organizationally fair manner tended to perceive that the academy training helped them learn new skills and knowledge ($b = .206, p < .001$).

Model 3 provides the regression estimates from the fully saturated OLS regression equation. The results reveal that organizational justice ($b = .206, p < .001$) was positively and significantly associated with perceived skill acquisition while training motivation and all the control variables were not significantly related to perceived skill acquisition except for self-efficacy ($b = .075, p < .05$). Taken together, the results from this sample of academy-trained officers suggest that organizational justice and self-efficacy were the only important predictors of perceived skill acquisition in the model (i.e., the evidence supports Hypothesis 5, but does not support Hypothesis 4). Collectively, the findings from Table 5 and 6 suggest that female was not significantly associated with training receptivity (i.e., does not support

Hypothesis 8), training motivation did not have a longitudinal effect on training receptivity (i.e., does not support Hypothesis 4) and organizational justice was strongly associated with training receptivity (i.e., supports Hypothesis 5).

4.3: Predicting Training Motivation

The analysis in Table 7 explored the predictors of training motivation. The model was statistically significant and accounted for roughly 35% of the variation in training motivation ($F = 26.892$, $p < .001$; $R^2 = .354$). The unstandardized regression coefficients indicate that internal locus of control ($b = .224$, $p < .01$) and self-efficacy ($b = .378$, $p < .001$) were positively and significantly associated with training motivation. These results suggest that respondents who believed they controlled the outcomes of events that influenced their lives and believed in their ability to successfully perform a specific task and accomplish a particular goal had more motivation to train. No other variables in the model were significant predictors of training motivation (i.e., the evidence supports Hypotheses 10 and 11 but does not support Hypotheses 7 and 12).

Table 7. Predicting Training Motivation^a (N = 351)

	<i>b</i> (se)	p-value	β
Internal Lous of Control	.224 (.068)	.001	.178
Self-efficacy	.378 (.044)	.000	.444
Organizational Commitment	.064 (.043)	.132	.080
Female	.566 (.301)	.061	.088
Age	.061 (.041)	.135	.080
Education	-.135 (.157)	.391	-.039
Preparation Period	-.046 (.087)	.598	-.027
Intercept	6.760 (1.683)	.000	—
<i>F</i> -test (p-value)	26.892 (.000)		
R^2	.354		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

4.4: Does Organizational Justice Moderate the Effect of Training Motivation on Training Receptivity?

Tables 8 and 9 test whether organizational justice moderates the relationship between training motivation and training receptivity outcome variables, respectively (i.e., training satisfaction and perceived skill acquisition). Starting with Table 8, in order to examine whether organizational justice moderates the effect of training motivation on training satisfaction, the interaction term between organizational justice and training motivation was entered into the equation in Model 3 from Table 5. The joint association test reveals that the model provided more explanatory power than would be expected by chance alone ($F = 17.988, p < .001$), and the coefficient of multiple determination is moderate ($R^2 = .346$). The interaction effect was significantly and negatively associated with training satisfaction ($b = -.025, p < .05$). This suggests that the strength of the relationship between training motivation and training satisfaction depended on how much respondents perceived that they were treated fairly by their supervisors.

Table 8. The Effect of Organizational Justice and Training Motivation on Training Satisfaction^a (N = 351)

	<i>b</i> (se)	p-value	β
Organizational Justice X Training Motivation	-.025 (.010)	.011	-.113
Organizational Justice	.355 (.032)	.000	.508
Training Motivation	-.036 (.069)	.605	-.028
Lous of Control	-.018 (.087)	.841	-.011
Self-efficacy	.122 (.062)	.052	.114
Organizational Commitment	.052 (.054)	.344	.051
Female	-.411 (.384)	.285	-.051
Age	-.016 (.052)	.753	-.017
Education	-.152 (.200)	.447	-.035

Table 8 (cont'd)

Preparation Period	-.151 (.111)	.174	-.071
Intercept	11.044 (2.389)	.000	—
<i>F</i> -test (p-value)	17.988 (.000)		
<i>R</i> ²	.346		

Note: Entries are unstandardized regression coefficients (b), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

To better understand the nature of the moderation effect, Figure 1 provides a graphical depiction of the interaction between organizational justice and training motivation predicting training satisfaction. The graph demonstrates that the intercept for high organizational justice (+1SD) was higher than that of low organizational justice (-1SD). This suggests that respondents' training satisfaction depends on their perceptions of how fairly they were treated by their supervisors, regardless of training motivation. In this way, high levels of organizational justice are associated with more training satisfaction among this sample of police officer trainees regardless of whether they had high or low training motivation.

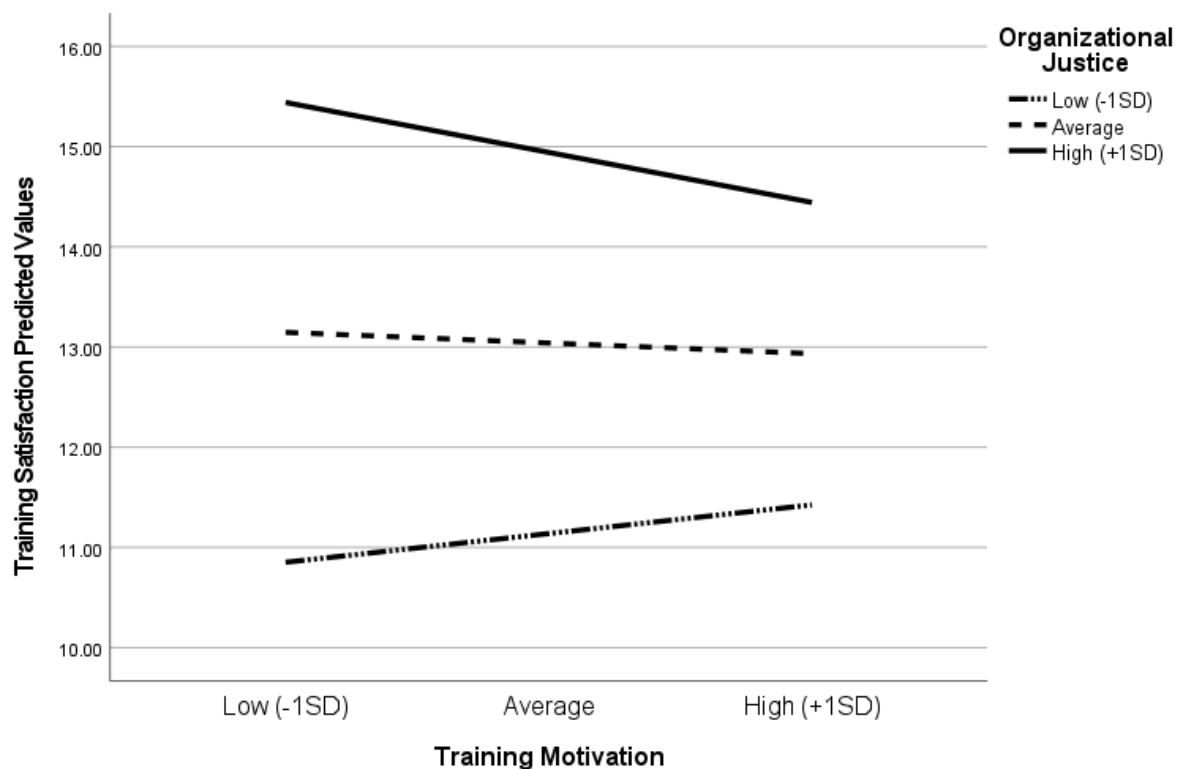


Figure 2. Interaction Effect between Organizational Justice and Training Motivation Predicting Training Satisfaction

Table 9 tests whether organizational justice moderates the relationship between training motivation and perceived skill acquisition. To do so, the interaction term between organizational justice and training motivation was entered into the equation in Model 3 in Table 6. The model in Table 9 was statistically significant ($F = 26.515$, $p < .001$; $R^2 = .438$) and explained about 44 percent of the variation in training satisfaction. The interaction effect was significantly and negatively associated with training satisfaction ($b = -.012$, $p < .05$). This suggests that the strength of the relationship between training motivation and perceived skill acquisition depends on how much respondents perceived that they were treated fairly by their supervisors.

Table 9. The Effect of Organizational Justice and Training Motivation on Perceived Skill Acquisition^a (N = 351)

	<i>b</i> (se)	p-value	β
Organizational Justice X Training Motivation	-.012 (.004)	.005	-.115
Organizational Justice	.204 (.015)	.000	.591
Training Motivation	-.015 (.031)	.633	-.024
Lous of Control	.022 (.040)	.578	.028
Self-efficacy	.081 (.029)	.005	.153
Organizational Commitment	-.003 (.025)	.918	-.005
Female	.005 (.176)	.979	.001
Age	-.008 (.024)	.737	-.017
Education	-.015 (.092)	.871	-.007
Preparation Period	-.015 (.051)	.774	-.014
Intercept	5.555 (1.095)	.000	–
<i>F</i> -test (p-value)	26.515 (.000)		
<i>R</i> ²	.438		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

Figure 2 provides a graphical depiction of the interaction between organizational justice and training motivation, predicting perceived skill acquisition. Similar to Figure 1, the intercept for high organizational justice (+1SD) was higher than that of low organizational justice (-1SD), regardless of training motivation. This tells us that the respondents were more likely to perceive that they had learned new skills and knowledge in the training when they believed that they were treated fairly by their supervisors, despite how motivated they were to train. Again, this finding indicates that organizational justice matters a great deal for police officers in this sample, regardless of their levels of training motivation. Taken together, officers will be more receptive to training as long as they perceive that their supervisors treated them in an organizationally fair manner.

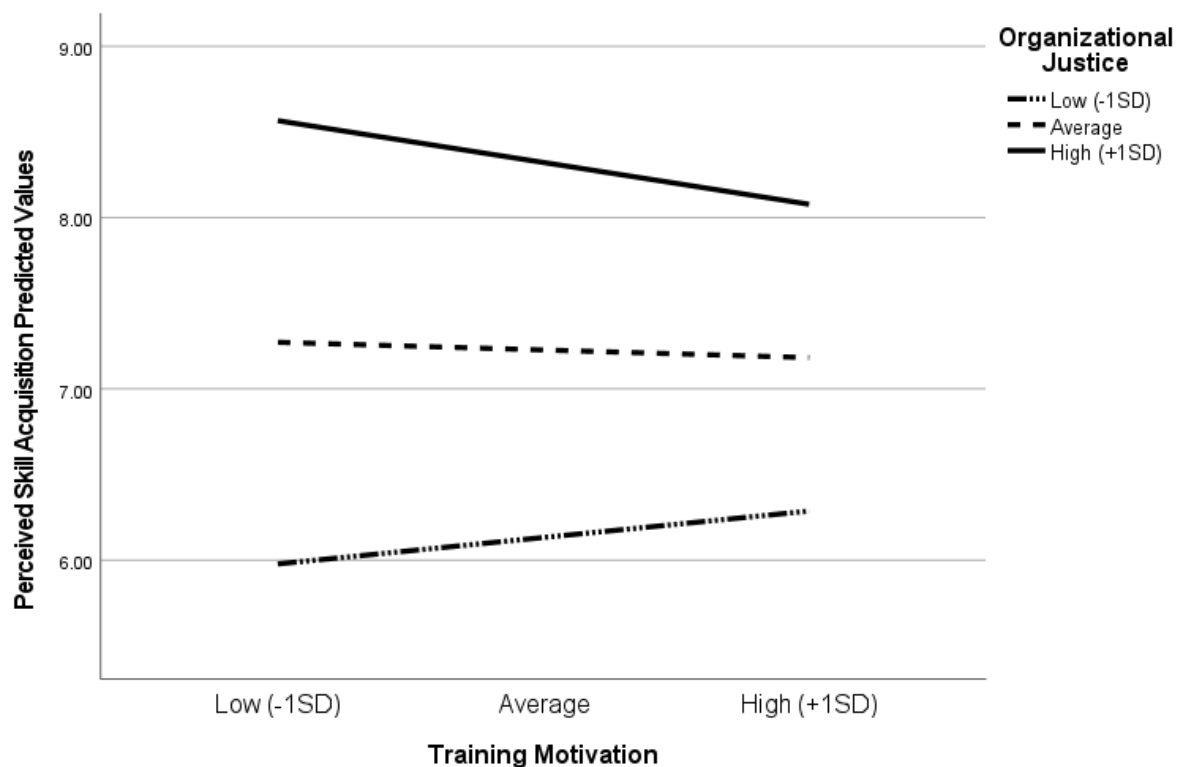


Figure 3. Interaction Effect between Organizational Justice and Training Motivation Predicting Perceived Skill Acquisition

4.5: Does Organizational Justice have a Stronger Relationship with Training

Receptivity among Female Officers?

Tables 10 and 11 test whether the respondent's gender moderates the relationship between organizational justice and the training receptivity outcome variables, respectively (i.e., training satisfaction and perceived skill acquisition). Starting with Table 10, in order to examine whether gender moderates the effect of organizational justice on training satisfaction, the interaction term between gender and organizational justice was entered into the equation in Model 3 in Table 5. The joint association test reveals that the model provided more explanatory power than would be expected by chance alone ($F = 17.748, p < .001$), and the coefficient of multiple determination was moderate ($R^2 = .343$). The interaction effect was significantly and negatively associated with training satisfaction ($b = -.025, p < .05$). This suggests that the strength of the relationship between organizational justice and training

satisfaction depends on an officer's gender.

Table 10. The Effect of Female and Organizational Justice on Training Satisfaction^a (N = 351)

	<i>b</i> (se)	p-value	β
Female X Organizational Justice	-.144 (.065)	.027	-.122
Female	-.485 (.385)	.209	-.060
Organizational Justice	.409 (.040)	.000	.586
Training Motivation	-.014 (.069)	.843	-.011
Lous of Control	-.018 (.087)	.839	-.011
Self-efficacy	.100 (.063)	.112	.093
Organizational Commitment	.047 (.055)	.390	.046
Age	-.018 (.052)	.732	-.019
Education	-.170 (.201)	.398	-.039
Preparation Period	-.148 (.111)	.184	-.070
Intercept	11.891 (2.211)	.000	—
<i>F</i> -test (p-value)	17.748 (.000)		
<i>R</i> ²	.343		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

To have a better understanding of the nature of the moderation effect, Figure 3 provides a graphical depiction of the interaction between gender and organizational justice predicting training satisfaction. The graph demonstrates that the magnitude of the relationship between organizational justice and training satisfaction is most significant for male respondents. In other words, the impact of organizational justice on training satisfaction is weaker for female respondents when compared to their male counterparts (i.e., this evidence does not support Hypothesis 9).

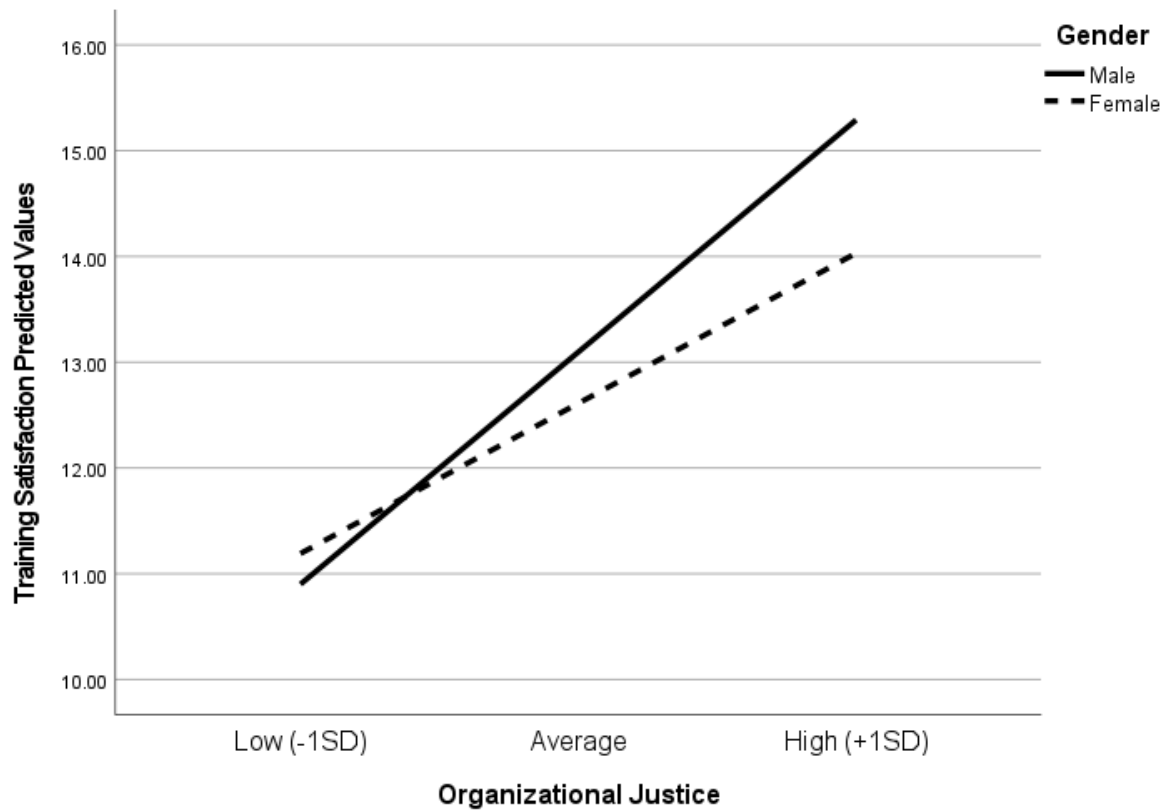


Figure 4. Interaction Effect between Gender and Organizational Justice Predicting Training Satisfaction

Table 9 tests whether gender moderates the relationship between organizational justice and perceived skill acquisition. To do so, the interaction term between gender and organizational justice was entered into the equation in Model 3 in Table 6. The model in Table 11 was statistically significant ($F = 25.672$, $p < .001$; $R^2 = .430$) and explained about 43 percent of the variation in perceived skill acquisition. Contrary to H_9 , the interaction effect was not significantly related to perceived skill acquisition ($b = -.053$, $p > .05$). Taken together, while the results from Tables 10 and 11 suggest that the interaction effect between gender and organizational justice was significant only on training satisfaction, contrary to Hypothesis 9, organizational justice had a stronger relationship with training satisfaction among male officers. This is counter to the theoretical expectations outlined in Chapter 2.

Table 11. The Effect of Female and Organizational Justice on Perceived Skill Acquisition^a
(N = 351)

	<i>b</i> (se)	p-value	β
Female X Organizational Justice	-.053 (.030)	.077	-.091
Female	-.026 (.177)	.885	-.006
Organizational Justice	.225 (.018)	.000	.650
Training Motivation	-.005 (.032)	.872	-.008
Lous of Control	.022 (.040)	.590	.028
Self-efficacy	.071 (.029)	.014	.135
Organizational Commitment	-.004 (.025)	.870	-.008
Age	-.009 (.024)	.716	-.018
Education	-.022 (.092)	.812	-.010
Preparation Period	-.014 (.051)	.789	-.013
Intercept	5.905 (1.019)	.000	—
<i>F</i> -test (p-value)	25.672 (.000)		
<i>R</i> ²	.430		

Note: Entries are unstandardized regression coefficients (*b*), standard errors in parentheses, statistical significance (p-value), and standardized regression coefficients (β); ^a Ordinary Least Squares regression

To sum up, twelve research hypotheses were examined in this dissertation. They are as follows:

- H1: Transfer of training will be positively associated with job performance.
→ **Supported**
- H2: Supportive of training work environment will be positively associated with the transfer of training.
→ **Supported**
- H3: Training receptivity—measured with training satisfaction and perceived skill acquisition—will be positively associated with the transfer of training.
→ **Supported**

- H4: Training motivation will have a positive and longitudinal effect on training receptivity.
→ **Not Supported**
- H5: Organizational justice will be positively associated with training receptivity.
→ **Supported**
- H6: Organizational justice will moderate the negative effect of low training motivation on training receptivity.
→ **Supported**
- H7: Female officers will be less motivated to train.
→ **Not Supported**
- H8: Female officers will demonstrate less training receptivity.
→ **Not Supported**
- H9: Organizational justice will have a stronger relationship with training receptivity among female officers.
→ **Not Supported**
- H10: Internal locus of control will be positively associated with training motivation.
→ **Supported**
- H11: Self-efficacy will be positively associated with training motivation.
→ **Supported**
- H12: Organizational commitment will be positively associated with training motivation.
→ **Not Supported**

CHAPTER 5: DISCUSSION

One of the key areas of focus for the President's Task Force on 21st Century Policing was police training. The Task Force emphasized the importance of investing in high-quality, evidence-based training programs for law enforcement officers as a key strategy for improving police-community relations and building trust between law enforcement and the communities they serve. Since then, there have been efforts to make improvements in police training at all levels, including pre-service training for new recruits, in-service training for current officers, and specialized training in areas such as crisis intervention, de-escalation, and implicit bias. We have witnessed similar trends globally. For example, the Korean National Police Agency (KNPA) has invested significant resources in improving the training of its officers. Over the last two to three decades, the KNPA has been working to improve police training as one of the means to reduce incidents of police misconduct and corruption. This includes the establishment of a new police academy to provide comprehensive training for new recruits and ongoing professional development for current officers.

While law enforcement agencies recognize that effective police training is essential for promoting professionalism, accountability, and community trust in law enforcement, the absence of police training evaluations poses a challenge for police administrators in selecting training programs based on scientific evidence of best practices. Fortunately, a growing body of research explores what works in police training (i.e., the effects of the training program on officers' attitudes and behaviors). Studies have tested the effectiveness of various police training programs in order to identify best practices and improve police training overall. In addition to examining what works in police training, however, it is equally important to understand why the training program was effective or ineffective. In other words, it is essential to understand how and why the training program works in order to generate comprehensive and evidence-based knowledge about police training. Therefore, the purpose

of my dissertation was to move beyond an understanding of whether a police training program has an impact on officers' attitudes and behaviors, to enrich our understanding of how and why training programs work. The overarching goal of my dissertation was to build on the theoretical framework of training motivation, receptivity, and outcomes to explore the factors that lead to successful or unsuccessful training programs, as well as to offer practical implications for law enforcement agencies on how to enhance the effectiveness of their training programs. To do so, I have conducted more comprehensive evaluation research on police training by addressing several gaps in the existing literature. A number of key findings emerged that warrant further discussion.

First, among the factors that predict officer trainees' perceptions of their own job performance, training transfer was the most significant predictor. Training transfer refers to the degree to which officers indicated they apply the skills and knowledge they learned in training to their job. The findings suggest that when officers transfer their training effectively, they are more likely to feel that the training has improved their job performance. In addition to training transfer, the results demonstrate that perceived skill acquisition and training satisfaction were significant predictors of job performance. Officers who perceived that they had gained new skills and knowledge and reported higher levels of satisfaction with the training were more likely to feel that the training had improved their job performance.

The finding that perceived skill acquisition and training satisfaction are important predictors of job performance, but that training transfer is the most significant predictor is important because it provides valuable insights into the factors that are critical for job performance. This suggests that the success of training programs is not solely dependent on employee perceptions and attitudes toward training. Rather, the success of training programs also depends on the degree to which employees apply the knowledge and skills they have learned to their work. This finding underscores the importance of practical and relevant

training programs that focus on transferring knowledge and skills to the work. While it is important for employees to perceive that they have acquired new skills and knowledge and to be satisfied with their training experiences, if they are unable to apply what they have learned to their job, the training will be less likely to lead to perceived improvements in job performance. Police agencies can use this information to design effective training programs that not only provide knowledge, skills, and satisfaction but also focus on transferring learning to the workplace. In other words, trainers should not only teach skills but should also spend time discussing with trainees how they can take skills learned in the training room and apply them on the street. By doing so, they may be able to maximize the impact of their training programs on employee job performance and, ultimately, on the success of the organization.

Along these lines, the current study explored the predictors of training transfer and examined the independent and simultaneous effects of organizational training support, training satisfaction, and perceived skill acquisition. When considered in isolation, organizational training support, training satisfaction, and perceived skill acquisition were associated with training transfer. Taken together, perceived skill acquisition dominated the prediction of training transfer, followed by training satisfaction (perceived skill acquisition: $\beta = .494, p < .001$; training satisfaction: $\beta = .255, p < .001$). In fact, there was a reduction in the magnitude of the organizational training support coefficient from $\beta = .326$ (i.e., when considered in isolation) to $\beta = .100$ (i.e., when taken together), and the test of equality of coefficients revealed that this difference was statistically significant. This suggests that the inclusion of both perceived skill acquisition and training satisfaction variables partially confounded the relationship between organizational training support and the outcome variable. Specifically, it suggests that the true effect of organizational training support on training transfer is not accurately captured in the isolation model. Taken together, this

indicates that perceived skill acquisition and training satisfaction are more strongly associated with training transfer than organizational training support.

Understanding the relative importance of different predictor variables in determining training transfer can help organizations design more effective training programs, identify areas for improvement, and maximize the transfer of training. The finding suggests that the quality of the training experience is a critical factor in determining the success of the training transfer. This underscores the importance that training programs should focus more on creating engaging and effective training experiences that help trainees acquire new skills and knowledge and feel satisfied with the training program. This may lead to better transfer of training and ultimately improved individual and organizational performance.

With respect to testing the longitudinal effect of training motivation on perceived skill acquisition and training satisfaction, the data reveal that training motivation is not significantly related to training satisfaction and perceived skill acquisition. Wolfe and colleagues' (2022) study using cross-sectional data collected from police officers in two U.S. departments found strong relationships between training motivation and receptivity to training variables (i.e., training satisfaction and perceived skill acquisition). The conflict between the current study and Wolfe and colleagues' results speaks to the possibility that the effect of training motivation may fade over time for police officers.

One of the explanations for this may be that training motivation changes over time. According to previous studies, motivation is diverse, complex, and undergoes several fluctuations (Campbell & Storch, 2011; Lompscher, 1999). This is because "Motives are not simply given. Rather, they are established in the process of activity" (Lompscher, 1999, p. 12). People engage in a range of activities, which create a corresponding variety of motivations. Motives continuously evolve, with new motives emerging or shifting in importance and other motives losing their influence over time. Thus, lack of sustained

training motivation may be one reason why training motivation did not have a long-term effect on training satisfaction and perceived skill acquisition. It is possible that the initial motivation to participate in academy training was short-lived and did not sustain throughout the training program. Officers may initially be motivated to participate in and complete the academy training program, but their motivation may wane over time. Especially if the training program is long and demanding, participants may become fatigued, bored, or distracted, leading to reduced motivation and engagement (Dirzyte et al., 2021; Han, Takkaç-Tulgar, & Aybirdi, 2019; Yamashita, 2020). Since the respondents in this sample were required to engage in training for an extended period of time, they may have become fatigued or felt overwhelmed. This may have led to a decline in training motivation, as the respondents may have felt that the training is time-consuming or that they are not making sufficient progress.

Relatedly, previous studies have identified factors that contribute to demotivation during training programs (Borgonovi & Biecek, 2016; Campbell & Storch, 2011; Dirzyte et al., 2021; Han, Takkaç-Tulgar, & Aybirdi, 2019; Meshkat & Hassani, 2012; Yamashita, 2020). One of the factors is training course difficulty (Campbell & Storch, 2011; Yamashita, 2020). If the course material is too difficult or complex for participants, they may become demotivated and disengaged. Anxiety and stress are also common contributors to demotivation, particularly if participants feel overwhelmed or unsupported (Han, Takkaç-Tulgar, & Aybirdi, 2019; Yamashita, 2020). The experience of failure is also a common factor that can lead to demotivation. If participants feel that they are not making progress or are struggling to understand the material, they may become discouraged and lose motivation (Campbell & Storch, 2011; Han, Takkaç-Tulgar, & Aybirdi, 2019; Yamashita, 2020). In summary, training motivation did not have a longitudinal effect on training satisfaction in this sample of Korean academy-trained police officers, and it is possible that training motivation

fluctuations over the course of the training resulted in this effect.

Another explanation for why training motivation did not have a longitudinal effect on training satisfaction and perceived skill acquisition may be simply because the measurement of training satisfaction and perceived skill acquisition occurred too long after the measurement of training motivation. Due to the gap in time between the measurement of training motivation and the measurement of training satisfaction and perceived skill acquisition, other factors, such as organizational justice, locus of control, or self-efficacy, may have had a greater influence on training receptivity because they either changed or had a more proximate impact. Thus, future studies should consider measuring training motivation and its predictors at multiple time points. This will help provide a more comprehensive understanding of how training motivation and its predictors change over time and how these changes relate to training satisfaction and perceived skill acquisition. This approach can also help identify any potential causal relationships between these variables, as changes in one variable may lead to changes in another variable over time.

Although training motivation did not have a longitudinal effect on training satisfaction and perceived skill acquisition, organizational justice was a significant predictor of training satisfaction and perceived skill acquisition. Simply put, respondents who perceived that they were treated fairly by their supervisors were more likely to be satisfied with the training and perceive they have acquired new skills and knowledge as a result of the training. Therefore, treating officers in an organizationally fair manner can improve their affective (i.e., training satisfaction) and utility-based (i.e., perceived skill acquisition) reactions to training. This is likely because officers tend to identify with their organizations and endorse their values, goals, and methods when they believe their supervisors apply organizational justice (Bradford & Quinton, 2014; Haas et al., 2015; Van Craen & Skogan, 2017). Officers working in such a departmental climate seek to contribute positively to the

effectiveness and ambiance of the organization. These officers “may have taken the cue that a goal of the training was an agency goal,” and therefore, took the training more seriously and displayed extra effort on training, which contributed to them exerting their utmost effort to cultivate the skills that the agency deemed valuable from the training program and harbor positive affect toward the training program (Wolfe et al., 2022, p. 218).

Next, internal locus of control and self-efficacy were associated with training motivation. An internal locus of control refers to an individual’s belief that he or she has control over the outcomes in their life rather than attributing success or failure to external factors beyond their control (i.e., an external locus of control). When it comes to training, the finding reveals that officers with an internal locus of control felt more motivated to engage in training because they believed that their efforts and actions will directly impact their success in the training program. In contrast, this also suggests that officers with an external locus of control were less motivated to engage in training because they may believe that their success in the training program is primarily determined by external factors such as luck or the actions of others rather than their own efforts or abilities. Self-efficacy, on the other hand, refers to an individual’s belief in their own ability to perform a specific task or achieve a specific goal. The finding demonstrates that officers with high self-efficacy were more likely to be motivated to engage in training because they believed that they had the skills and ability to learn and apply the new knowledge or skills being taught.

Understanding the predictors of training motivation, such as internal locus of control and self-efficacy, is important because it can help agencies design more effective training programs and strategies to increase officer training motivation. For example, suppose an agency is aware that officers with an internal locus of control and self-efficacy are more likely to be motivated to train. In that case, they can design training programs that focus on building and strengthening these factors. This could include offering training sessions that

provide opportunities for officers to take more control of their learning and development, such as by setting their own learning goals, providing feedback on their progress, and giving them a sense of autonomy. Similarly, if an agency knows that self-efficacy is a significant predictor of training motivation, they can design training programs that provide officers with opportunities to practice and develop new skills in a supportive environment. This could include offering hands-on training sessions, providing feedback and coaching on performance, and providing opportunities for employees to apply their new skills in real-world situations.

With respect to the interaction effects, the findings suggested that organizational justice was a significant predictor of training satisfaction and perceived skill acquisition, regardless of training motivation level. In other words, regardless of whether officers had high or low training motivation, they are more likely to be receptive to their academy training if they believe their supervisors treated them fairly. The practical implication of this finding is that it underscores the importance of creating a culture of organizational justice within police departments. This suggests a long-term and intentional effort to foster an environment in which all officers feel valued, respected, and treated fairly likely will produce beneficial outcomes such as greater training receptivity, training transfer, and job performance. This can be done by police agencies implementing fair policies, encouraging open communication, and providing organizational justice training. For example, organizations can adopt policies and procedures that are fair, transparent, and consistent by ensuring that promotions, pay raises, and other rewards are distributed fairly based on objective criteria such as merit and performance, rather than subjective factors such as personal relationships or biases. Organizations can also encourage open communication between employees and management, so that employees feel they can express their concerns or grievances without fear of retaliation. This can help to identify and address any issues related to organizational justice

before they become more serious. Overall, by promoting organizational justice, police departments may be able to improve not only officers' receptivity to training but also their job satisfaction, performance, and retention by creating a positive work environment that benefits both the employees and the organization as a whole (Wolfe & Lawson, 2020; Wolfe et al., 2018; Wolfe & Piquero, 2011; Wolfe et al., 2022).

Finally, trainee officers' gender moderated the effect of organizational justice on training satisfaction. Though the theoretical framework led me to hypothesize that organizational justice would have a stronger relationship with training satisfaction among female officers, the data provided the opposite finding. The results suggested that the relationship between organizational justice and training satisfaction was more significant for male officers when compared to their female counterparts. One of the explanations for this may be that the mandatory military service for male citizens in Korea could have resulted in male officers focusing more attention on organizational fairness. In South Korea, military service is mandatory for all able-bodied males aged 18 to 28, with only a few exceptions (i.e., physical or mental disabilities). Given the strict hierarchical structures and emphasis on discipline and obedience, it is possible that male police officers in South Korea who have completed their mandatory military service may have a greater awareness and appreciation for the importance of organizational fairness. During military service, individuals are often required to follow strict rules and procedures, and failure to comply can result in serious consequences (i.e., disciplinary action, punishment, or legal prosecution). This can sometimes lead to instances of abuse of power or unfair treatment by those in positions of authority. The Korean military has faced its own challenges with issues of discrimination, hazing, and abuse and has taken steps in recent years to promote fairness and respect for human rights within its ranks. As a result, individuals who have served in the military may have a greater appreciation for the importance of promoting fairness, transparency, and accountability

within organizations. They may be more likely to recognize instances of unfair treatment or discrimination and to speak out against them. This may have influenced male officers to be more attuned to issues of organizational fairness in their work as police officers.

However, this does not mean that organizational justice does not matter to female officers. Organizational fairness is important for all police officers, regardless of their gender. While completing mandatory military service may make some male officers in South Korea particularly attuned to issues of fairness, female officers also have their own unique perspectives and experiences that can shape their understanding of this issue. Female officers may face additional challenges and obstacles during training and in the workplace, such as discrimination or harassment, and promoting organizational fairness and justice can be particularly important to ensuring their rights and well-being are protected. Ultimately, promoting organizational justice is essential for creating a positive and effective training and work environment for all police officers, regardless of their gender. This includes ensuring that all officers are treated with respect and dignity, provided with equal opportunities for advancement and recognition, and protected from discrimination.

This study is not without limitations. First, while self-assessments of whether training improved job performance can be a useful tool, there are also some potential problems that need to be considered. For example, self-assessment can be subject to biases, such as overconfidence or self-criticism, which can lead to inaccurate assessments of performance. In addition, self-assessment may not provide a complete perspective on job performance, as it only reflects the individual's viewpoint and may not account for external factors. Furthermore, employees may not have enough knowledge to accurately assess the impact of training on job performance, especially if the training was focused on new or complex skills. To overcome these potential problems, assessment of whether training improved job performance should not only involve getting feedback from multiple sources, including

colleagues and supervisors but may also ask community members to provide feedback on their interactions with trained officers. On top of this, objective performance evaluations by supervisors and objective skill assessments can provide an assessment of officer job performance based on a range of metrics. Therefore, it's important to use multiple tools and sources of information when evaluating job performance in order to assess a more comprehensive and balanced view of an officer's job performance.

Second, while training transfer and job performance are theoretically distinct concepts, this study found they are highly correlated. This could potentially be caused by common method bias, which occurs when the variance in a measure is due to the measurement method rather than the construct being measured. Common method bias can lead to overestimating the strength of relationships between variables and can create a theoretical indeterminacy, which means that it is difficult to disentangle the true effects of training transfer and job performance on each other, as their measurement may be confounded. Related to the above recommendations, future studies should consider using different methods to measure the constructs of interest, such as objective measures (i.e., body-worn camera footage) and peer or supervisor ratings, in addition to the self-report assessment used in this study.

Third, conducting waves of surveys to measure different concepts related to police training at multiple time points can provide valuable insight into the effectiveness of police training programs. Conducting surveys at multiple time points can help to identify patterns or trends in officer attitudes or behaviors toward the training. By identifying these patterns or trends, law enforcement agencies can adjust their training programs to better meet the needs and preferences of their officers. For example, they may choose to incorporate more interactive or hands-on training activities to increase engagement and participation. Additionally, identifying patterns or trends in officer attitudes or behaviors can help to

uncover potential barriers to effective training. For instance, if officers consistently report feeling anxious or stressed during a training program, this may be an indication that additional resources are needed to help them manage their emotions and reduce stress levels. Overall, conducting surveys at multiple time points can be a valuable tool for evaluating police training.

Fourth, replicating the current study's findings using samples from various policing contexts, including in various settings inside and outside South Korea, can help lead to more generalizable conclusions. This is because different policing contexts may have unique characteristics and challenges that affect how officers perceive and respond to training. For example, police departments in different countries may have different training standards or cultural norms that influence how officers approach their work. Additionally, replicating the findings of the current study using samples of in-service training can provide important insights into the effectiveness of training programs for experienced law enforcement officers. For example, experienced officers may have already developed certain attitudes or behaviors that are difficult to change and may be resistant to new training or ideas. By replicating the study in different contexts, researchers can assess the degree to which the findings hold up across diverse populations and settings.

In the end, the present study explored different predictors of training motivation, receptivity, and outcomes, which provided empirical evidence that can guide police agencies on how to design and deliver more effective training programs. I hope the findings from my dissertation can provide evidence-based knowledge about police training. Relatedly, I believe the findings from my dissertation can provide evidence-based knowledge about why police training programs succeed or fail and also provide practical implications for police agencies on how to improve training effectiveness. Understanding what factors influence training motivation, receptivity, and outcomes can help police departments make data-driven

decisions on how to improve training effectiveness, which ultimately can lead to improved employee performance, increased job satisfaction, and greater overall success for the organization. This can ultimately help to ensure that officers are better equipped to serve and protect their communities effectively.

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APPENDIX A: EXPLORATORY FACTOR ANALYSES

Table 12. Principal Axis Factoring with Promax and Kaiser Normalization of Post-training Survey (Wave 2) Items

Item	Factor loading		
	1	2	3
SS3: My supervisor supports his/her officers in applying newly learned skills and knowledge to the job.	0.899	0.557	0.649
SS5: My supervisor teaches his/her officers how to apply my training knowledge to my job.	0.890	0.581	0.642
SS4: My supervisor considers it important for his/her subordinates to be trained.	0.884	0.533	0.606
SS2: My supervisor makes his/her officers participate in the training to develop their skills and knowledge.	0.880	0.544	0.641
SS1: My supervisor encourages me to apply newly learned knowledge and skills to my work.	0.876	0.578	0.643
PS2: Peers help me utilize newly learned knowledge and skills.	0.850	0.579	0.661
PS1: My peers are ready to embrace new ideas.	0.836	0.541	0.633
PS3: My peers compliment me when I apply my training to my job.	0.833	0.546	0.654
OJ1: My agency's policies are designed to allow employees to have a say in agency decisions (i.e., assignment changes)	0.824	0.612	0.779
PSA1: Through the training, I learned the skills and knowledge that are needed for police work.	0.528	0.881	0.581
TS1: Overall, I am satisfied with the training.	0.551	0.859	0.606
TT1: At work, I am actually using the knowledge and skills I learned in training.	0.585	0.845	0.583
TT2: I constantly try to apply the knowledge and skills I learned in training to my work.	0.566	0.763	0.603
TS2: The training reflects the necessary contents of the task that I will be in charge of.	0.439	0.748	0.402
TS4: 2. The training satisfied the expectation that I had for the training.	0.481	0.702	0.467
PSA2: Participation in the training served as an opportunity to acquire skills and knowledge necessary for specific tasks.	0.603	0.701	0.550
TS3: The number of courses offered in training was appropriate.	0.379	0.695	0.326
OJ3: Command staff treats employees with respect.	0.650	0.562	0.926
OJ2: Command staff considers employees' viewpoints.	0.654	0.560	0.922
OJ4: Command staff clearly explains the reasons for their decisions.	0.666	0.558	0.909
OJ5: My agency's policies regarding internal decisions (i.e., promotion, discipline) are applied consistently	0.727	0.591	0.888
OJ6: If you work hard, you can get ahead at this agency	0.690	0.593	0.816
Eigenvalues	12.985	2.212	1.390
Percentage of variance	59.024	10.053	6.316

Note: Entries are Supervisor Support (SS), Peer Support (PS), Organizational Justice (OJ), Perceived Skill Acquisition (PSA), Training Satisfaction (TS), and Training Transfer (TT)

Table 13. Principal Axis Factoring with Promax and Kaiser Normalization of Beginning of Academy (Wave 1) Items

Item	Factor loading			
	1	2	3	4
TM4: Through the training, I want to improve the knowledge and skills needed as a police officer.	0.898	0.350	0.466	0.364
TM3: The purpose of the training is to learn the knowledge and skills necessary to become a police officer.	0.839	0.326	0.431	0.336
TM5: I will try harder if there is something I do not understand in the training.	0.836	0.347	0.436	0.376
TM1: I will try to learn as much as possible in the training.	0.816	0.340	0.496	0.357
TM 2: I will try to learn more from the training than other trainees.	0.783	0.293	0.499	0.376
OC2: I feel attached to my organization.	0.322	0.817	0.352	0.397
OC5: This organization is like a family, and I am one of them.	0.329	0.812	0.411	0.422
OC3: My job is very meaningful to me.	0.382	0.786	0.365	0.397
OC4: I am proud to tell others that I am part of this organization.	0.293	0.785	0.335	0.321
OC1: I identify strongly as a member of my organization.	0.243	0.730	0.348	0.388
OC6: I hope to stay with this job until retirement.	0.276	0.681	0.239	0.350
SE2: I am confident that with my training, I will be able to accurately create police reports about my activities when I become a police officer.	0.452	0.367	0.892	0.479
SE1: I am confident that with my training, I could carry out a variety of police duties when I become a police officer.	0.580	0.454	0.884	0.471
SE4: I am confident that with my training, I will be able to overcome problems common to police work when I become a police officer.	0.478	0.404	0.880	0.449
SE3: I am confident that with my training, I will be able to effectively use my police equipment to interact with suspects when I become a police officer	0.420	0.345	0.846	0.456
SE5: I am confident that with my training, I will be able to work effectively with members of society when I become a police officer	0.568	0.446	0.720	0.455
ILC5: I am confident of being able to deal successfully with future problems.	0.290	0.340	0.466	0.745
ILC1: I can anticipate difficulties and take action to avoid them.	0.252	0.235	0.368	0.583
ILC4: I believe a person can really be the master of his fate.	0.280	0.415	0.228	0.537
ILC2: My mistakes and problems are my responsibility to deal with.	0.477	0.309	0.240	0.513
ILC3: Becoming a success is a matter of hard work, luck has little or nothing to do with it.	0.271	0.392	0.344	0.480
Eigenvalues	8.350	2.665	1.877	1.328
Percentage of variance	39.762	12.690	8.940	6.325

Note: Entries are Training Motivation (TM), Organizational Commitment (OC), Self-efficacy (SE), and Internal locus of control (ILC)