

EVALUATING BLUE COURAGE:  
A NATIONAL EVALUATION OF THE BLUE COURAGE TRAINING PROGRAM

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## ABSTRACT

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The impact of stress on police officers has profound implications for both the wellness of individual officers and the legitimacy of policing as field. Stress produces a litany of negative impacts on officer health, including direct impacts like a higher risk of heart disease and a shorter life expectancy as well as indirect effects like an increased risk of the development of harmful coping mechanisms like substance abuse. More recently, the impacts of stress on individual officers have been observed to spill over and negatively affect community-police relations as officers struggle to contain emotional responses when under stress or withdraw from critical functions of police work, like community engagement, as a way to manage stress.

This study performed an evaluation of a holistic police training program called Blue Courage, which is designed to educate officers about the impact of stress and provide them with tools to improve the health and wellness of themselves and the profession writ large. This study was a mixed-methods process and outcome evaluation of the training program, and consisted of observations of the training, interviews with key program staff, and the use of a case study model to elucidate aspects of the Blue Courage train-the-trainer model of delivery. Additional, data from 681 training participants, collected between June of 2017 and September of 2018 was used to determine the impact of the training on a number of attitudes central to officer health and wellness. At the conclusion of this dissertation, discussions of the findings and future directions

for research are discussed. Additionally, several policy recommendations for the Blue Courage organization are provided.

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## **Chapter 1: The State of 21<sup>st</sup> Century Policing and the Creation of Blue Courage**

Policing is one of the most strenuous and stressful professions. This strain is primarily the result not of physical exertion but of constant psychological and emotional stressors on officers (Monahan and Farmer, 1980; Violanti, 1996). The consequences of this stress fall largely into two groups identified by President Obama's Task Force on 21<sup>st</sup> Century Policing (2015). First, overburdened police officers struggle with their interactions with members of the community. In the long term, the task force argued that this produces the backdrop that contributes to civil unrest in places like Ferguson, Missouri.

A second, often ignored, consequence is the effect stress has on individual officers. The Task Force argued that law enforcement officers, and as a result the communities which they serve, are plagued by a number of serious issues. Most prominent of these issues identified by the Task Force, and one with strong links to police legitimacy, is that of officer wellness:

Most law enforcement officials walk into risky situations and encounter tragedy on a regular basis. Some, such as the police who responded to the carnage of Sandy Hook Elementary School, witness horror that stays with them for the rest of their lives. Others are physically injured in carrying out their duties, sometimes needlessly, through mistakes made in high-stress situations...As a result, physical, mental, and emotional injuries plague many law enforcement agencies (pg. 61).

This narrative largely ignores the additive effect of daily frustrations that come with the work of policing. As the Task Force states:

In addition to working with difficult – even hostile – individuals, responding to tragic events, and sometimes coming under fire themselves, [police] suffer from the effects of everyday stressors – the most acute of which often come from their agencies, because of confusing messages or non-supportive management; and their families, who do not fully understand the pressures the officers face on the job... When both work and family relations fray, the individuals coping abilities can be stretched to the limit, resulting in alcohol abuse, domestic violence, overaggressive policing, even suicide (pg. 63).

The consequence of this is that officers “who are mentally or physically incapacitated cannot serve their communities adequately and can be a danger to the people they serve, to their fellow officers, and to themselves (pg. 63).” In essence, focusing on the health and wellbeing of individual officers can have an aggregate effect on communities.

The task force’s findings are supported within the academic literature as well. Classical work on policing has outlined a series of police specific work-related stressors including the need to use coercive force (Bittner, 1990; Skolnick, 1994), higher rates of exposure to stressful and potentially traumatic situations (Skolnick, 1994; Toch, 2002; Tanigoshi, Kontos, and Remley, 2008; Papazoglou and Anderson, 2014) including the death of children (Toch, 2002), social isolation resulting from the nature of the work (Brown, 1981; Skolnick, 1994), reliance on lies and deception as a craft in the field and the near constant perception of threat of physical harm (Skolnick, 1994), tense relationships with citizens (Toch, Grant, and Galvin, 1975; Toch, 2002; Muir, 1977; Skolnick, 1994; Brown, 1980), leadership within the department (Toch, Grant, and Galvin, 1975; Toch, 2002; Manning, 1977; Muir, 1977; Brown, 1980; Reuss-Ianni, 1983), patrol partners (Toch, 2002), inequality in treatment of officers within a department (Toch, 2002), issues of self-efficacy resulting from repeated failure (Toch, 2002), and long and irregular hours of work that often include night shifts (Toch, 2002; Lowden et al., 2010).

These facets result in a litany of negative outcomes for officers. Tanigoshi, Kontos, and Remley (2008) state that police officers are more likely to develop negative coping mechanisms to deal with stress like alcohol abuse, tobacco use, and sedentary lifestyles. Additionally, police suffer psychological, emotional, physical, spiritual, and social consequences due to their work. This results in problems with vulnerable interpersonal relationships, depression, anxiety, and

even post-traumatic stress, divorce, domestic violence and suicide that are all of greater concern to police than the general public (Tanigoshi, Kontos, and Remley, 2008).

Within the field of policing there exists a scarcity of initiatives designed specifically to address the specific concerns of officer wellness, particularly mental and emotional wellness. Blue Courage is an in-service law enforcement officer training program designed to address these specific issues. The training, developed by retired chief of police of Aurora, Illinois, Michael Nila, began in early 2014 and has provided training to thousands of officers nationwide since that time.

The formulations of Blue Courage began in the early 2010s, before the civil unrest in Ferguson and other communities, but was designed to address many of the issues that contributed to similar situations. The program is built around the concepts of nobility and purpose in police work and the impact of officer health and wellness on the profession. This work runs parallel to President Obama's Task Force on 21<sup>st</sup> Century Policing, and addresses some of the specific recommendations of the Task Force. In a recorded podcast interview, Nila describes Blue Courage as a philosophy, rather than a training designed to convey a limited set of skills (Nila, 2015). He suggests that several key problems exist in the field of policing for which Blue Courage is designed to address.

First, Nila (2015) argues that police officers have grown disillusioned and cynical, which hampers their capacity to serve the public interest. He quotes a phrase he learned from the New York Police Department (NYPD) as they confronted the challenges of officer cynicism; they argue that "cynicism is the new form of corruption." Cynicism is especially problematic in police work because every situation, for example an encounter with a citizen, is different and requires constant iteration on behalf of officers to reach an optimal outcome. This process

requires a tremendous amount of applied thought and personal discretion. Cynicism is harmful in this context because cynical officers become apathetic, withdrawn and have less capacity to perform this job specific task.

Second, Nila (2015) suggests that the societal role that police have developed over time has been maladaptive, leading to poor community relations, poor service, and concerns for both officer and community safety. He also advises that police too often adhere to a “warrior” mentality, or that of a crime-fighter, which ignores what he sees as the core identity of policing: “service, justice, and fundamental fairness” (Nila, 2015). He argues that police should balance their warrior mentality with a “guardian” mentality, with a focus on serving the public.

Addressing the tension within the field of policing about which mentality is more important he instead insists that police can do both by “be[ing] as hard as the community requires them to be, and as soft as the community allows them to be” (Nila, 2015). Paralleling the procedural justice literature, Nila argues that poor relationships with the community can lead to loss of legitimacy of police, lack of community member deferment to authority, and increased citizen hostility in the relationship (e.g. see Tyler, 1988). He goes on to suggest that all of these increase strain in the lives of police officers and feed back into the cycle of officer stress, and reinforcing the negative consequences of the profession.

Finally, Nila (2015) argues that officer wellness is a constant and pervasive issue in policing due to the unique structural constraints placed on the profession. He suggests that wellness is best understood through the lens of the whole person, encompassing multiple domains of wellness: mental, emotional, spiritual, and physical health. Nila argues that physical health is often prioritized among law enforcement personnel to the detriment of the other domains (though physical health is often neglected as well). Due to a combination of work

related pressures, for example long shift hours and high rates of exposure to stressful situations, and cultural pressures unique to police work, for example a cultural mantra that stigmatizes using mental and emotional health services and views their valuation as a sign of weakness, Nila argues that the field often neglects to adequately maintain all aspects of officer health. This leads to a litany of negative consequences for officers and helps explain the high rates of burnout, alcoholism, divorce, depression, anxiety and suicide observed by Tanigoshi, Kontos and Remley (2008). These consequences spill over into community-police relations because officers overburdened by stress often react emotionally, or “snap”, when presented with negative stimuli such as an encounter with even a semi-belligerent member of the community.

Despite the critical importance of systems and programs to address issues consistent with those addressed in the Blue Courage training program—considering its potential to ameliorate many of the issues identified in the President’s Taskforce on 21<sup>st</sup> Century Policing—no assessment has been conducted to-date to determine its efficacy. Blue Courage training has been, and continues to be, offered in many departments across the nation, yet we have little evidence of its impact. This dissertation serves as the first attempt to formally document the Blue Courage training and evaluate its impact on officers.

The absence of a formal assessment is particularly troubling considering that a consistent theme in criminal justice interventions is the role that implementation success and failure has on program outcomes. Some poorly implemented interventions even produce iatrogenic results. That is, participants are found to be worse off after the intervention. For example, in detailing the findings from Pittsburg’s One Vision One Life program Wilson, Chermak, and McGarrell (2011) state:

It is quite a challenge to explain why a program did not produce any effect, but an even greater test to discuss why a program had a negative effect. Not only are the results

different from what we anticipated; they are also inconsistent with the results from other evaluations of similar programs (pg. 74).

Specifically, the risk of repeated failed change within organizations runs the risk of developing and reinforcing feelings of cynicism among organizational members (Abraham, 2000). The potential for these negative outcomes in this and other interventions make program evaluations of the nature proposed here critical.

The purpose of this dissertation is to provide an evaluation of the Blue Courage Training. The proposed dissertation will consist of three primary parts. First, as this is the first analysis of Blue Courage, materials will be collected and analyzed that describe the contents, curriculum, and methods of delivery used within the Blue Courage Training so that the training can be more fully defined. Second, this research will then use pre- and post-survey data from the national implementation of the Blue Courage training to determine the perceived impact of the training on individual officers. Third, this dissertation will also use qualitative data from the implementation of the training in a police department that served as a case study to identify some of the challenges this particular training might have with implementation fidelity in other sites nationwide.

This dissertation will be divided into several chapters. Chapter two will provide a basic description of the Blue Courage training and discuss how it compares to other contemporary police training programs. In chapter three, a detailed review of the relevant literature, including literature on training, police training, the core components of theory within the Blue Courage training, as well as implications drawn from implementation science of relevance to a national training program will be provided. Chapter four will outline key research questions and will describe the methodologies used to answer those research questions. Chapter five will detail the

data and findings from the evaluation. Lastly, Chapter six will provide a discussion of these findings and their implications for policing, detail a list of program recommendations for the Blue Courage training and its delivery, and outline a number of directions for future research.

## **Chapter 2: What is Blue Courage, and how has it been Implemented?**

After assessing the state of officer wellness and safety the Task Force on 21<sup>st</sup> Century Policing outlined a series of recommendations for the field. Their first recommendation to enhance officer safety and wellness was to encourage the Justice Department to “enhance and promote...multi-faceted” officer safety and wellness programs. Despite development in parallel to the Task Force, Blue Courage largely fits the mold of such a program.

Like many interventions, it can be difficult to understand what Blue Courage is intending to do specifically. Page 7 of their “Participant Guidebook,” a resource for officers to follow along during a training, attempts to lay out the “Premise” of Blue Courage. The page outlines the following bullets to define this “Premise”:

- Police Education needs an upgrade – good but “incomplete”
- We have a “Skill” focus vs “Will”.
- Prepare officers to do the “Job” but not to master a “Craft” and survive and thrive within a career in policing.
- Increasing complexity requires increased sophistication (maturity, wisdom, wellness and wholeheartedness).
- Development is a career long process, not an event – “a practice”.
- Purpose is everything and is often an afterthought.
- Health, wellness and wellbeing are not sufficiently taught, nurtured, or encouraged.
- Life outside policing is extremely important to well-being and the perception of life – it is too often neglected.
- “Resilience” is essential and must be developed.

Though helpful this bulleted list still outlines too broad a scope for a definition, while also containing some redundancy. This list is also largely ambiguous. Outside of the Blue Courage instructors themselves, it is clear that few have a grasp of what the training is designed to accomplish. A more formal definition of the training is required in order to fully understand its potential impact.



Drawing on this list, publicly available information from the Blue Courage website, and Michael Nila's (2015) recorded interview, Blue Courage has several distinct primary goals: (1) change the culture of policing, (2) reinvigorate purpose and nobility in the profession, and (3) increase awareness of personal wellbeing beyond issues of physical fitness.

First, Blue Courage attempts to shift the culture of policing to create an equilibrium in the culture of policing between the warrior mentality and the model of guardianship. A guardianship model postulates that the core of policing is protecting the public and their civil liberties (Rahr and Rice, 2015). A warrior model treats police officers in a more commonly held conception of "crime-fighters" (Rahr and Rice, 2015). The distinction between these two philosophies is conceptually similar to the distinction between the crime control and due process models of the criminal justice system offered by Packer (1964), and manifest in different task orientations discussed in the police culture literature by Paoline (2004) and others. As Rahr and Rice (2015) state: "Constitutional rights are now viewed by some, including some police, as an impediment to the public safety mission. Sadly, many have forgotten that protecting constitutional rights is the mission of police in a democracy (pg. 1-2)."

Second, the Blue Courage training attempts to reinvigorate idealism in officers. This is accomplished by pushing officers to view policing as a noble profession. This is designed also to combat cynicism and apathy in officers, what Nila (2015) argues is the "new form of corruption."

Third, Blue Courage seeks to enhance officers' understanding of "Whole Person" wellness. This involves increasing awareness of mental and emotion health in officers in addition to physical health, and building skills to overcome challenges to the same. This is key

to addressing many of the specific issues identified in the task for on 21<sup>st</sup> century policing and research on police wellness.

To address these goals, Michael Nila and others developed a nine-module curriculum delivered to officers over the course of two eight-hour days. Below are the modules within the curriculum:

1. Foundations
2. Culture
3. Nobility
4. Respect
5. Resilience
6. Positive Psychology
7. Practical Wisdom
8. Health and Wellness
9. The Immortal Cop

Few outside of the Blue Courage organization have an in-depth understanding of what the content or delivery of the training looks like because this information is not publicly available.

To facilitate increased demand for the two-day officer training, Blue Courage offers a train-the-trainer (TTT) course to certify members of local departments to provide the two-day in-service training material to officers of their own departments. This TTT course is called the *Blue Courage Academy*. The TTT approach has shown some impact in other fields like education (LaVigna, Christian and Willis, 2005) but its efficacy remains largely unexamined in the field of policing.

Several related trainings have emerged that run parallel to Blue Courage. One alternative attempt at fixing the problems surrounding contemporary policing in the United States, specifically the events that led to the civil unrest in Ferguson, is implicit bias training (Smith, 2015). One popular form of this training for police was developed by Lorie Fridell: Fair and Impartial Policing. Smith (2015) describes the Fair and Impartial Policing training:

A typical implicit bias training runs between five and six hours. The purpose of these trainings is to ensure that "[o]fficers can learn skills to reduce and manage their own biases" and to promote the "unlearning" of the association between black Americans and criminality. For a line police officer, the training might consist of a section that explains the nature of bias and highlights contemporary research on implicit bias; a section that provides examples of how biased policing has a negative impact on communities and leads to inefficient policing; and a final section that seeks to provide officers with tools for avoiding biased policing through better control of their automated behavioral responses.

Few formal evaluations of the training exist, but the principles of implicit bias that it is founded upon are grounded in sound theory (Smith, 2015).

Another approach to addressing the issues identified by the Task Force on 21<sup>st</sup> Policing, specifically low police legitimacy in some communities, is the framework of procedural justice. procedural justice suggests that police *outcomes* do little to sway public opinion of the police. Rather, Tyler (1988) argued that police *process* is far more important to understanding citizen satisfaction with the police. Tyler argued that satisfaction in these encounters is tied directly to perceptions of police legitimacy. This framework suggests that police legitimacy can be improved if police can learn to alter the *processes by which they engage in the same work*.

Tyler (2017) argued that procedural justice training should be able to instill the principles of procedural justice into individual officers because it is grounded in theory. In an evaluation of the Chicago Police Department's attempt to instill these principles, Gilbert, Wakeling and Crandall (2015) found that the training was able to improve officers' understanding of the importance of giving citizens voice, the importance of offering respect to citizens, and observing and showing neutrality in decision making. Interestingly, this evaluation also identified officer cynicism as an impediment to open reception of the course content.

A third source of similar police training programs are those that focus on officer mental and emotional health. Arnetz et al. (2009) and Christopher et al. (2016) both investigated the

impact of police focused stress resiliency training. Arnetz et al. (2009) outlined and evaluated a ten week police training program designed to improve stress resilience skills. This program focused on building awareness of stressful situations in policing, and building skills on how to think differently about those situations to reduce stress responses. The training consisted of ten, two-hour sections lasting the course of ten weeks. Arnetz et al. found that the training was able to improve the stress resiliency of officers, but the small number of officers in their sample (twelve) suggests replication would be required to add reliability to the study findings.

Christopher et al. (2016) evaluated the impact of an eight week mindfulness-based resilience training program on officers. Officers in the training engaged in eight, two-hour sessions, totaling sixteen contact hours. This program was designed to train participants in a number of experiential exercises evoking qualities of mindfulness: “mental focus, sustained attention and a broad sense of personal and situational awareness” (pg. 18). Christopher et al. (2016) found that this approach was able to improve the emotional regulation, reduce sleep disturbance, and improve stress resilience in a sample of sixty-two police officers in a department in the Pacific Northwest.

Despite this, a meta-analytical review by Patterson, Chung and Swan (2012) found that “stress management interventions had no significant effect on psychological, behavioral or physiological outcomes.” (p. 27). This review was, of course, before the findings of Christopher et al. (2016) or any evaluation is available from the Blue Courage training, but it does sow considerable doubt about the efficacy of this type of training.

Blue Courage differs in significant ways from these alternatives. First, a central theme that ties both implicit bias and procedural justice training together is their development as external sources of change of police departments, police culture, and policing writ large. Blue

Courage differs from these two approaches because it was developed by retired police officers and is taught only by retired and active officers. In this way it serves as a more bottom-up approach to changing policing than these other contemporary examples, something the literature suggests might be necessary for institutionalized change in policing (Zucker, 1987).

Blue Courage also differs from other examples of mental and emotional health trainings in key ways. First, the training is significantly shorter than other examples. While the overall contact hours, sixteen, is comparable to these other interventions, Blue Courage only focuses on these aspects for parts of the training and takes place over a shorter time frame, two days compared to several weeks. This shorter time frame does not allow officers to reflect on new attitudes and skills during the time between sessions. This allows Blue Courage to fit more easily into the time demands that many departments face, because a two-day course is more manageable than an eight or 10-week course, but the lower dosage may also influence the impact of the training on officers. Second, Blue Courage is designed as a holistic training that possesses concepts found in many different police training programs. It is possible that focusing on the health and wellbeing of officers first, and then turning towards improving policing outcomes in the community is beneficial. It is interesting to consider if these differences impact the efficacy of the training.

### **Chapter 3: Literature Review**

This chapter will outline the relevant literature required to understand Blue Courage and its potential impact on officers and the communities which they serve. It will first outline the common yet serious consequences of being a police officer, including some of the observations discussed previously provided by the Task Force on 21<sup>st</sup> Century Policing. This literature is organized to fit within the domains that make up the modules of Blue Courage. Included in this section is evidence of the efficacy of programs that have attempted to build those domains into similar interventions. Lastly, the chapter will outline relevant literature on implementation and implementation failure, a key to understanding the success of any intervention.

Within the curriculum of Blue Courage are several core concepts pertinent to policing, police departments, and officer health and wellness. The following sections provide a review of the literature for each of these seven concepts: Police Culture, Nobility in Policing, Respect, Resilience and Hope, Positive Psychology, Practical Wisdom, and Health and Wellness. Based on publicly available information, it is unclear exactly what these concepts mean to those within the Blue Courage organization, but many of them follow closely existing concepts within the extant literature. Key differences will have to be parsed out after the program has been documented and defined.

#### **Police Culture**

Worrall and Schmallegger (2016) define culture as “a shared set of customs, attitudes, values, norms, and behaviors that form a particular way of life for a particular group of people (pg. 75). Subculture refers to an additionally unique set of shared attitudes, beliefs, and values that belong to a subgroup of a larger group. For example, American police officers might be viewed as having a unique subculture from Americans writ large (Paoline, 2004). Blue Courage

highlights the integral role that culture plays in defining the boundaries of police behavior. The training suggests that police subculture can be positive (e.g. a shared sense of comradery among officers), but that it's consequences can also be quite negative such as isolation and withdrawal from relationships and a hypersensitivity to danger (Skolnick, 1994).

Subcultural theories of social behavior grew from the Chicago School of criminological thought as a way to explain concentrated deviance in Chicago neighborhoods in the early 1900s (Cohen, 1955). They blossomed largely as a critique of strain theories of crime (e.g. see Merton, 1938) which were thought to ignore differences in cultural beliefs and values across social groups. In the years since Cohen's examination, subcultural explanations of social organization and behavior have grown in application to a number of social groups, including formal organizations.

Schein (2005) contends that the principles of cultural differentiation can be extended to understand how members of formal organizations, like police departments, define the boundaries of the organization, understand acceptable modes of conduct, and socialize others to the rules of the organization. Specifically, Schein argues that the culture of an organization is developed through an iterative process of managing the formal role of the organization (i.e. what are its goals), external pressures to the organization, and the internal dynamics of the organization including the interplay between line-level workers and organizational leadership.

Several authors have gone further to discuss the unique subcultural differences that organize police, police work, and police organizations (White, 1972; Manning, 1977; Muir, 1977; Reuss-Ianni, 1983; Skolnick, 1994; Worden, 1995; Herbert, 1998; Paoline, 2003; Paoline, 2004; Crank, 2010). Skolnick (1994) describes policing as having an identifiable "working personality," defined in no small part by a series of challenges that are unique to the field.

Specifically he argued that policing is characterized by three facets: the constant, perceived, presence of danger; the authority, and necessity, to use coercive force; and a sense of insularity from those outside of the profession. These common attributes of the profession are echoed throughout the policing literature (Muir, 1977; Reuss-Ianni, 1983; Worden, 1995; Paoline, 2003). Additionally, Paoline (2003) and Reuss-Ianni (1983) argued two additional facets. First, policing is rife with goal conflict, or a competing set of interests and outcomes that drive the purpose behind policing. Second, policing is characterized by distinct differences in values between management within police organizations and line-level officers.

The outcome of these unique facets within policing are a unique set of cultural attitudes, beliefs, and values found among police officers. Reuss-Ianni (1983) outlines what she calls the “Cop’s Code,” a set of social rules emblematic of these cultural values. She argues that, in the insular and isolated nature of policing, officers feel they should “never give up another cop” (pg. 14). As a result of tension between officers and management, Reuss-Ianni finds that officers need to “protect your ass” and “don’t trust bosses to look out for your interest” because management is willing to sacrifice the career of an officer to protect the police department (pg. 15-16). This suggests that officers develop a sense of defensiveness towards management. This may manifest in officers failing to engage in some difficult police activities if they do not feel that management will support them through potential challenges that stem from those activities.

Paoline (2004) pushes back against the classical conception of a “monolithic” understanding of police culture. Paoline argues that not all police have the same values and beliefs, and finds that officers should be defined into several distinct categories: lay-lows, old professionals, organizational street cops, dirty harry enforcers, peacekeepers, and law enforcers. Most importantly, Paoline finds that placement into each of these categories depends on different



value and belief orientations in five key areas: views towards citizens, views towards supervisors, views towards procedural rules, role orientation, and police tactics.

Kappeler, Sluder, and Alpert (2015) argued that one consequence of police culture is a heavy reliance on symbolic bravery, which has consequences for other domains in police work. Pogrebin and Poole (1991) described one such consequence:

The bravery ethos is so strong among police that merely talking about pain, guilt or fear has been considered taboo. If an officer has to talk about his/her personal feelings, that officer is seen as not really able to handle them...as not having what it takes to be a solid dependable officer (pg. 398).

This cultural mantra has an impact on the efficacy of organizational change and training as well, as officers who subscribe to these values will resist changes that violate them (Blau, 1970; Zhao, 1996).

Skolnick (1994) outlined an additional series of consequence for police culture in which he described the interplay between danger, solidarity, and isolation within his conception of police “working personality.” Skolnick argues that:

The element of authority reinforces the element of danger in isolating the police. Typically, the police are required to enforce laws representing puritanical morality such as those prohibiting drunkenness, and also laws regulating the flow of public activity, such as traffic laws. In these situations, the police direct the citizenry, whose typical response denies recognition of the officers’ authority and stresses their obligation to respond to danger. The kinds of people who respond well to danger, however, do not normally subscribe to codes of puritanical morality. As a result, the police are unusually liable to the charge of hypocrisy. That the whole civilian world is an audience for the police further promotes police isolation and, in consequence, solidarity (pg. 43).

### **Police Nobility and Officer Cynicism**

Perhaps most importantly, Blue Courage is designed to reinvigorate a sense of nobility in policing in the minds of officers who attend the training. This is designed in large part to overcome the common sense of cynicism that many officers develop over the course of their careers (Caplan, 2003). This is one of the more unique aspects of the training.

The concept of nobility can be found in the classical policing literature. Manning (1977) describes the nobility of policing in symbolic terms stating:

A sacred canopy is drawn over police work; these ideological mechanisms suffuse police work with a moral integrity and by doing so conceal as well as reveal the realities of police work. By converting this ideological canopy into an *absolute morality* (what is done in the name of and by the agents of the state is by definition the good, the proper and the aim of the state), agents of the state, especially those with the task of protection of the state from ostensible enemies, both civil or domestic (always a difficult line to draw), have mystified their functions” (pg. 5).

Toch, Grant, and Galvin (1975) referred to the problem of officer cynicism as “alienation” among officers. They described alienated officers as having feelings of powerlessness, meaninglessness, and normlessness. These officers are in a state of “feeling isolated and estranged, and dependent on material rewards for incentives (pg. 4).” They describe them as misunderstood, rejected, unappreciated, uncompensated, and disrespected (from both citizens and department leadership), with contempt for department leadership.

Even forty years ago, Toch, Grant, and Galvin (1975) drew the link between officer wellness and policing outcomes, arguing that:

[A] key link [exists] between problems of individual mental health, organizational effectiveness and community welfare. On an individual level, the forms taken by alienation include apathy, unhappiness, and frustration-motivated conduct, ineffectiveness (in relation to organizations) and poor citizenship (in relation to the community). Organizations that comprise alienated members or workers are unable to communicate their goals, and experience poor morale, high absenteeism and low quantities and/or qualities of production (pg. 4).

More contemporary work on cynicism defines it more clearly. Abraham (2000) outlines five different forms of organizational cynicism: Personality cynicism, societal cynicism, organizational change cynicism, employee cynicism, and work cynicism. Abraham states that personality cynicism is the only innate form, stemming from a deep seeded mistrust of others. Societal cynicism largely stems from the violation of what Abraham (2000) calls “the social contract,” something that in the United States might take the form of an individual perceiving

that their effort to achieve the “American Dream” is for naught, and pushes employees to be self-serving and take short term outlooks on their role in an organization.

The remaining three forms of cynicism are developed as a result of interactions between the organization and its members and prove valuable in understanding the development of cynicism in police officers. First, organizational change cynicism develops as a result of repeated failed change efforts within an organization. Abraham (2000) argues that it develops as a result of observing “the predictable sequence of lofty pronouncements, rapid implementation, and inevitable failure, to be followed immediately by the next new program (pg. 272).”

Abraham (2000) suggests that the development of organizational change cynicism becomes cyclical and self-fulfilling because cynical members become disengaged and uncommitted to the organization and its endeavors, effectively sabotaging change efforts that the organization engages in subsequently.

Second, Abraham (2000) argues that organizational members can develop what she refers to as employee cynicism. This type of cynicism develops due to a perceived violation of the social contract between members of an organization and organizational leadership. Abraham (2000) argues that employees almost universally expect equity, fairness, and impartiality from their supervisors and other organizational leadership. When organizational leadership violates this expectation, employee cynicism sets in. This violation happens as a result of two primary actions: (a) unequal expectations between organizational members and leadership (e.g. differences in pay that are not commensurate with value to the organization) and (b) unequal treatment of employees within the organization (e.g. undeserved promotions based on nepotism and not merit).

Lastly, and perhaps most salient in the context of policing, Abraham (2000) describes work cynicism. Simply put, work cynicism is the result of what is commonly described as burnout, and develops due to the perceived futility of one's actions and the slow erosion of an individual's emotional capacity. Abraham describes this process: "The constant reminder that one's best efforts are in vain deprives their work of meaning. Over time, the burden of taking every insult, failure, and rejection personally yields burnout (pg. 273)." Abraham (2000) argues that interactions with "consumers" during the course of work, in the context of policing this would be interactions with citizens while on duty, further erodes emotional capacity, leading to burnout and work cynicism: "In certain occupations, stressful interactions with consumers leave workers feeling emotionally overextended and physically drained (pg. 273)." This is particularly problematic for police who "have stressful confrontations with hostile citizenry in conditions of human misery bred by poverty, deprivation, and poor living conditions (pg. 273)." Abraham concludes that workers must disengage with their work in order to survive, producing poor outcomes for workers, consumers, and the organization:

Work cynicism becomes a coping strategy...causing individuals to depersonalize or distance themselves from consumers. Work cynicism is characterized by emotional numbness, detachment, callousness, and a lack of caring. The dehumanization process involves the rejection of humanity and identity of clients, failure to empathize, and a cold disconnection of self from the feelings, emotions, and sensibilities of consumers. By blaming consumers for their problems, the individual finds protection against emotions that are negative, painful, and overwhelming. Techniques included using derogatory terms to label clients, recasting the situation in intellectual rather than personal terms, and withdrawal by minimizing contact with consumers (pg. 273).

Abraham (2000) argues that the consequences for the organization for each of these forms of cynicism are the same. Cynical members possess "the core belief that the principles of honesty, fairness, and sincerity are sacrificed to further the self-interest of the leadership (pg. 269)." These members openly question the motives of the organization, are pessimistic in their

work, are less likely to defend the organization, less likely to give extra time or effort to the organization, and are less likely to mentor peers within the organization. These members are less likely to be satisfied in their work, show lower levels of organizational commitment, and are less likely to show organizational citizenship (i.e. the commitment to go beyond the expected scope of one's duties to advance the goals of the organization). Lastly Abraham (2000) suggests that cynical workers more likely to be "alienated" within the organization, disconnecting from their work to the point that "the activity of work is no longer a mode of personal self-expression (pg. 276)." Alienation in this sense is particularly problematic in that policing requires an immense amount of craft-like discretion at the officer level to produce quality outcomes (Toch, Grant, and Galvin, 1975; Caplan, 2003).

A body of research has specifically examined cynicism in the field of policing (Klinger, 1997; Caplan, 2003; Richardsen, Burke, and Martinussen, 2006; Hickman, 2008; Osborn, 2014; Enciso, Maskaly, and Donner, 2016). This research is largely consistent with Abraham (2000), but describes the unique contexts found within the field of policing that produce cynicism in police officers.

Consistent with Abraham (2000), Richardsen, Burke, and Martinussen (2006) found that individual personality traits of officers showed a pre-disposition to cynicism. This is consistent with some literature that suggests cynicism is an innate trait of police officers (Worden, 1995). Richardsen, Burke, and Martinussen (2006) found that officers with "Type-A" personalities are more likely to choose to work in the field of policing and also more likely to develop cynicism, suggesting a unique problem of scale for the field. Anderson, Swenson, and Clay (1995) suggest that people who enter the field are more likely to "have a high need for excitement and want a certain amount of risk in their life (pg. 3)."

Research on police also suggests that cynicism is not only an innate trait, and not a characteristic linked necessarily to age, but one that is developed over time (Caplan, 2003; Enciso, Maskaly, and Donner, 2016). Enciso, Maskaly, and Donner (2016) found that the issues inherent in organizations that produce cynical workers are so strong within police departments that officers start to develop the markers of cynicism starting on their very first day. As Enciso, Maskaly, and Donner (2016) argue, cynicism “is a by-product of factors other than where [officers] are in their life course (pg. 94).” Literature has linked officers’ families (Osborne, 2014), fellow officers (Osborne, 2014), department leadership (Osborne, 2014), lack of organizational resources (Richardsen, Burke, and Martinussen, 2006), and department size (Rafky, 1975; Regoli et al., 1988; 1989; Hickman, 2008; Enciso, Maskaly, and Donner, 2016) to the development of cynicism in officers.

Consistent with Abraham’s (2000) argument that workers who have negative interactions with consumers, literature has also found that working in high crime and disadvantaged neighborhoods is also associated with the development of cynicism in officers. In fact, Klinger (1997), Caplan (2003), Hickman (2008), and Osborne (2014) argue this very point. Borrowing from Sudnow’s (1965) concept of “normal crimes,” Klinger (1997) argues that this is one powerful influence on the development of cynicism “because officers in districts with high levels of crime and other forms of social deviance see more deviants and deviance in public, get involved in more serious encounters, observe more tawdry social conditions, and thus ultimately understand their districts as more deviant, they will view more types of deviance as normal (pg. 290).”

Consistent with Abraham’s (2000) discussion of work cynicism, Schaible and Gecas (2010) discuss the impact of emotive dissonance on officers. Emotive dissonance occurs when

the values and actions of a worker, in this situation a police officer, do not line up with the values of the organization or its consumers. This is a process echoed by many classic organizational and police scholars (Lipsky, 1980; Muir, 1977; Brown, 1980) and is well articulated by Hickman (2008):

Police officers experience a severe contrast between the ideal expectations and the reality of policing on the street. Officers quickly discover that policing by the book is nearly impossible, if not entirely impractical. Discretion in the enforcement of law is an initially frightening but necessary feature of the daily work of policing. Rules and regulations must occasionally be bent in order to accomplish immediate needs on the street, as there can be no comprehensive set of procedures to address every contingency encountered while on patrol. Officers learn that fighting crime is little of what they do on a daily basis, and dealing with inebriated and other disorderly individuals is their primary business.

These conditions result in frustration and disillusionment as officers attempt to maintain their commitment to professional values. This further generates cynicism, hopelessness in fulfilling their role, contempt for the administrative apparatus that imposes unrealistic goals and objectives, distrust in the public, and general frustrations with the criminal justice system (pg. 5).

Research has been mixed on the connection between rank and cynicism, particularly after controlling for law enforcement tenure and officer age (Enciso, Maskaly, and Donner, 2016). Hou et al. (1983) and Rafky (1975) discovered that officers that served as organizational leadership were less cynical, but later work by Regoli et al. (1990) concluded that they were not. Further research on a national scale would be required to validate either of these conclusions.

The literature has been quite clear about the consequences of police cynicism. Caplan (2003) and Hickman (2008) found that cynical officers are less likely to be satisfied in their work. The inevitable consequence of poor job satisfaction is poor job performance, which also has some support from research on police officers (Hickman, 2008). Cynical officers are also more likely to become isolated within the organization and also are more likely to lose respect for the rule of law and the public writ large, which has consequences for the quality of law

enforcement that cynical officers can provide (Caplan, 2003). These consequences are additional to those described in the organizational cynicism literature outside of policing, most notably loss of organizational commitment and organizational citizenship, and there is little reason to believe that police officers do not suffer those same consequences.

### **“Respect” and Procedural Justice**

Blue Courage references Meshanko’s (2013) work discussing the importance of officer respect. Meshanko argues that respect is important in gaining loyalty and deferment from subordinates in a work environment. Blue Courage extends this framework to the relationship between police officers and community members. This suggests that officers possess the capacity to develop legitimacy from the perspective of the community. Legitimacy is incredibly important for police because it can lead directly to deferment to authority, something scholars argue is more effective than the use or threat of coercive force (Hepburn, 1985; Raven, 1993).

In the context of policing, Meshanko’s (2013) framework for understanding the importance of respect is similar to that of procedural justice (Tyler, 1988; Schulhofer, Tyler, and Huq, 2011). The framework of procedural justice suggests that police *outcomes* do little to sway public opinion of the police. Tyler (1988) argues that police *process* is far more important to understanding citizen satisfaction with the police during an interaction. Tyler outlines seven domains of procedural justice:

1. The degree to which citizens perceive that the actions taken by authorities (i.e. the police) are motivated by a sense of fairness
2. The degree to which citizens judge authorities to be honest in their interactions with them
3. The degree to which authorities follow ethical principles of conduct
4. The capacity for citizens to be represented in any potential decision making process (i.e. do they have a *voice* in the process)
5. The quality of the decisions made
6. The extent to which the authority was biased in any way
7. Any capacity that poor decisions might be corrected



Each of these domains may be more or less salient depending upon the circumstance (e.g. it may be difficult for an officer to involve interested parties in the decision making process in the case of a serious offense like murder) and the definition of some of these concepts (e.g. “ethical principles” or “fairness”) may differ depending upon the social and cultural norms of the parties involved (e.g. see Anderson, 1999).

In later work Tyler (1996) suggests that the outcome of an interaction with police, the issuing of a speeding ticket or not, is not entirely insignificant. Tyler (1996) finds that citizens care less, on average, about process when they know the outcome of an interaction. These same citizens, however, do still place value on process. The problem inherent with police work is that the police are unable to resolve the situation in many criminal incidents (e.g. a person who calls the police because their vehicle was broken into), and citizens often do not understand critical components of the criminal process (e.g. the legal threshold to make an arrest), or place demands upon police that they are ill suited to meet (e.g. quality of life issues like enforcing property codes). Tyler argues that this heightens the importance of procedure in policing over other arenas in public service.

Research into procedural justice suggests that the approach can enhance officer safety by increasing citizen compliance (Hepburn, 1985; Raven, 1993; Sunshine and Tyler, 2003; Tyler, 2006; Nagin and Telep, 2017). Tyler (2006) postulates a series of conditions that leads to citizen compliance through procedural justice approaches. First, procedural justice can increase perceptions of fairness and legitimacy in law enforcement. In turn, citizens who view the police as legitimate are more likely to follow police commands, as Tyler (2006) argues: “because of legitimacy, people feel that they ought to defer to decisions and rules, following them voluntarily out of obligation rather than out of fear of punishment or anticipation of reward” (pg. 375). This

is similar to sociological work by Hepburn (1985) and Raven (1993) who argue that legitimacy can more easily persuade social actors than coercion. Sunshine and Tyler (2003) argue that this is the lynchpin of public perception of the police: more important than the risk of being sanctioned for wrongdoing, or the efficacy of the police as crime fighters, “legitimacy has the strongest influence on the public’s reaction to the police” (pg. 513).

The link between process, satisfaction, legitimacy, and compliance is not salient in every situation. De Cremer and Tyler (2007) find that this relationship is attenuated by citizen trust, both in the police in general and an individual officer in particular. De Cremer and Tyler argue that in situations where a citizen does not have trust information for a police officer (i.e. does not know or know of them), the basic implications about process described above hold. However, in situations where a citizen knows a police officer, trust becomes an important mediating variable on whether a citizen is compliant. This relationship works in both directions as well. If a citizen does not trust an officer (because e.g. they have a reputation of abuse) or the police writ large the power of process is diminished (i.e. the citizen is less likely to comply even if the officer engages in procedurally just practices). Inversely, if a citizen trusts the police they are more likely to comply, even in the absence of those practices.

Lastly, Tyler (2017) suggests that training can instill these principles in police. This is consistent with literature on police training and is critical to the success of Blue Courage. This effect can extend beyond officer behavior, and can influence police culture within a department. This is important to changing the practices of larger swaths of officers and consistent with approaches used by Blue Courage.

## **Resiliency and Stress Management**

Blue Courage focuses heavily on developing Emotional Resilience in training attendees. Law enforcement, as a profession, possesses several unique facets that challenge officers. These facets range in size and scope but the most powerful of which stems from what Bittner (1990) calls the “mandate” of policing: the capacity to use coercive, even lethal, force as a core component of the profession (Bittner, 1990; Skolnick, 1994).

Each of these facets serve as stressors for officers and, in combination with the basic stressors of everyday life (e.g. marital, family, or financial problems), slowly eat away at an officer’s emotional capacity. When an officer loses emotional capacity they are less likely to be able to control their emotions (e.g. fear, anger, or grief) and are more likely to produce an emotional response (Toch, Grant, and Galvin, 1975; Territo and Vetter, 1981; Toch, 2002). For example, an officer with diminished emotional capacity is more likely to present an angry outburst or use extra-legal force in response to a challenging interaction with an uncooperative citizen. Officer’s other capacities, like their problem solving or critical thinking skills, are also impaired (Toch, Grant, and Galvin, 1975; Territo and Vetter, 1981; Toch, 2002).

Rajan-Rankin (2014) defines Emotional Resilience is an “individual’s adaptive response to adversity, stress-resistant personality traits and the ability to ‘bounce back’ [from stressful situations] (pg. 2426).” Resilience works as a buffer against low emotional capacity, slowing the erosion of capacity and, as Rajan-Rankin suggests, helping individuals “bounce back” from stressful events. Blue Courage relates this process to the charging and draining of a battery. Emotional capacity, one’s battery, starts fully charged. Over time that battery slowly drains, even in the absence of stressors. The presence of stressors (e.g. an uncooperative citizen or a fight with one’s spouse) accelerates the “drain” of the emotional battery. Once depleted, people

suffer some of the consequences described above (e.g. emotional outbursts). Resiliency works to slow the drain of the emotional battery, and can also be used to refill it in minor ways.

Emotional Resiliency is particularly important for law enforcement officers because of the additional stressors involved in the work. Classical work on policing has outlined a series of these work related stressors including the need to use coercive force (Bittner, 1990; Skolnick, 1994), higher rates of exposure to stressful and potentially traumatic situations (Skolnick, 1994; Toch, 2002; Tanigoshi, Kontos, and Remley, 2008; Papazoglou and Anderson, 2014) including the death of children (Toch, 2002), social isolation resulting from the nature of the work (Brown, 1981; Skolnick, 1994), reliance on lies and deception as a craft in the field and the perceived constant threat of physical harm (Skolnick, 1994), tense relationships with both citizens (Toch, Grant, and Galvin, 1975; Toch, 2002; Muir, 1977; Skolnick, 1994; Brown, 1980), leadership within the department (Toch, Grant, and Galvin, 1975; Toch, 2002; Manning, 1977; Muir, 1977; Brown, 1980; Reuss-Ianni, 1983), and patrol partners (Toch, 2002), inequality in treatment of officers within a department (Toch, 2002), issues of self-efficacy resulting from repeated failure (Toch, 2002), and long and irregular hours of work that often include night shifts (Toch, 2002; Lowden et al., 2010).

As discussed previously, these facets act as stressors that result in a litany of negative outcomes for officers. Tanigoshi, Kontos, and Remley (2008) state that police officers are more likely to develop negative coping mechanisms to deal with stress like alcohol abuse, tobacco use, and sedentary lifestyles. Additionally, police suffer psychological, emotional, physical, spiritual, and social consequences due to their work. This results in problems with vulnerable interpersonal relationships, depression, anxiety, and even post-traumatic stress, divorce, domestic

violence, and suicide that are all of greater concern than the general public (Tanigoshi, Kontos, and Remley, 2008). Territo and Vetter (1981) describe these consequences:

Stress affects us physically, emotionally, and interpersonally. Its immediate physical effects are increased heartbeat, perspiration, increased breathing rate, inhibition of the digestive processes, dilated pupils, and a number of other physical adjustments made by the body in reaction to stress. More prolonged exposure to stress results in a lowering of resistance, which increases susceptibility of infectious diseases and also to various “diseases of adaptation” such as cardiovascular and kidney ailments, rheumatism and arthritis, ulcers, and allergic diseases – all of which are symptomatic of the body’s efforts at coping with the consequences of stress.

Emotional reactions to stress include confusion, anxiety, fear, anger, cynicism, and even hysteria. An interpersonal reaction to stress is one that directly inhibits a person’s ability to communicate effectively with others. A person having such communication difficulties may vacillate between making irrational emotional outbursts and remaining completely silent. The end result to continued exposure to high-stress situations, if left untreated, are alcoholism, divorce, and even suicide (pg. viii).

One unique source of police stress is the organization that they work for: the police department (Territo and Vetter, 1981; Toch, 2002). Territo and Vetter (1981) outline the unique pressures police face from their departments:

Stress factors that police officers identify as endemic to law enforcement organizational structures include excessive paperwork, red tape, lack of participation in decision-making processes that directly concern them, antiquated promotional policies, and disciplinary regulation that require them to maintain significantly high personal and moral standards than are expected of civilians (pg. viii).

An additional consequence is the cascading nature of the strain that stressors place on officers’ emotional capacity, suggesting that officers may lose capacity slowly over the course of their careers as well (Rauchenbach, Goritz, and Hertel, 2012). This suggests that over time, officers are unable to ‘recharge’ fully, effectively capping their emotional capacity. Some additional research suggests that this effect is exacerbated by race and gender of officers as well, as minorities and women suffer from additional sub-culturally driven stressors within many

police organizations (Moon and Johnson, 2012; Robinson, MacCulloch, and Arentsen, 2014; Schneider, Lyons, and Khazon, 2013).

Some authors have found that emotional resiliency can be an innate trait (Galatzer-Levey et al. 2013; Goritz, and Hertel, 2012; Robinson, MacCulloch, and Arentsen, 2014), but others have argued that people, including police officers, can build resiliency (Day and Hong, 2016; Schneider, Lyons, and Khazon, 2013; Wang, Xu, Luo, 2016; Galatzer-Levey et al., 2013; McCraty and Atkinson, 2012). One primary building block, pertinent specifically to Blue Courage, is the capacity of individuals to develop resiliency through mindfulness meditation (Wang, Xu, Luo, 2016) and training (Day and Hong, 2016; Schneider, Lyons, and Khazon, 2013; Galatzer-Levey et al., 2013; Berking, Meier, and Wupperman, 2010; McCraty and Atkinson, 2012).

There are, however, significant hurdles in building this capacity. Most prominent within the literature are the roles played by organizational leadership and culture (Toch, Grant, and Galvin, 1975; Chapin et al., 2008; Tucker, 2012; Moon and Johnson, 2012; Goerling, 2012; Day and Hong, 2016). Research has found that organizational culture within police departments stymies the desire of officers to address issues with emotional capacity and resilience (Hunt, 1985; Day and Hong, 2012; Chapin et al., 2008; Papazoglou and Anderson, 2014; Goerling, 2012; Tucker, 2012). This is largely due to the perception among police that asking for help, particularly in the domain of emotional health, is a sign of weakness.

Literature on organizational change in general (Mastrofski, 2001; Engle, 2001; Jacobs, 1978) and adoption of practices that support emotional resilience specifically finds that it requires strong organizational leadership. Work by Tucker (2012), Goerling (2012), Moon and Johnson (2012), and Day and Hong (2016) find that support from organizational leadership is

key. Leadership is additionally important for counteracting the cultural stigma within policing of asking for help with issues regarding emotional and mental health (Tucker, 2012; Day and Hong, 2016; Goerling, 2012), which, stated above, is a central impediment. Interestingly, Tucker (2012) adds that these findings hold even when the perceived competency of the mental health provider is controlled for. This suggests that officers know that focusing on mental and emotional health is important and would be helpful in their lives, but they are deterred from reaching out because of unsupportive leadership and a stigmatizing sub-culture within policing.

### **Positive Psychology**

In conjunction with emotional resilience, Blue Courage also teaches attendees the principles of positive psychology, largely as a tool for enhancing resilience. This is apt because some literature directly ties positive psychology to enhanced emotional capacity and resilience (Arnetz et al., 2009; Galatzer-Levey et al., 2013; Wang, Xu, and Luo, 2016; Fredrickson, 2001; Bolier et al., 2013), largely through the process of emotion regulation. Positive psychology grew out of the discipline of psychology in the early 2000s due to an understanding within the field that an undue emphasis had been placed on the study of all things *negative*, at the expense of understanding the *positive* aspects of the human psyche (Gable and Haidt, 2005; Lomas, 2016). These aspects include examining the impact and correlates of hope, optimism, motivation, positive emotions, and well-being (Rusk and Waters, 2013).

At the individual level, positive psychology has been associated with lower levels of stress (Seligman et al., 2005; Rana, 2005; Froman, 2010), reductions in depression (Seligman et al., 2005), enhanced workplace satisfaction and motivation (Martin, 2005), and some literature suggests it might even enhance physical health (Rana, 2015). The capacity for positive thought

to serve as a healthy tool to combat the negative aspects of stress makes positive psychology valuable in understanding emotional resilience.

Research has also identified mediating factors associated with the success of Positive Psychology. Froman (2010) and Martin (2005), for example, argue that organizational leadership is critical in creating a culture of acceptance for using the principles of Positive Psychology. This is tied directly to the efficacy of Emotional Resilience in police organizations and suffers from the same impediments. A meta-analytical review by Bolier et al. (2013) discusses factors that influence the efficacy of positive psychology, finding that positive psychology interventions are more effective when they are longer and if they are targeted to higher need recipients. Both of these are limitations of the Blue Courage training as it only trains officers on the principles of positive psychology for two hours and openly admits that it prefers to target ‘low-hanging’ officers (i.e. those who would be most receptive to talking about emotional and mental health).

### **“Practical Wisdom” and Police Discretion**

Blue Courage borrows the concept of practical wisdom from the work of Schwartz (2010). Schwartz develops and discusses a spectrum of approaches designed to elicit behavior from others (particularly organizations). He suggests that on one end of the spectrum are approaches that use regulations and formal pressure to push organizations to change. On the other are approaches that develop the human capacity of individuals (i.e. their wisdom) to informally engage in change. He argues specifically that regulatory action alone is insufficient if the *motives* of individuals are left unchanged. Schwartz argues that people will simply expose another regulatory loophole. On the other end, human development allows for the potential that people will self-regulate their behavior and that of their organizations.



Schwartz (2010) discusses this framework in the context of banking regulations, but Blue Courage argues that it, a focus on developing people and informal change rather than change through policy or law, can also be applied to policing as well. Some organizational literature suggests that this may also be more practical (Lipski, 1980; McCleary, 1978), particularly in the context of policing (Skolnick, 1994; Muir, 1977; Brown, 1981; Maynard-Moody and Musheno, 2003).

A focus on human development is useful in the context of policing because of the high degree of discretion and a loosely coupled form of supervision and oversight of line-level officers (Muir, 1977; Lipski, 1980; Brown, 1981; Skolnick, 1994; Maynard-Moody and Musheno, 2003). Lipski (1980) is most clear in describing the unique problems associated with line-level public servants (i.e. police officers), arguing that these line-level workers are tasked with numerous goals and objectives in their work which often conflict in serious ways (e.g. officer need to balance crime control with the due process protections of suspects). As a result, line-level officers require an enormous amount of individual and situational discretion to be effective. Developing the skills of these officers to navigate different situations and know how best to react, or what Schwartz (2010) would call their “wisdom,” is key to producing quality law enforcement outcomes.

Some policing classics describe police work in terms similar to that of practical wisdom. These texts explain police work as what might be considered ‘craft’ work, or heavily reliant on personal experience, unique and developed skills, and situational discretion. Skolnick (1994) outlines police work as a craft profession in his description of narcotics policing and the development of informants:

The major organizational requirement of narcotics policing is the presence of an informational system. Without a network of informers...narcotics police cannot operate.

It is possible to capture addicts by cruising in an unmarked car in certain neighborhoods and looking for what the police call ‘furtive’ movements – a shuffling that indicates to the eye of the skilled narcotics officer that the suspect is trying to dispose of a ‘joint of weed’ (marijuana cigarette) or a ‘dime paper’ (ten-dollar package of heroin). Even if, however, the police officer succeeded in catching such an offender, the officer would ordinarily attempt to use the exculpation of incriminating evidence as ‘payment’ for the suspect’s cooperation as an informant. In narcotics work, the apprehension of a person with one joint of one dime paper simply does not constitute a ‘good pinch.’ The narcotics officer is primarily interested in uncovering a large cache, and for this to happen, informants must be employed (pg. 117-118).

Toch, Grant, and Galvin (1975) allude to this process in their attempt to modify officer use of force behaviors. They suggest that the process happens in a unique context for police: “police conduct is multi-dimensional. Each officer must perform with a style and temperament, emotional expression, and communication that extends into his private life and reflects him as a human being. He must act as a product of police training and influence, filtered through pre-existing conceptions and expectations (pg. 1).” Later, Toch, Grant, and Galvin (1975) argue that officers can develop wisdom through interactions with citizens and training in order to more appropriately use force:

Change targets are not passive arenas for ministrations; they are self-reflecting and active, and can take roles beyond their regeneration. They have relevant experience and skills, and reason to care. Thus, the police officer who has overeagerly responded to hostile citizens accumulates experience with degenerating contacts. If we can induce such an officer to adopt a more sophisticated perspective, he can draw upon a wealth of data about human interactions not possessed by less aggressive officers. Moreover, he may be uniquely able to see the point of the violence prevention effort. He can think back to his own narrow escapes – the near-riots, injuries, courtroom inquisitions, and reprimand from superiors. He can recall the necessary deceptions and their risks (pg. 3).

Muir (1977) describes the development of “wisdom” in officers in his discussion of the paradox of coercive force:

The extortionate model makes it possible to see the pitfalls of coercion more clearly, particularly the paradoxes of coercive power:

1. *The paradox of dispossession:* The less one has, the less one has to lose.

2. *The paradox of detachment*: The less the victim cares about preserving something, the less the victimizer cares about taking it hostage
3. *The paradox of face*: The nastier one's reputation, the less nasty one has to be.
4. *The paradox of irrationality*: The more delirious the threatener (sic), the more serious the threat; the more delirious the victim, the less serious the threat.

But the reality, and the subtle irony, of being a policeman is that, while he may appear to be the supreme practitioner of coercion, in fact he is first and foremost its most frequent victim. ... The citizen is, relative to the policeman, the more dispossessed, the more detached, the nastier, and the crazier. Add to these natural advantages the fact that most police-citizen encounters are begun under circumstances which the citizen has determined, and the reader may begin to feel some of the significant limits placed on the policeman's freedom to respond to these encounters. ... The irony of the policeman's lot is that his authority, his status, his sense of civility, and his reasonableness impose terrible limits on his freedom to react successfully to the extortionate practices of others (pg. 44-45).

Police must learn to act within these parameters (i.e. develop adequate 'wisdom') in order to effect positive policing outcomes, as well as protect themselves and their fellow officers.

Brown (1981) describes a similar process in the development of police discretion as a response to the unique social and organizational pressures that police face:

Though there are important commonalities in the experiences of patrolmen, though they confront the same dilemmas and choices while working the street, there are profound differences in the way they respond. The occupational pressures that impinge on patrolmen do not lead to a distinct "police mentality." Rather, these occupational pressures facilitate the formation of a bond of solidarity among policemen, one that provides the emotional support and trust necessary to perform an arduous task in the face of a deep-seated sense of isolation from the community. This bond also, in conjunction with the ethos of individualism and the limits of formal administrative control, contributes to a tendency among patrolmen, to fashion highly individualized approaches to police work (pg. 221).

The development of these "highly individualized approaches" closely resembles Schwartz's (2010) conception of "practical wisdom."

### **Physical Wellness**

Physical wellness, the maintenance of a healthy diet and exercise, has traditionally been seen as core to effective police work. A large body of literature, including on subjects in the

military, have also reached this conclusion (e.g. see Purvis et al., 2013; Rethorest, Wipfly, and Landers, 2009). An officer's capacity to run, chase, tackle, wrestle, and ultimately detain a suspect has been central to the popularly understood conception of effective police officers. While not completely dismissing the importance of physical wellness for the aspects of policing that require officers to be "warriors," Blue Courage argues that physical wellness is also key for officers to be effective "guardians."

A body of literature suggests that police work has negative consequences for physical wellness. Police suffer from irregular sleep and high levels of stress, as well as a heightened risk of a litany of health problems including metabolic disorders, heart disease, cancer, diabetes, obesity, and chronic lower back pain (Lowden et al., 2010; Tanigoshi, Kontos, and Remley, 2008). In large measure this is a consequence of poor diet and exercise which are significantly constrained due to the structure of irregular hours and poor availability of healthy meals that characterize police work (Lowden et al., 2010; Tanigoshi, Kontos, and Remley, 2008).

Some literature suggests that physical wellness is also tied to other forms of officer wellness, specifically emotional capacity to cope with stress (Anshel, Umscheid, and Brinthaup, 2013; Lowden et al., 2010; Fodor et al., 2014; Rethorest, Wipfly, and Landers, 2009; Tanigoshi, Kontos, and Remley, 2008). This is problematic both for officers as people and for policing as a profession which requires officers to be emotionally stable to make sound judgements. Thankfully, these constraints are not determinative of officer outcomes. Literature also finds that police can be taught to overcome many of these deficits through in-service training programs (Anshel, Umscheid, and Brinthaup, 2013; Tanigoshi, Kontos, and Remley, 2008).

### **Linking these Central Concepts**

The Blue Courage training focuses on the “whole person,” indicating that each of the areas discussed above interact. Blue Courage tries to integrate each of these concepts together, highlighting the ways in which concepts intersect with one another. For example, some literature suggests that intense cultural pressures within organizations, in particular found within police departments, push members away from seeking and accepting help with issues of emotional capacity and resilience (Chapin et al., 2008; Goerling, 2012; Tucker, 2012; Papazoglou and Anderson, 2014; Day and Hong, 2016). These two issues must be integrated, particularly in the setting of police and police departments, to be adequately understood.

Two additional concepts, physical wellness and organizational cynicism, are also tied intrinsically to emotional capacity and resilience (Toch, Grant, and Galvin, 1975; Rethorst, Wipfli, and Landers, 2009; Anshel, Umscheid, and Brinthaup, 2013). Work by Rethorst, Wipfli, and Landers (2009) and Anshel, Umscheid, and Brinthaup (2013) found that exercise can enhance emotional resilience by reducing stress, and Fodor et al. (2014) showed that engagement in a healthy diet was moderated by worker level of stress. This highlights the linkages between physical, mental, and emotional health.

Despite the current uncertainty about the meaning of many of these concepts, arguments can be made that links might also exist between: respect and practical wisdom, because procedurally just behavior allows officers a wider range of tools with which to solve unique problems; emotional resilience and practical wisdom, because officers require stability and clear headedness in order to actively engage in “craft” like problem solving (Toch, Grant, and Galvin, 1975); positive psychology and emotional resilience, because positive psychology allows for the positive regulations of emotions that are beneficial to maintaining resilience (Arnetz et al., 2009;

Galatzer-Levey et al., 2013; Wang, Xu, and Luo, 2016; Fredrickson, 2001; Bolier et al., 2013; Froman, 2010; Rana, 2015; Goerling et al, 2016); and emotional resilience and respect because, as Goerling (2012) argues, poor resilience in officers produces poor interactions between officers and citizens which has consequences for police-community relations.

Toch, Grant, and Galvin (1975) tie the development of organizational cynicism into a number of these dimensions:

[There exists] a key link between problems of individual mental health, organizational effectiveness and community welfare. On an individual level, the forms taken by alienation include apathy, unhappiness, and frustration-motivated conduct, ineffectiveness (in relation to organizations) and poor citizenship (in relation to the community). Organizations that comprise alienated members or workers are unable to communicate their goals, and experience poor morale, high absenteeism and low quantities and/or qualities of production (pg. 4).

Each of these concepts are critical to understanding Blue Courage, and should be considered in their intersection with each other to be fully understood.

### **Efficacy of Police Training**

The pertinent literature for understanding the potential efficacy of Blue Courage falls roughly into three categories: (1) Officer training designed to develop baseline knowledge and tactical skills, (2) officer training designed to change attitudes and emotions, and (3) research on the correlates and impediments of department-wide change.

Research on enhancing baseline knowledge and tactical skills among officers suggests that training programs can, with some exceptions (e.g. see Sleath and Bull, 2012), be effective while cutting across a large swath of areas including overdose knowledge and prevention and familiarity (Saucier et al., 2016) and use of violence risk assessment tools (Storey et al., 2011), as well as competencies and skills working with those with special needs such as the deaf and hard of hearing and LGBTQ communities, victims of sexual assault, the suicidal, and youth

(Engelman and Deardorff, 2016; Israel et al., 2014; Lonsway, Welch, and Fitzgerald, 2001; LaMott et al. 2010; Marzano et al., 2016). In summary, this research suggests that police training can be effective in conveying knowledge and skills. However, building knowledge and skills, while important, is not the goal of Blue Courage.

More central to Blue Courage is research on best practices for changing police officers' attitudes and emotions. This research is more mixed than those evaluating training aimed at knowledge and skill development. Some literature suggests that this can be especially difficult even in areas where training has had some success building knowledge and skills (Engelman and Deardorff, 2016; Israel et al., 2014; Lonsway, Welch, and Fitzgerald, 2001; Sleath and Bull, 2012). Encouragingly, some research suggests that altering these aspects through police training is possible.

Buchanan and Perry (1985), LaMott et al. (2010), and Marzano et al. (2016) show that training programs can alter police attitudes. Buchanan and Perry (1985) discovered that police officers' attitudes in a number of domains related to domestic disturbance calls of service changed as a result of a training program. Most notably this training was found to be effective at convincing officers that domestic disturbances should be taken more seriously, suggesting a change in value orientation in officers. LaMott et al. (2010) evaluated a program designed to reduce disproportionate minority contacts, particularly of youth, by officers and found that the training was effective at changing officers' attitudes towards youth. Lastly, Marzano et al. (2016) found that a training program both educated officers on suicide, provided them skills with how to manage situations with citizens who are showing signs of being suicidal, and also altered officers' attitudes towards the suicidal.

Of specific importance to Blue Courage, Berking, Meier, and Wupperman (2010) and McCraty and Atkinson (2012) suggest that police training programs can enhance officers' emotional skills, thus promoting officer emotional and mental health, as well as their general well-being. Berking, Meier, and Wupperman (2010) found, following a training program, that officers were able to better process the negative emotions resulting from police work (e.g. goal conflict, perceived lack of support from the department and the community, and trauma from violent encounters). Using the skills of emotional regulation served an alternative to managing stress through more harmful means such as alcohol abuse. McCraty and Atkinson (2012) evaluated a training program designed to promote "resilience-building" and "self-regulation skills" (pg. 44). They found that officers who participated in the training showed improvement in emotional well-being, stress coping and interpersonal skills. These skills resulted in improved familial relationships for officers.

In summary, evaluations of police training programs, while mixed, show some evidence of efficacy. This is true for changing attitudes as well as developing skills for managing and regulating emotions. These aspects are core to the Blue Courage training and this literature signal that there are precedents to the training.

A third component of the literature that is important to assessing the impact of Blue Courage is research on organizational change and resistance to change. One stated aspect of the training is the hope that the changes instilled among individual officers will diffuse throughout the larger department. Understanding the obstacles to this process helps set the stage for understanding the efficacy of Blue Courage.

Literature on organizational change is mixed, but several key themes emerge. First, organizational change can be exceedingly difficult. This is particularly true of police



departments (Maguire, 1997; Zhao, 1996; King and Lab, 2000; Maguire et al., 2003). Second research suggests that bottom-up change stemming from sources within can be effective, particularly with pressure from organizational leadership (McCleary, 1978; Willis, Mastrofski, and Weisburd, 2004; Ford, 2007; Zucker, 1987). Third, these changes tend to be slow, taking a period of time to be institutionalized within organizations (Zucker, 1987). Lastly, changes within organizations that are most likely to succeed and take root over time tend to be those that are consistent with the current institutional environment of the organization (Zhao, 1996; King and Lab, 2000; Maguire et al. 2003). For example, the adoption of strategies that involve the reallocation of officer patrols, an existing structure within police departments that members of the department agree are important and fit their conception of policing, have been found to be more likely to be adopted by departments than the adoption of the principles of community policing, which require department wide restructuring and a reorientation of officers into a philosophy of policing that does not fit the conception of policing to many officers (Zhao, 1996; King and Lab, 2000; Maguire et al. 2003).

This is closely related to the field of implementation science. Fixsen, Naoom, Blase, Friedman, and Wallace (2005) introduced a framework for understanding effective intervention implementation. Their framework was later revised by Bertram, Blase, and Fixsen (2015). This framework outlines three key domains for understanding implementation: (1) core intervention components that lead to successful implementation, (2) stages of the implementation process and (3) drivers of implementation success and sustainability (Fixsen, Naoom, Blase, Friedman, and Wallace, 2005; Bertram, Blase, and Fixsen, 2015).

First, the framework outlines five core intervention components that lead to successful implementation: (1) defining the intervention, (2) theory and evidence that supports the

intervention, (3) theory of how desired changes will take place, (4) understanding of the unique needs of the target population, and (5) the ruling out of alternative interventions (Fixsen et al., 2005; Bertram, Blase, and Fixsen, 2015). This approach is designed to fully assess the needs of the organization and to establish model fit with organizational need. This prevents the use of poorly fitting interventions which wastes time and financial resources, and also threatens to entrench what Abraham (2000) calls “organizational change” cynicism, the result of “the predictable sequence of lofty pronouncements, rapid implementation, and inevitable failure, to be followed immediately by the next new program” (pg. 272). This is problematic because organizational cynicism can produce resistance to the implementation of future interventions (Abraham, 2000).

Next, Bertram, Balse, and Fixsen (2015) outline four stages of successful implementation: Exploration, Installation, Initial Implementation, and Full Implementation. Full Implementation, they argue, is the aspirational stage reached only when an intervention is implemented as envisioned with fidelity. This vision requires a tremendous amount of groundwork to be laid before reached.

The first stage in the groundwork, “Exploration,” consists of four steps. First, an organization or collaboration should (a) assess their needs. For example a police department might determine that they require officers that have greater purpose and more extensive awareness of their personal mental and emotional health. Next, an organization should (b) identify and examine the components of an intervention and (c) assess the “implementation drivers” within their organization or collaboration. These “drivers” will be discussed in the next section. Lastly, the intervention should be examined for its fit with the organization’s needs. This is designed to prevent the adoption of an intervention that is maladaptive or unnecessary.

The next stage outlined in the framework is “Installation” (Fixsen et al., 2005; Bertram, Blase, and Fixsen, 2015). The first step in this stage is the acquisition of resources. This includes financial resources to pay for training or, as is often the case in policing contexts, overtime assignments. This might also include intervention specific resources such as training materials. The next step is to prepare the organization or collaboration for the intervention. This includes altering organizational structures to accommodate the new intervention and training organizational staff to implement the intervention. Next, proper Installation requires preparation of implementation drivers, which will be discussed more in the following section

The next stage described by Fixsen et al. (2005) and Bertram, Blase, and Fixsen (2015) is “Initial Implementation.” This stage is largely a place for iterative feedback processes to take place. Implementation staff should (a) deploy data systems to assess the quality of the implementation and efficacy of the intervention, and (b) manage necessary changes that are required to enhance implementation fidelity including (c) potential changes to the implementation drivers which will be detailed in the following section.

Bertram, Blase, and Fixsen (2015) argue that “program services are inefficient, poorly executed, ineffective, or are not sustained when the host organization attempts to move to full implementation without developing or repurposing and working through the framework of implementation drivers (pg. 481).” The development of a refined definition of these “Implementation Drivers” is perhaps the most significant revision made of the original Fixsen et al. (2005) framework by Bertram, Blase, and Fixsen (2015). These Implementation Drivers “establish the capacity to create practice, program, and system-level changes needed to achieve improved population outcomes. They are the infrastructure elements required for effective implementation that support high fidelity, effective, sustainable programs (pg. 481).” Bertram,

Blase, and Fixsen (2015) posit three of these Drivers that interact to produce effective implementation: Competency Drivers, Organizational Drivers and Leadership Drivers.

The first critical driver of successful implementation are “Competency Drivers.” As Bertram, Blase, and Fixsen (2015) state: “The purpose of competency drivers is to promote competence and confidence of those [staff] engaged in implementing the program model (pg. 482).” There are four core Competency Drivers: (1) staff selection, (2) staff training, (3) staff coaching and (4) staff performance assessment.

Staff selection, Bertram, Blase, and Fixsen (2015) argue, has important implications but is rarely considered by implementers. Having the appropriate staff implementing a particular intervention can be key to the success of the intervention. As Bertram, Blase, and Fixsen (2015) state, for interventions to be implemented with fidelity sometimes staff must be selected “with knowledge of, or aptitude for, engaging the target population (pg. 482).” Also, they argue that for efficacious implementation it becomes “necessary to establish staff selection criteria that also seek model-pertinent or target-population specific knowledge, skills, or aptitude (pg. 482).”

Bertram, Blase, and Fixsen (2015) describe staff training as the next component of the Competency Driver of implementation. Bertram, Blase, and Fixsen (2015) state:

Preservice training during the installation phase and in-service training during the subsequent implementation stages should help develop a shared knowledge of population characteristics, the rationale for choosing the program model, the model definition, including its key elements, activities, phases, and the theory bases supporting them as well as the program model’s theory of change (pg. 483).

Bertram, Blase, and Fixsen (2015) suggest that an impactful way to support implementation is to measure these attributes in staff and evaluate the efficacy of staff training with the same rigor and priority that might be put into evaluating the efficacy of the intervention itself. Regrettably, Bertram, Blase, and Fixsen (2015) state that this is rarely done.

Staff coaching should be considered as an extension of staff training (Bertram, Blase, and Fixsen, 2015). This is a process carried out by implementation staff leaders during the stages of installation and initial implementation. As Bertram, Blase, and Fixsen (2015) argue: “Coaching should support staff in trying out new skills or abilities. It is especially important to provide this support during initial implementation when they are likely to be uncomfortable and awkward as they implement a new practice (pg. 483).” This is particularly important when trying a new approach because staff often want to revert back to previous practices, reducing implementation fidelity (Bertram, Blase, and Fixsen, 2015)

In the context of implementation Bertram, Blase, and Fixsen (2015) argue that performance assessments are meant to examine two key aspects of model fidelity: (a) practitioner performance with consumers, and (b) organizational performance managing drivers of implementation. This last part, organizational drivers, will be discussed in the following section.

Organizational Drivers are a second critical group of influences that push successful implementation. These drivers are important for establishing and managing the structures needed for successful implementation. Bertram, Blase, and Fixsen (2015) outline three types of organizational drivers: (1) systems-level interventions, (2) facilitative administration and (3) decision support data systems.

Bertram, Blase, and Fixsen (2015) describe Systems-Level Interventions as macro-level events, changes, or contexts that impact implementation. As Bertram, Blase, and Fixsen (2015) describe: “Stages of implementation unfold in an ever-changing context of federal, state, organizational, and community factors that are themselves influenced by shifting socio-

economic, political, and cultural concerns (pg. 485).” These differences impact implementation across different contexts, and require attentive stewardship from implementers to navigate.

Facilitative administration is the proactive capacity of intervention administrators to produce and sustain structures within implementation that produce fidelity with the intervention model. Bertram, Blase, and Fixsen (2015) provide the example of reorganization and caseload of staff during the implementation of a new intervention:

Job descriptions, caseload size, training, coaching, and decision support data systems had to be integrated and adjusted to support development of staff competence and confidence in delivery of [services]. Caseloads were reduced from 20 to 8 or 10 cases per [service] care coordinator. Position responsibilities of the care coordinator and parent partner were differentiated. Coaching responsibilities were reorganized so that care coordinators and parent partners working with the same family would receive coaching from the same supervisor.

Furthermore, Bertram, Blase, and Fixsen (2015) state that the administrative team, through the course of regularly scheduled planning meetings, identified issues with implementation which then “guided further adjustments to the focus, frequency, and formats of coaching (pg. 485).”

The last type of organizational driver is the development of a decision support data system. These data systems should include mechanisms to assess (a) implementation fidelity and (b) intervention outcomes. These assessments can then be used to make adjustments to any of the drivers described above. Bertram, Blase, and Fixsen (2015) argue that one critical aspect of these data systems is that they must provide timely data to administrators and staff so that decisions regarding changes can be made quickly.

Bertram, Blase, and Fixsen (2015) suggest that the last set of implementation drivers, Leadership Drivers, work to tie together and manage the Organizational and Competency Drivers described above. Bertram, Blase, and Fixsen (2015) describe two separate Leadership Drivers that consist of two necessary skillsets: Technical Leadership and Adaptive Leadership.

Technical leadership is best understood as the skills required for operational maintenance, observing the implementation process and keeping key players on task, and the resolution of procedural problems (Bertram, Blase, and Fixsen, 2015). Bertram, Blase, and Fixsen (2015) argue that this approach is most appropriate at times of consensus among the implementation team. Contrary to this, Adaptive Leadership is required at times of disagreement and strife amongst the implementation team. Adaptive leadership requires observing the implementation process and identifying when various aspects need change and how to change them.

Bertram, Blase, and Fixsen (2015) argue that Technical and Adaptive Leaders are required for different domains of implementation. Technical Leadership is required in all domains (e.g. managing the operation of a data collection process) while Adaptive Leadership is most important in the areas of (a) coaching, (b) facilitative administration and (c) systems-level intervention.

The concept of Intervention Acceptability might also play a critical role in understanding the efficacy of the Blue Courage Train - the - Trainer model. Bertram, Blase, and Fixsen (2015) suggest that proper implementation requires an understanding of the unique needs of the target population. One aspect of these needs is the “acceptability” of the intervention in the minds of the target population. Issues of intervention acceptability have been found to be critical correlates for successful intervention implementation in fields ranging from social work (Wilson et al., 2017), medicine (Dixon et al., 2016), and substance abuse (Price et al., 2012).

Intervention Acceptability is critical for both implementation staff and intervention clients (Price et al., 2012; Dixon et al., 2016; Wilson et al., 2017). Implementation staff who do not believe in the intervention model, or who do not value the importance of the desired outcomes, may be less likely to implement the intervention as designed, reducing model fidelity

(Price et al., 2012; Bertram, Blase, and Fixsen, 2015; Dixon et al., 2016; Wilson et al., 2017).

Furthermore, clients who are not receptive to an intervention because it is burdensome or conflicts with their values or identities may be less likely to use the information or skills provided.

Despite there being no formal evaluation of the Blue Courage training, an examination of the literature suggests the potential for efficacy. Many of the core elements of the training, in particular those surrounding mental and emotional health, are supported by the literature. Some of the elements, however, are untested. The concept of practical wisdom is perhaps the best example of this. Furthermore, some of the same evaluations of similarly focused training were of multi-week training programs, suggesting that treatment dosage might be an issue with Blue Courage.

Specific to the deployment of Blue Courage through the train-the-trainer model, the literature suggests that several factors may facilitate and inhibit the capacity to implement Blue Courage with fidelity. Can a five-day instructor course produce sufficient competency in staff members to implement the training with high fidelity? What role do organizational structures play in facilitating or inhibiting the implementation of Blue Courage? Can the curriculum of the training, which discusses issues of mental and emotional health, be packaged in a way that is acceptable to both instructors and officers within the research site? These are all questions that need to be addressed.



## Chapter 4: Key Research Questions and Methodology

### Key Research Questions

This dissertation outlines four primary research questions regarding the Blue Courage training:

1. What is the intervention “Blue Courage?”
2. Is the Blue Courage training able to change attitudes, beliefs and behaviors in officers who complete the training?
3. What types of individual and agency-level factors influence the effectiveness of the Blue Courage training?
  - a. Agency size and type?
  - b. Officer Cynicism?
  - c. Officer Race?
  - d. Officer Gender?
  - e. Officer Rank?
4. What influence does training fidelity, specifically the delivery model, have on program outcomes?

The first step of the evaluation will be to define the intervention. Based on the definition provided by the Blue Courage organization, there is some ambiguity about what the training is and what it seeks to accomplish. The core concepts described above are also loosely defined. In order to fully understand the impact of the intervention, we will first need to define exactly what that intervention *is*.

The second step of the dissertation will be to assess the impact of the training on officers. The literature is quite clear that mental and emotional health, physical health, and procedural

justice focused police training programs can have at least some effect in changing the attitudes, beliefs, and behaviors of officers (e.g. see McCraty and Atkinson, 2012; Tanigoshi, Kontos, and Remley, 2008; and Tyler, 2017). However, without exception these interventions were of a time frame significantly longer than Blue Courage. This suggests that Blue Courage, which only focuses two hours on each of these topics and doesn't allow officers to reflect on intervention content between periods of training contact, may not be sufficient to produce meaningful changes. There is also a dearth of knowledge on the impact of the more unique aspects of the Blue Courage curriculum like practical wisdom or nobility and purpose. It is currently unclear what impact a training like Blue Courage can have on these domains.

Third, the research will examine additional factors that influence the efficacy of the training. The size of the agencies where officers work may play a role in the impact of the training. The literature suggests that differences in agency size influence the development of cynicism in officers, largely due to the increased presence of bureaucratic layers in larger departments (Rafky, 1975; Regoli, 1988; 1989; Hickman, 2008; Enciso, Maskaly, and Donner, 2016). This literature also suggests that officers who work in higher crime areas, associated with urban settings in the United States, are more likely to develop cynicism (Klinger, 1997; Richardsen, Burke, and Martinussen, 2006; Hickman, 2008) in part because they perceive their work to be ineffective (Klinger, 1997).

The organizational literature suggests that members of different rank perform different and critical functions within organizations. Organizational leaders are key to setting the tone of organizational culture and creating organizational structures (Jacobs, 1978; Mastrofski, 2001; Willis, Mastrofski, and Weisburd, 2004; Schein, 2005), line-level workers are responsible for enacting (or changing) the formal policy of an organization (Lipsky, 1980; Maynard-Moody and

Musheno, 2003), and mid-level managers are critical to the efficiency of organizations by bridging the divide between leadership and line-level workers (Engel, 2001). Understanding the impact of Blue Courage on officers of different ranks is critical to understanding not only the potential of the training to ameliorate some of the negative consequences of the profession on individual officers, but also the training's capacity to alter organizations as well.

The policing literature is clear that many police officers develop an innate cynicism after a short period of time on the job (Caplan, 2003). Officer cynicism is critical to training success because, as Gilbert, Wakeline and Crandall (2015) discovered in a training regarding procedural justice in Chicago, Illinois:

Soon after the training began, the Chicago PD training team observed that cynicism – expressed as frustration, disillusionment, and distrust – limited officers' openness to the course content. The trainers all knew that interacting with people at the lowest points in their lives – a common daily experience for police – often had serious effects on officers' personal relationships and professional experiences. The instructors, drawing on their own insights and the work of consultant Kevin M. Gilmartin, developed a course component that prompted participants to reflect on and recognize their own cynicism and distrust. That facilitated an open, candid and constructive discussion on ways that cynicism can be a barrier to improving relationships with the community. The acknowledgment of cynicism in the training allowed for authentic engagement about the personal and professional value of procedural justice, the importance of a strong police-community relationship and the ways officers' behavior can affect it (pg. 5).

This is almost the inverse of the risk-needs responsivity problem outlined by Lowenkamp and Latessa (2004) and Lowenkamp, Latessa, and Holsiner (2006). However, instead of low-risk officers being harmed by the intervention, the obstacle of officer cynicism in this context suggests that the neediest officers may not be receptive to the course content.

Officer race and gender may also influence their receptiveness to the training. Literature on police stress suggests that both female officers and minority officers are at risk of higher rates of stress when compared to their male and non-minority counterparts, respectively (Robinson,

MacCulloch, and Arentsen, 2014). It is possible that these differences reduce the impact of the training because these officers are at a higher state of risk. Counter to this, these officers may also be impacted more by the training because they have greater room for improvement or may have different stress related capacities compared to their respective counterparts (Schneider, Lyons, and Khazon, 2013).

Fourth, the dissertation will attempt to determine the influence that implementation fidelity has on training outcomes. Training fidelity is critically important to understanding the impact of Blue Courage because it is implemented through several different means. Specifically, the use of the TTT model strongly suggests that fidelity of implementation of the Blue Courage training differs significantly when classes are taught by the program's founder, Michael Nila, in contrast to local instructors within individual agencies.

Process evaluations offer some insight into this challenge. As Carol Weiss (1998) argues:

The evaluator has to discover the reality of the program rather than its illusion. If she accepts the description given in the application for funds, or in publicity releases, she may evaluate a phantom program. The study will be attributing effects (or no effects) to a program that never took place at all, or one that operated at so low a level of competence or in such a different manner that it hardly deserves to be called by the program name (pg. 49).

The question becomes: Is Blue Courage implemented with fidelity through its TTT model, and still maintain the accurate title: *Blue Courage: The Heart and Mind of the Guardian*? Or are instructors implementing a "phantom program," as Weiss (1998) suggests is common? The work of Fixsen et al. (2005) and Bertram, Blase, and Fixsen (2015) on "implementation drivers" should provide a framework for identifying differences in program fidelity across these different methods of implementation.

### **Methodology to Address these Questions**

The proposed dissertation will employ three general approaches to answer these four research questions. First, little is currently known about the content of the Blue Courage training, its curriculum, or its methods of delivery. In order to better understand the potential efficacy of the training, the first step in the proposed dissertation will be to collect information about the training and document its curriculum and methods of delivery. Data for this will come from interviews with Blue Courage staff, observations of Blue Courage instructors teaching the curriculum, and a review of the documented curriculum for the in-service Blue Courage training and TTT instructor course.

Second, pre- and post-data from a national sample of officers who completed the Blue Courage training will be reviewed and analyzed to help answer the second, third and fourth research questions. The survey instrument used to collect data for this evaluation (Appendix a) has information on each of the core concepts embedded in the training as well as demographic information on participants that will allow for group comparisons. This includes data on the type of agency (rural, suburban and urban) participating officers work in and the age, rank, gender, and race of those officers. The survey data will allow for comparisons across these different subgroups.

Third, the dissertation will examine the experience of a single department that immersed every officer in the Blue Courage training using Blue Courage's train-the-trainer model. This department was selected because of its willingness to allow additional qualitative data to be collected regarding the training. It is not representative of all departments, but its size allows for a large enough sample of officers to draw confident statistical conclusions regarding the efficacy of the training there. Analysis of survey data collected on officers in the department will allow

for an assessment of the impact of the training. A review of notes taken from multiple observations of Blue Courage training in the department, and a review of notes taken during interviews with local instructors certified to teach Blue Courage will allow for an assessment of training fidelity and provide a window into some of the implementation issues Blue Courage might face in similar sites when using the train-the-trainer model<sup>1</sup>.

### **Data Sources**

As stated previously, data for the description and definition of the program will come from interviews with Blue Courage staff and observations of the training taught by Blue Courage master instructors. Additionally, course curriculum for the training will be reviewed. These data should provide a holistic view of what the training is and what it seeks to accomplish, and most importantly how it is viewed by those responsible for its development.

Capturing change in officers that take the training, including those officers within the case study site, will be done using data from a survey instrument (appendix a) used by the Blue Courage organization. This will help answer research questions two and four. Comparisons of these data from the case study site and other sites will also help address question three. This survey was designed to measure change in attitudes, beliefs and behaviors in the six core conceptual areas targeted within *Blue Courage: The Heart and Mind of the Guardian*: Attitudes towards respectful behavior (“Respect”), officer cynicism (“Cynicism”), physical wellness (“Physical Wellness”), attitudes towards emotional self-care (“Emotional Wellness”), positive mindset (“Positive Mindset”), and officer discretion (“Discretion”). Embedded within the survey

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<sup>1</sup> These surveys, observation notes and interview notes were collected in the course of a program evaluation funded by the Bureau of Justice Assistance.

are several questions targeting each of these core areas that were designed specifically to be combined into scale measures.

Data were collected utilizing a self-administered electronic survey method between June of 2017 and September of 2018. Before a Blue Courage training, rosters with email addresses for all attendees are collected. These addresses are then used to send a pre-test and post-test survey instrument. Research on police specific email survey methodologies finds that response rates for recent surveys of this kind are about 45% (Nix et al., 2017). Blue Courage staff report that the response rate for the sample is approximately 40%. The survey collected data on basic demographic information as well as measures for officer domains targeted by the training. These will be described in more detail later.

Data for the case study portion of the proposed dissertation consists of three sources: (1) pre-post data, using the same survey instrument Blue Courage uses for all other training, from officers in the case study site, (2) observations of the training provided at the case study site and (3) interviews of the key individuals involved in implementing the training at the site. The goal of these observations was to compare them in content to *Blue Courage: The Heart and Mind of the Guardian* trainings taught by Blue Courage Master Trainers to assess intervention fidelity. Fidelity, in its broadest sense, is defined as the inclusion of core program components during intervention (Mowbray et al., 2003), but a more refined definition will be discussed in a later section.

Semi-structured interviews with all but two of the instructors certified to teach Blue Courage in the department were conducted. An interview was also conducted with the training director at the research site, who did not instruct the training but was responsible for much of the logistical work that facilitated its implementation. These interviews followed a semi-structured

interview protocol (appendix b). These interviews were designed to capture the experience of the instructors' in the process of the implementation with specific focus on the three implementation drivers outlined by Fixsen et al. (2005) and Bertram, Blase, and Fixsen (2015): Competency, Leadership, and Organizational Drivers. Data from these observations and interviews will be reviewed to determine if factors of implementation, including examining the role that the train-the-trainer model played in the site, can help better understand the impact the Blue Courage training had on officers in that department. This analysis should be illustrative of the experience that other like departments have with implementing Blue Courage with fidelity.

### **Research Design and Analysis Plan**

One serious issue limits the available research designs that might be used to answer the research questions: no viable control groups exist because no data was collected on officers who did not receive the training. As a result, this assessment will use a one-group pretest-posttest design to measure the impact of the training (Shadish, Cook, and Campbell, 2002). Shadish, Cook, and Campbell (2002) argue that the one group pretest-posttest approach allows for the capture of change before and after an intervention. The lack of a control group, however, limits the capacity of the analysis to *attribute* that change to the intervention. Specifically, Shadish, Cook, and Campbell (2002) argue that the approach, specifically the addition of a pretest measure, helps control for several threats to internal validity including ambiguous temporal precedence and potential selection effects (e.g. officers who are most likely to succeed might have volunteered for the training, obscuring any observed training effect). However, the lack of a control group limits the capacity of the design to manage several other threats to internal validity: (a) history effects, or the potential that another, unobserved, variable is impacting units within the treatment; (b) maturation, the possibility that treatment units change naturally over



time and that change is captured between pretest and posttest measures; (c) testing effects, the possibility that subjects respond differently to a posttest instrument due to experience with the instrument and not impact from the intervention; and (d) attrition effects, or the possibility that the impact of participant dropout is masked as program effects.

There are several contextual factors unique to the assessment of Blue Courage that may limit the impact of these threats. As Shadish, Cook, and Campbell (2002) state: “social scientists in field settings will rarely be able to construct confident causal knowledge with the simple pretest-posttest design unless the outcomes are particularly well behaved and the interval between pretest and posttest is short (pg. 110).” Since the survey instrument measures items quite specific to the Blue Courage training, because many of the elements found within the training curriculum are rarely found in other police training (e.g. increasing the frequency with which police officers use breathing techniques) and because the pretest and posttest measures are taken a short interval apart it is believed that the potential for confounding variables, a potential “history effect,” to obscure any observed impact of the training would be low. Potential maturation, testing and attrition effects are still problematic, and may confound any potentially observed impact of the Blue Courage training.

A second problem that presents is due to the structure of the data. Pre-test and post-test surveys are not linked to individual training participants. This means that the data effectively exists as a pool of pre-test measures and post-test instruments for participants. This structure produces some analytical problems. First, it only allows for the use of independent samples *t*-tests to estimate treatment effects. This is problematic because the research cannot be certain that the same participants are present in both samples, meaning that any observed change may be due to differences in sample composition and not the training. Second, this structure makes

Ordinary Least Squares regression impossible because the research cannot estimate the impact of the dependent variables change within participants. This reduces possible analysis to breaking the samples by demographic groups and making comparisons in effect size across them.

The following chapter will answer the proposed research questions, and will be structured as follows. After providing a detailed description and critical assessment of the Blue Courage training, an independent samples *t*-test will be conducted to compare differences between the pre-test and post-test samples of participant measures. Next, drawing from the medical research on record linkage a sample of participant pre-test and post-test measures will be matched. This allows for a more robust analysis tool to be conducted, a paired samples *t*-test, allowing for the measure for a treatment effect as a result of the training. This tool is superior to an independent samples *t*-test in helping to answer the second research question because it helps eliminate the potential for differences in sample composition across pre-test and post-test samples. Second, this matched sample also allows for the use of Ordinary Least Squares (OLS) regression because the research will now be able to estimate the impact of the dependent variables observed change within participants. This is helpful in answering the third research question.

Two approaches will be used to answer the fourth research question regarding implementation fidelity. First, because the literature strongly suggests significant differences in fidelity across the direct training and training-the-trainer delivery models (LaVigna, Christian and Willis, 2005) a variable will be added to the OLS regression model to estimate differences across these delivery models. This approach is limited, because no data on intervention fidelity across sites is available and other differences might exist between the two delivery models (e.g. differences in credibility between Master Instructors and certified instructors), but should provide a first step in assessing the impact of fidelity on training outcomes. Additionally, and in

part to address these limitations, a training site within the sample will serve as a case study site for identifying potential problems delivering the Blue Courage training with fidelity through the Blue Courage TTT model. This will include thematic analysis of observations of the training delivered in the case study site and interviews conducted with certified instructors within the site, as described above.

This dissertation will present the first examination of the national police training program Blue Courage. The importance of addressing these research questions and the opportunity to consider the impact of the train-the-trainer model, a common method of police training nationally, suggest the value of the research. Conclusions will be tempered in light of these methodological limitations but might also provide a roadmap for the next series of analyses of Blue Courage and other police training programs.

## **Chapter 5: Findings**

This chapter will seek to answer the research questions outlined in the previous chapter and will thus be assembled into four sections. First, a detailed description and critical assessment of the Blue Courage training will be provided. Second, this research will assess if Blue Courage training has an impact on participants. Next, this dissertation will determine if the training has different impacts on the different theoretically relevant groups outlined above. Lastly, findings from the case study site will be presented. A detailed discussion of these findings will then follow in the sixth and final chapter of this dissertation.

### **Research Question 1: What is in the Blue Courage training, how is it Implemented, and what is its Underlying Theory of Change?**

After assessing the state of policing, including officer wellness and safety, the Task Force on 21<sup>st</sup> Century Policing outlined a series of recommendations for the field. Their first recommendation to enhance officer safety and wellness was to encourage the Justice Department to “enhance and promote...multi-faceted” officer safety and wellness programs. Despite development in parallel to the Task Force, Blue Courage largely fits the mold of such a program.

This section uses several different types of source material. Table 1 outlines these different types of material. This source material will be referenced throughout this section. This analysis used an approach called qualitative description. This approach is designed to provide a description of a practice that is consistent with the perspective and language of its participants (Neergaard et al., 2009).

**Table 1. Source Material used to Describe the Blue Courage Training**

	Source Material	Frequency
Review of Public Information	Training Guidebook	1
	Instructor Handbook	1
	Website	1
Interviews with Key Program Staff	In-Person Interview: Michael Nila	6
	Phone Interview: Michael Nila	1
	In-Person Interview: Key Program Staff	12
	Phone Interview: Key Program Staff	1
Observation of Training	Observations of Training	3

Three documents were reviewed for this analysis: (1) the Blue Courage Website; (2) the participant training guidebook used by trainees during the training; and (3) the instructor handbook, which is provided to instructors when they are certified to provide the training to others. A total of twenty unstructured interviews were conducted with key program staff, including seven total interviews with founder Michael Nila. These interviews took the form of informal conversations during the training during breaks, meals and training set-up. Two additional interviews took place over the phone. These interviews ranged in time from five to ten minutes during the training to forty-five minutes during the phone interviews.

The majority of this section relies on direct observations of the training provided to officers in three different locations nationally. These observations involved the researcher sitting at a table at the back of the training room. As will be discussed below, because Blue Courage Master instructors teach in rotating pairs, the researcher was able to sit with the instructor who was not providing the training and thus be non-obtrusive to the training delivery. Field notes of the training were collected including the reactions of some participants during some sections of the training.

These sources were used in different ways in the following section. First, the observations of the training, review of the Blue Courage website and review of the participant guidebook helped provide a detailed description of the content of the training. Second, the interviews with key program staff and instructor guidebook helped provide an understanding of the concepts underlying the training as well as the purpose behind some of the structures within the training (e.g. the order of the modules).

Like many interventions, it can be difficult to refine a concise definition of what Blue Courage intends to accomplish. During the training, instructors often state that the goal of the training is to “ignite transformation” in officers. At other times, these Master Trainers argues that “Blue Courage is a way of being,” rather than a tactical or skill based training. However, neither of these attempts sufficiently define the intervention.

Page seven of the Blue Courage “Participant Guidebook,” a resource for officers to follow along during a training, attempts to lay out the “Premise” of Blue Courage. The page outlines the following bullets to define this conception:

- Police Education needs an upgrade – good but “incomplete”
- We have a “Skill” focus vs “Will”.
- Prepare officers to do the “Job” but not to master a “Craft” and survive and thrive within a career in policing.
- Increasing complexity requires increased sophistication (maturity, wisdom, wellness and wholeheartedness).
- Development is a career long process, not an event – “a practice”.
- Purpose is everything and is often an afterthought.
- Health, wellness and wellbeing are not sufficiently taught, nurtured, or encouraged.
- Life outside policing is extremely important to well-being and the perception of life – it is too often neglected.
- “Resilience” is essential and must be developed.

While helpful, this bulleted list still outlines too broad a scope for a definition.

Through observations of the training, review of the course material, and interviews with Blue Courage staff and Master Trainers several themes emerged that reflect the goals of the training. Blue Courage has three primary goals: (1) Change the culture of policing, (2) reinvigorate purpose and nobility in the profession to reduce officer cynicism, and (3) increase awareness of personal wellbeing beyond issues of physical fitness and promote self-care of mental and emotional health.

First, Blue Courage attempts to shift the culture of policing from employing a warrior model to employing a more balanced model of policing that relies heavily on guardianship. A guardianship model postulates that the core of policing is protecting the public and their civil liberties. A warrior model views police officers in the commonly held conception of “crime-fighters.” This finds parallel in the policing literature in a discussion about officer role orientation. Though characterized with different language, classical research on police suggests that officers can be roughly organized based on their attitudes towards a service orientation and a crime fighting orientation, among a number of other orientations (Sundeen, 1974; Brown, 1988; Chen, 1988). Paoline (2004) argues that previous literature has likely over simplified the classification of officers but still finds that a critical component of officer classification is orientation towards service and crime-fighting. Under this framework it seems clear that the goal of the Blue Courage training is to push officers towards a service orientation and away from a crime-fighting orientation.

Second, Blue Courage attempts to reinvigorate idealism in officers by pushing them to view policing as a noble profession, and use this conception as an intrinsic driving motivation to overcome a number of challenging tasks within the training, which will be described in detail

below. This is designed also to combat cynicism and apathy in officers, what Blue Courage staff argue is the “new form of corruption” in policing.

Third, Blue Courage seeks to enhance officer understanding of “Whole Person” wellness. This involves increasing awareness of mental and emotional health in officers in addition to physical health. The course guidebook for the training outlines a fourth area of wellbeing, Spiritual Health, but observations of the training determined this domain to be conceptually similar to the notions of nobility and purpose described above, so it is not discussed in this section.

The following sections will outline the approaches the Blue Courage Staff use to teach and facilitate the training. This will be followed by a critical assessment of the delivery and underlying theory of the training. Lastly, a logic model of the delivery of the training and intended outcomes will be provided.

As discussed in the introduction, Blue Courage consists of several approaches. Central to Blue Courage is the two-day in-service officer training *Blue Courage: The Heart and Mind of the Guardian*. Blue Courage also uses a train-the-trainer model to facilitate the delivery of the core training program. This chapter will detail each of the components Blue Courage uses.

### **Blue Courage: The Heart and Mind of the Guardian**

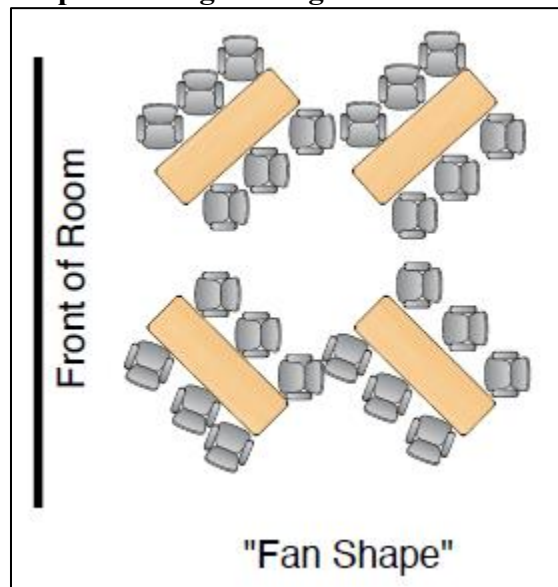
At the core of Blue Courage is a two-day in-service training for law enforcement personnel called *Blue Courage: The Heart and Mind of the Guardian*. All two-day courses are structured the same, consisting of a nine module course curriculum offered to law enforcement personnel of all ranks. Following is a detailed description of the curriculum.

The trainings are structured so that participants are divided into smaller inward facing “pods,” or clusters of desks or tables meant for five or six individuals. As shown in Figure 1,



These pods are structured in a “fan shape” so everyone can participate in both the lecture given by the instructors and in periodic group discussions within the pods. Several times during the training the instructors asked the smaller groups to discuss topics or give smaller presentations. This structure allowed for a smaller intimate group setting during discussions.

**Figure 1. “Fan Shape” Seating Arrangement for Blue Courage Training**



These courses are taught by official Blue Courage Staff, comprised of what Blue Courage refers to as “Master Trainers.” Master Trainers provide the training by rotating each class module, allowing one instructor to break in the back of the room and observe training participants. Blue Courage selects trainers who have considerable experience in law enforcement which, they argue, works to give them, and by extension the content of the training, credibility with the audience of police officers. This is a concept found within the communications literature (Kelman, 1938; Smith and Petty, 1996; Perry, et al., 2015; Strangor, 2017) and also has parallels with the concept of acceptability within the implementation literature (Price et al., 2012; Bertram, Blase, and Fixsen, 2015; Dixon et al., 2016; Wilson et al., 2017). Literature on police suggests that this approach might work well in the context of policing (Muir, 1977; Brown, 1981; Skolnick, 1993).

At the beginning of the training participants are provided the required materials. These items include: a journal for taking notes, writing answers during the course, and reflecting on the course content at the end of each module; a course “Guidebook” that contains the content of the two-day course; a pocket-sized toolkit book with techniques for emotional resilience, which is discussed below; a pocket mirror, for literal and figurative self-reflection; a name card placed in front of each participant’s seat so that instructors can call each participant by their first name; and a fifty-seven page book, *The Nobility of Policing: Guardians of Democracy*, filled with stories and anecdotes designed to evoke and reinforce feelings of purpose and nobility in officers. These materials are laid out precisely the same for each training participant, an approach that one Master Trainer argued lends professionalism and legitimacy to the training.

The training consists of two eight-hour days of lectures facilitated by power point presentations, class discussions, smaller group discussions within the pods described above, small written assignments and journal reflections consisting of one to two paragraphs, stories, famous quotations, and video segments all used to present underlying concepts within the course. In addition to this, attendees are asked to complete two short “homework” assignments the evening between the first and second days of the training. First, attendees are asked to “leaf through” the book provided to them by the instructors, *The Nobility of Policing* by Nila, Covey and Covey (2008), and identify a story to share with the class at the beginning of the second day. Second, attendees are asked to work together in their smaller groups to research a “fallen officer” whose name was provided by the instructors and placed inside a plastic name tray on each group’s table. Attendees are asked to focus on the personal life of the individual rather than the manner of their death. These stories are given throughout the second day of the training between

modules as a way to prevent monotony and continually reinforce the concept of nobility in policing.

As mentioned above, the formal curriculum of the training is broken into nine modules, which possess some overlap in content. These modules are titled as follows and are taught in this order: Foundations of Blue Courage, Police Culture, Nobility, Respect, Resilience and Hope, Positive Psychology, Practical Wisdom, Health and Wellness, and The Immortal Cop. During an interview, Nila argued that this order was critical to the success of the training as each successive module builds upon the content learned in the preceding modules.

### **Foundations of Blue Courage**

The first module of the training sets the stage for the two-day course, defining Blue Courage and describing the goals of the training. The instructors open this segment by arguing that a career in policing represents an “Impoverished Environment,” what neurobiologists describe as a setting that deteriorates the chemical, physical, and psychological capacities of those that operate within it. The instructors suggest that those exhibiting symptoms of exposure to these “Impoverished Environments” most consistent with law enforcement officers are prisoners of war. This suggests to training participants that the field of policing has an incredibly deleterious effect on the physical, emotional, mental, and social lives of those that work within it. This connection is designed to draw the attention of participants early in the training. For example, one such topic focused on how police officers live shorter lives on average than individuals in other professions. This seemed to garner the attention of officers in attendance during observed trainings.

Next, the instructors define Blue Courage for the class. The “Blue” in Blue Courage represents policing, a common axiom in the field. The instructors define “Courage” as the

capacity for principled bravery and the ability to “speak one’s mind by telling one’s heart.” This refers to the capacity of officers to do the right thing even when it is difficult. Most importantly the instructors suggest that courage involves doing the “right thing” even when it goes against the culture of their peers or leadership within their department. The instructors reward courage by giving attendees that participated in the training, for example by sharing a personal story or by allowing themselves to be emotionally vulnerable to the class, a two-inch in diameter medal with the Blue Courage seal on it. This creates a reward structure for attendees to participate during class.

The instructors then review each of the topics that will be covered in the modules embedded in the remainder of the training. Blue Courage Master Trainers argued that this section serves to build rapport between instructor and participants, laying the foundation for more challenging facilitation later in the training. In summary, the instructors state that the training is largely about changing the philosophy and culture of policing, enhancing the wellbeing of individual officers, and building a greater capacity within officers to “thrive” in their profession.

### **Police Culture**

The second training module directly discusses the positive and negative aspects of police culture and their respective influence on the work and lives of police officers. The training directly references the work of John Crank, who is well known in academia for his work with regards to police culture. This module is designed to encourage attendees to openly discuss the aspects of their field that are healthy (e.g. “brotherhood,” integrity, honor, bravery, duty and a sense of justice) and unhealthy (e.g. cynicism, pessimism, isolation, and poor diet and sleep) and largely relies on a group brainstorm activity where attendees are asked to list positive and

negative aspects of police culture. These lists are then used to facilitate a larger group discussion about police culture.

The focus of this module was to (a) have officers openly discuss aspects of culture they are often unaware of, (b) highlight the critical role that cynicism plays in policing, (c) identify and build knowledge of the social and behavioral aspects within police departments that reinforce the negative aspects of police culture, and (d) discuss approaches that attendees could use to mitigate the impact of those negative aspects or enhance the impact of positive ones. In an interview a member of Blue Courage argued that this process is purposefully structured into the training to allow instructors to connect with training participants at an emotional level by showing participants that they understand the deeply personal facets of their work and life. In several instances observed during the training this involved instructors acknowledging marginal wrongdoing. In one training an instructor raised their hand and stated “I know I’ve had a few too many [beers] after work before” and then used jargon to reference an after-work social gathering of officers who would drink too much. Many officers in attendance understood the reference and appeared to connect with the instructors through the story.

There are several key concepts this module hopes to convey. First is the idea that police have a unique subculture. Second is the idea that police subculture can be both harmful and protective. The last key concept in the module is the understanding that individual officers can change police culture through their own action.

### **Nobility**

Blue Courage seeks to build a sense of purpose within attendees by evoking themes of service and sacrifice to convince officers that their work is important. The instructors argue that officers who forget about the nobility of policing, or are “in it for the wrong reasons,” grow

cynical and apathetic and can no longer perform to the standards required to be an impactful police officer. The instructors argue additionally that individuals are easier to persuade when they have a purpose; when they have a “Why.” This is borrowed from Simon Sinek’s (2011) work on leadership. This module is designed to re-focus officers on what Blue Courage suggests is the “Why” of policing: Nobility. In defense of the notion that policing is noble the instructors argue that (1) officers are the only profession that is entrusted with the power of the state to take life and (2) that the impacts of police work are far ranging over time.

Within the guidebook, and during the training, nobility is defined as “Greatness of character and high ethical qualities or ideals that **serve a cause greater than self**; faithfulness to a higher calling or purpose” (emphasis in original, pg. 24). This definition is somewhat ambiguous so the training references what is called a “History of Noble Policing.” In this topic instructors spend time likening modern police to Plato’s discussion of “The Guardians” of democracy, individuals tasked with keeping the order in ancient Greece. To interpret this using slightly different language, the instructors argued that the “cause greater than self” referred to is service to others in the community.

Next the instructors discuss the evolution of policing from Robert Peel’s principles of policing, a focus on community policing and then a transition toward the principles of procedural justice in recent years. In defining Nobility the instructors focus most on asking participants to think back to the oath they took the day they were sworn; a dedication of self to place others first and serve the community. The instructors go on to suggest that the values of police work should be to strive for “service, justice and fundamental fairness.” Specifically the instructors argue that the original goals that officers swore to achieve were to (1) preserve freedom and uphold democracy, (2) uphold the law, (3) ensure justice, (4) protect life and (5) keep the peace. Central

to all of these is the overarching goal of helping others. In an interview Nila argued that many officers have grown cynical and forgotten this pledge. These officers, he argues, perform the functions of police work but have forgotten its purpose. To Nila, the nobility of police work is to work towards achieving these commonly held goals through service to the community and with integrity of self.

During the lecture, the instructors draw upon historical examples of service and sacrifice to convey this message, including references to soldiers who fought in World War II and the stories of first responders who died in the World Trade Centers during the terrorist attack on September 11<sup>th</sup>, 2001. Next, attendees are asked to break into groups and discuss ideas about noble police action. One attendee in a training that was observed discussed the actions of the Dallas Police Department when several officers were shot on July 7<sup>th</sup>, 2016. These officers sought to protect the lives of protesters, who were demonstrating against the actions of the police themselves, even while being directly targeted by the gunman. The instructors build themes of service and sacrifice throughout the two-day training, not just in this module, conveyed through stories and videos.

There are several key concepts this module hopes to convey. The first is that policing is a noble profession, as defined by the instructors, and that many officers have grown cynical and forgotten their purpose. Second, because policing is a noble profession officers have to be exceptional because their work is so consequential. Lastly, and perhaps most importantly, the consequential nature of the work means that officers must take care of themselves so that they can help others.

## Respect

Blue Courage describes respect as a process of “non-judgmentally engaging people from all backgrounds.” It requires officers to act in ways that are “curious” rather than “suspicious.” They argue that respect is reciprocal and since the noble purpose of the police is to serve, that requires that officers act in respectful ways first even if they do not receive respect from citizens. This is particularly important in the context of policing when, as Michael Nila (2015) argues, many officers “will [only] give respect if they get respect first.”

The idea of respect found within *Blue Courage: The Heart and Mind of the Guardian* is conceptually similar to parts of procedural justice, which suggests that citizens value process over outcome when determining satisfaction with the police (Tyler, 1988). Satisfaction is subsequently tied to citizen perception of police legitimacy, and police legitimacy is argued to lead to citizen deferment and compliance. This is of particular interest to individual police officers because compliance can be linked directly with officer safety (i.e. legitimate compliance allows officers to de-escalate a situation with minimal use of force and lower risk of retaliatory harm from a suspect or citizen).

Blue Courage attempts to make participants value engaging in respectful behavior by using two approaches. First, as guardians of democracy officers have a moral responsibility to engage in respectful conduct in the pursuit of service. Second, officers who focus on engaging respectfully with citizens can enhance officer safety. Of these two aspects, the training was observed to focus with greater frequency on the morality of respect and had almost no discussion of the potential for respectful acts to de-escalate situations and enhance officer safety. This was embodied best by the discussion of “The Spirit of Ubuntu,” described below.



This section utilized videos and stories of police officers across the country who acted in respectful ways with citizens and in turn saw more favorable outcomes in terms of service to the community and on officer safety. Additionally, instructors discuss the impact of de-escalation on emotional and mental wellbeing, because officers who can diffuse situations without using force face lower levels of stress. Of particular effect was a video of a Los Angeles County Sheriff Deputy who had never received a complaint from a citizen despite writing an above average volume of traffic citations over the course of several years. His demeanor and affect, and the reactions of traffic violators who were given tickets, are recorded in a video that is shown during the training. At one point the deputy states that he hates being talked down to, so he tries hard to bring himself down to the level of citizens, suggesting that he treats them as equals. These citizens stated that they were content with the interaction despite receiving a ticket because they felt they were treated with respect.

The instructors spend some time focusing on a concept borrowed from Meshenko (2013) in his book *The Respect Effect*. Meshanko argues that interactions with others can take several forms whether we are passive or active in our engagement. Passive engagement leads people to “tolerate” others. Active engagement leads to two different types of interactions depending on whether people carry a “suspicious” or a “curious” mindset. Suspicion, Meshanko argues, leads to interactions that are confrontational and hostile. Curiosity however leads to exploration and respect.

The training next spends time discussing the culture of a tribe in the Northern Natal of South Africa which the training references as “The Spirit of Ubuntu.” This tribe, they say, engages in a process of respect that is worth understanding. The tribe greets members by saying “Sowa Bona” and “Sikhona,” which translates to “I see you” and “I am here,” respectfully. The

instructors ask the group to greet each other using these phrases. Next the instructors outline the cultural meaning of respect for the tribe, stating “Until you see me I am not here. When you see me you bring me into existence.” The instructors next read a Zulu folk saying “A person is a person because of other people,” and ask the participants to discuss its meaning, before concluding “We are in this existence together. What makes us human is that we share the world with other people. We are people having a human experience. And in this experience everyone has value.” This content is designed to persuade participants to humanize those they interact with and treat them with curiosity and dignity and while respecting their differences.

Blue Courage recognizes that this is a challenging conversation to have with police officers as a central part of policing’s cultural ethos is the perception that suspicion promotes officer safety (e.g. see Skolnick, 1993). The instructors attempt to address this problem by couching this approach through the use of situational discretion. The instructors use language like “in the presence of [officer] safety, we have to be able to activate our curiosity” and “we have to be as hard as the situation requires, while still being as soft as the situation allows.”

There are two key concepts this module hopes to convey. First, because policing is a noble profession, it is the moral responsibility of officers to act in respectful ways in the pursuit of serving others. Second, and perhaps of less focus, respectful behavior can enhance officer safety by deescalating situations before force becomes necessary

### **Day Break between Class Days**

Blue Courage is designed as a two-day training program. Officers break for the day after the Respect module and return the next morning for the Resilience and Hope module. Instructors take advantage of this break to accomplish several things. First, the instructors remind participants about their homework assignments. Participants are asked to look through the

*Nobility of Policing* book that was provided and identify a story within to share with the class the next day. Participants are also tasked with researching the fallen officer whose name is placed on their tables at the start of the training. Both of these exercises are designed to evoke a sense of purpose and sacrifice among the participants, and reinforce the lessons learned within the Nobility module. The fallen officer reports open the second day of the training and participants are asked to share stories from the *Nobility* book to open each of the remaining modules throughout the second day.

This break also allows the instructors to interact in a more personal way with participants. One master instructor discussed in an interview that they like to use this time to converse with the participants that were (a) most talkative and engaged in the content of the training and (b) least engaged, or what Nila described in an interview with the researcher as “checked out.” In a separate interview, one Master Trainer argued that this allows instructors to build upon the content with the most promising participants and attempt to break through with participants that may be souring the training during break-out group discussions with negative or cynical comments. In one situation observed by the researcher an instructor was able to identify a participant that was “checked-out” of the training and discover that the participant had grown disillusioned about his work as a police officer due to media portrayals of police misconduct, which he viewed as unfair. After the conversation, this participant was more engaged in the training and raised their hand more frequently to share experiences. It is unknown how frequently this approach is used to success by instructors, but in an interview with the researcher one Master Trainer suggested that they had used this tool successfully on multiple other occasions.

## **Resiliency and Hope**

The trainers argue that the topics of mental and emotional health, and stress resiliency are the most important concepts conveyed during the training. “Resiliency” refers to emotional resilience against stress, or what might be called stress management. This is particularly important for police officers because, as the instructors’ state, “policing is an exhaustive profession.” The instructors argue that people have emotional reservoirs, similar to batteries. Positive emotions, along with rest, recharge the “battery” while negative emotions and stressors deplete it. Individuals operating with low emotional capacity are more likely to show poor judgement and more likely to react with an emotional response during a stressful situation (e.g. have an angry outburst). The training states that resiliency techniques refer to approaches that recharge emotional capacity and slow its depletion.

The training focused first on explaining to attendees the links between emotional responses to stimuli (e.g. stressful situations) and chemical changes within the body. The most potent aspect of the delivery for participants was the idea that prolonged exposure to stress produces high levels of cortisol in the body, extended exposure to which can produce long term consequences for physical and mental health. The instructors told attendees that the training was designed to provide tools to prepare, sustain, and recover emotional capacity so that these long term consequences could be reduced.

Next, the instructors lecture officers on common sources of stress in policing. These include long work hours, financial uncertainty, sleep disruption and fatigue, the constant threat of danger, unexpected change, strained social relationships and communication issues. With this list established, the instructors next lead a discussion with the class discussing the role that emotions have on resilience. They show the class a quadrant chart with a list of “renewing” and

“depleting” emotions. They argue that emotions like anger, frustration, impatience and cynicism all work to quicken the depletion of emotional capacity. Other emotions, like excitement, passion, love, appreciation and gratitude work to restore emotional capacity and slow its depletion. Through awareness and choice, they argue, officers can make small changes to more actively regulate their emotional capacity and more productively handle the consequences of stress.

Next the training provides a detailed explanation of the human body’s chemical response to stress. The instructors argue that during a response to stress, the body produces chemicals to prepare the body’s “fight or flight” response. One such chemical is Cortisol, which helps produce adrenaline and prepare the body for strenuous activity. They suggest that this response is healthy in the short term, because of the nature of police work requiring a certain level of strenuous activity, but that frequent exposure of cortisol can have serious harmful effects on the body. This is a finding supported in the extant literature (Staufenbeil, 2014).

The instructors argue that some exposure to Cortisol is necessary given the nature of police work but that police officers often allow themselves to be exposed to higher levels of Cortisol for a longer duration than is needed because they lack awareness that this process is taking place. One example that the instructors provide is a high stress traffic stop where an arrest is made. An officer exists in a high state of stress during the event, but then remains so for a period of time after. Blue Courage argues that with awareness and proper tools officers can limit their exposure to Cortisol only to when is needed and then return to less stressful state shortly after. This would limit the body’s exposure to Cortisol and improve officer health.

From the perspective of Blue Courage, the most important tools provided to officers in the course were “Heart Focused Breathing” techniques. These techniques perform what is

referred to as “pattern interruption,” or change in the flow of cognitive stimuli, thoughts, that produce emotional responses and high levels of Cortisol. For example, if an officer has an argument with a superior, or are placed in the traffic example described above, they often continue to think about that argument for an extended period of time, producing high rates of cortisol. Breaking that pattern allows officers to return to “coherence” faster, reducing cortisol levels. This reduces the negative impact of the chemical and also returns officers to a state of peak performance sooner.

“Heart Focused Breathing” is a simple tool taught in the training. First, attendees are instructed to breathe in slowly for four seconds, focusing on the thought of air entering the chest or heart and hold for four seconds. The focus on airflow is not important; the larger point is to focus on a different thought so as to ‘interrupt’ another pattern of stress producing thoughts. Officers are then instructed to breathe out slowly for four seconds, again focusing on air leaving the chest or heart, and then hold for four seconds. The entire technique lasts only sixteen seconds which makes it convenient for a profession like policing where stressful situations often come at fast pace. If needed, the approach can be used multiple times.

During the class instructors argue that police officers often struggle discussing their emotions. They illustrate this by arguing during the training that many officers have a “tough guy image armor” that makes it difficult to discuss their feelings or ask for help when they are emotionally depleted. The instructors are attuned to this and work to give legitimacy to the topic by linking it to success stories in both professional sports (e.g. “NBA stars like Shaquille O’Neil use these techniques”) and the military (e.g. “Navy SEALs use these approaches in combat”), areas that the instructors feel connects with the officers in attendance.

There are several key concepts this module hopes to convey, and as a central module these are key to the training overall. First, officers should learn that stress produces chemicals that are harmful to them in the long term. Second, that people have the power to regulate their emotional state and thus reduce the negative impact of these chemicals. Lastly, and perhaps most important to the entire training, breathing techniques are a tool that officers can use for emotional regulation.

### **Positive Psychology**

This module teaches officers a process of managing personal emotions with positive thought. In the context of policing, this allows officers to remain in control, execute tactical functions with more precision, show better judgement, and interact with citizens in a more constructive manner. The training leverages positive psychology as an approach to manage emotional resilience, which is why it directly follows the Resilience and Hope module.

Blue Courage works to develop skills in officers like that of “mindfulness,” or the intentional focus on one’s immediate experience. This approach builds awareness of participant’s thoughts, emotions, and physical sensations, like stress during a traffic stop or anger building at being disrespected by a member of the community. The training taught this concept by showing a video of the Wall Street banker turned mindfulness meditation expert Davidji. This video reinforced breathing exercises and introduced a simple form of meditation that attendees could use to remain positive and manage stress.

The instructors focus on teaching officers two new concepts: Mindfulness and Learned Helplessness. Mindfulness refers to “intentionally focused awareness of one’s immediate surrounding.” The course teaches this by showing a video about mindfulness. This video raised awareness by showing an example of a driver who becomes angry when another motorist cuts

him off. The narrator in the video emphasizes awareness of the emotional reactions that take place at each stage of the interaction. The video closes by arguing that individuals can, through awareness, preempt negative emotions by identifying their precursors and actively choosing to think differently about situations. Through added awareness, a participant can then use the tool of “pattern interruption” to help regulate their emotional state.

Learned helplessness is a distinct concept from mindfulness. The instructors argue that some individuals, especially in the profession of police work, are nihilistic about changing aspects of their lives or work. These individuals concede when met with a challenge because they believe no amount of effort will result in a positive outcome. The training teaches participants that this is a defeatist approach that stymies individuals before they even try to make changes.

There are several key concepts this module hopes to convey. First, positive thought is another way to regulate emotions beyond breathing techniques. Second, that mindfulness is an approach to improve awareness of emotions.

### **Practical Wisdom**

Blue Courage argues that effective police work requires both flexibility and intuition. Practical Wisdom refers to the capacity of officers to analyze a situation, observe the context within which the problem is occurring, understanding what actions need to be taken, and then acting accordingly. Officers must be able to choose among alternatives in a way that enhances justice and maintains norms of professionalism. The instructors argue, as during the Nobility module, that at the core of good police work should be the purpose of “service, justice, and fundamental fairness,” and the behaviors of officers should always be in pursuit of those goals. Police work, however, is full of discretionary points and requires skill to achieve those goals.



Blue Courage works to build the skills unique to policing and provide officers the confidence required to act. Sometimes this means not only understanding the “rule of law, but the flavor of the law” (i.e. officer discretion). Other times this involves, as the instructors explicitly argued, “forget[ing] about the rules and regulations” of a department in the pursuit of enhancing service, justice, and fundamental fairness in any particular situation. Instructors also pushed participants to challenge others in their departments who were not striving to meet these goals, as a way to change the culture of the field of policing writ large.

The instructors emphasize that officers need three things to exude practical wisdom: (1) humility and empathy, enough to analyze a situation and determine what is required from the perspective of others to achieve a positive outcome; (2) emotional control, as emotions such as anger often overtake an officer’s capacity to properly assess a situation, leaving them to overly rely on the use of force as a tool to resolve problems; and (3) hard work, the “deliberate practice” required to develop the craft-like skills needed to be an effective police officer. This is an area where the order of the modules is critical as emotional awareness and regulation, taught earlier in the training, is a necessary skill to master police discretion under the philosophy of Blue Courage.

Another poignant example provided by instructors to exemplify this point was the civil unrest that arose from the Ferguson Police Department’s handling of Michael Brown’s body in August of 2014. The instructors argued that the community was most discontented not because Brown was shot, but that the police disrespected his body by leaving it in the hot sun for hours. The instructors argued that the Ferguson Police had failed to take into consideration what was required on them in that moment: identifying the “right thing” to do to achieve justice and fairness for the residents that lived in the neighborhood where Brown was killed.

There are several key concepts this module hopes to convey. First, policing is becoming more complex and requires new approaches by officers. Second, because of this officers need to hone a skillset around the use of discretion that involves more than arrest. Third, because policing is noble, discretion is necessary to serve a variety of public needs and should always be used in the pursuit of serving the greater good in the community. Lastly, and a critical component to the training, this sometimes this means challenging peers, supervisors and department leadership.

### **Health and Wellness**

Health and wellness refers primarily to the physical wellbeing of officers, specifically their physical wellness and diet. Officers who are physically well and enjoy a healthy diet show greater performance at work-related physical tasks. Blue Courage argues that physical wellness and proper diet are linked to positive personal relationships and a greater capacity to operate under stress which may lead to lower rates of excessive force. Physical wellness and good diet also “sharpens the saw,” which aids in better brain function, concentration, and memory. This allows officers to perform better at discretionary decision making, reduces stress and limits work related risks like traffic accidents.

In this section the instructors also discuss the impact of poor health and wellness, including emotional and mental health, on officer suicide. Before showing a slide with a bulleted list of negative health outcomes associated with policing the instructors state: “These are the costs of being unfaithful to our health and wellness.” This list includes heart disease, higher risk of cancer, anxiety and depression.

Blue Courage works to motivate officers to eat healthy and exercise more regularly, and provides officers with tools to do both. The course provides external resources for diet and

exercise guides and provides a toolkit in the participant guidebook for short exercises that focus on short bursts of rigorous activity for officers, like the “Tabata” approach. Lastly, the instructors reinforce the importance of both rest and regular sleep, which are also keys to maintaining emotional health.

There are several key concepts this module hopes to convey. First, that police die sooner than other people. Second, that proper diet and exercise improve longevity. Lastly, that diet and exercise are also linked to emotional health through stress reduction.

### **The Immortal Cop**

This module serves as the summary and conclusion section of the two-day training. As one instructor stated it is designed to “close the training out with a bang.” This section is filled with videos and stories designed to evoke a strong sense of nobility and purpose in officers, echoing similar sentiments as the Nobility module. An important idea conveyed is that “policing is a legacy profession” that touches the lives of everyone officers interact with. This is exemplified when the instructors show a ten-minute video called Boat Lift, narrated by Tom Hanks, that describes the actions of boat captains in the wake of the 9/11 attacks as they ferried thousands of people away from the island of Manhattan. The purpose of the video is to show participants that anyone, and police in particular, can help when needed. Furthermore, the instructors argue that participants need to be at peak performance to “act when called upon,” meaning that they need to be physically, mentally and emotionally well so that they can perform their “noble duty” when needed.

The instructors then attempt to sign officers up for a daily emailing list, called the Blue Courage “Daily Dose,” before ending the training. Each “Dose” consists of a short quote designed to embody an underlying concept of the training. Instructors put pressure on

participants to sign up by asking them to do so in front of them and during the training. This is Blue Courage's attempt to keep participants engaged in the philosophy of the training even after it ends.

The two-day training closes with a certificate ceremony and a commitment from attendees to establish a 21-day plan to apply the principles of Blue Courage. The concepts of Nobility and Emotional Resilience are key to the two-day training and often flowed into the other modules. Nobility and purpose in particular are important, and almost every module in the two-day course contained a video, story, anecdote, activity or quote that conveyed its importance.

Additional time instructors spend with attendees is a critical aspect of the training. The training was structured with ten minute breaks in-between modules, with an hour break scheduled for lunch. While officers often use this time to take care of personal business the instructors also used it to make personal bonds with the attendees and reinforce the content of the training through additional stories and anecdotes. This reinforcement seems to be a valuable tool in convincing attendees to be open minded regarding the content of the course.

### **Understanding the Content, Concepts and Delivery of Blue Courage**

This section will provide a summary of the key aspects within the content, delivery and underlying theory of change in the Blue Courage Training. First, the focus of the training is on officers. One of the key aspects of the Blue Courage training, one that appears to set it apart from other training, is the "you" focus it conveys early and throughout its content. The instructors would often say "this training is about *you*" to the participating officers and emphasize that it was developed "by cops for cops." The meaning of this statement was to convey to officers that the instructors were there to improve their lives.

In an interview a master instructor argued that the training chose this tact for two reasons. First, the training is designed to improve the lives of individual officers, as a standalone goal. Second, the instructors argue that officers perceive police training, for example implicit bias and procedural justice training, as originating from outside of their profession and developed with the goal of improving the lives of *others* at the expense of officers. They argued that these trainings alienated officers because they did not appear to have officers' needs in mind. This is conceptually similar to Abraham's (2000) discussion of societal cynicism. The approach of delivering Blue Courage as focused on officer needs may break through this problem and lend greater credibility to the training.

Second, the training uses instructors that are exclusively current and former officers. Blue Courage requires that every training, through both the Direct Trainer and TTT models, be taught by current or former police officers. Having instructors with experience in law enforcement lends credibility to the instructors in the same way that the "you" focus of the training does and may work to overcome cynicism in participants. This seemed particularly salient in that it allowed instructors to offer personal stories that weaved in underling concepts of the training (e.g. a personal story about the value of emotional regulation). As will be discussed in more detail below, this approach finds support within the literature (Strangor, 2017).

Third, the training uses knowledgeable and impassioned instructors that believe in the philosophy of the training. Many of the concepts offered in the Blue Courage training cut against many of the elements of traditional police culture (e.g. expressing emotional vulnerability). In an interview with the researcher, Nila argued that instructors needed to believe in the training themselves to serve as credible messengers for the training. Several themes emerged from observing the Blue Courage Master instructors. First, these instructors appeared

knowledgeable about the content of the training. Over the course of three trainings, the researcher observed that instructors provided the content of every modules, and the content within, with consistency while being able to handle pointed and specific questions from the audience without stumbling. Second, the instructors appeared passionate about the training and appeared to believe in the principles within it while applying those principles in their own lives. All of the Master instructors observed by the researcher described multiple examples throughout the course of the training of how they personally had incorporated some component of the training into their personal lives. All Master Trainers observed also described how the use of these components had positively impacted their lives. For example, in one training observed by the researcher a master instructor describe how the use of breathing techniques and meditation had improved their emotional regulation and personal relationships. These instructors also were willing to challenge participants about the importance of these components when they received push-back from participants.

Fourth, modules build upon one another sequentially, and noble purpose is referenced throughout. One key regarding the delivery of the training that was observed was that material from early modules is used in later modules, suggesting that the order of the training is key. In an interview, Nila referred to this as a “logical learning sequence” and likened it to how students must learn addition and subtraction before applying those skills to algebra. Nila argued that this approach led to the placement of the Culture and Nobility modules at the beginning of the training because officer cynicism and many aspects of police culture prevent officer openness to other aspects of the training. This is a key to the underlying theory of the training, described below.

Fifth, the structure of the training included several blended delivery approaches. The content of the training involves a mixture of lecture, videos, personal stories, discussion and journaling. In addition to this are two homework assignments. The researcher also observed that instructors appeared to strategically use breaks, about ten minutes every hour, to ensure that participants did not become disengaged in the material. During an interview with the researcher, a Master Instructor confirmed that this approach was used for this purpose.

In addition to this, these approaches appeared to stimulate participant engagement in the form of dialogue. The use of the selected video segments were effective in this way, particularly when instructors debriefed the content of the video to highlight themes that reinforced underlying concepts of the training. Stories operated the same way and particularly stimulated dialogue from participants, both during the training and in side conversations observed by the researcher during breaks, when they were personal to the instructor. Discussion sections, sometimes following a journaling segment, were helpful because they allowed instructors to identify areas where participants needed additional persuasion.

Sixth, the training works to associate content for officers. One approach used by instructors during the Blue Courage training is the use of associations between content and concepts. This primarily took two forms: (1) associating new content that officers might be apprehensive about (e.g. breathing techniques) with groups held in reverence to the participants (e.g., Navy SEALs), and (2) linking new concepts (e.g. respectful behavior) with traditional values (e.g. officer safety). When these attempts were used participants asked more questions and were more attentive during the training. These parts of the training were also more frequently brought up in conversations between instructors and participants during breaks, and between participants during small-group discussions.

Not every attempt at this process seemed to work with participants. For example, during the use of a video recording by meditation expert Davidji many participants shifted in their seats, seeming uncomfortable, and many chose not to participate in the guided breathing techniques. Another example of this occurred during a video which featured officers dancing and lip syncing to the song *Happy*, by Pharrell Williams, in the Positive Psychology module. When the instructor suggested that some departments around the country were replicating the video one participant opined that they did not feel that officers in their department would not find this practice acceptable. In response to this comment, several other participants quietly laughed.

Seventh, the training is complex, has a large number of underlying concepts and is different than most other types of police training. The robust content, sometimes challenging underlying concepts, and varied delivery of the Blue Courage training suggest that it is hard to teach. Instructors must first understand the overarching concepts within each module and then understand how the content applies to them. Within this content are long personal narratives of popular figures, Greek philosophy, and famous quotes that require context to understand and teach. Master trainers observed seemed to weave these things together with skill but one master trainer in an interview said that they engaged in hundreds of hours of practice, including formal teaching of the curriculum.

### **The Underlying Theory of Change for the Training**

Understanding the Blue Courage training's theory of change is key to understanding how the training could impact officers. As Skogan et al. (2009) state, the "theory underlying a program is the model of how the "inputs" that are assembled and set in motion cause the "outcomes" that are the target of the intervention. A well-articulated program theory opens for inspection the "black box" of connections that link inputs...to the outcomes that are valued" (pg.



1-1). Skogan et al. discuss the sometimes difficult task of outlining a program theory: “In truth, not all programs actually have a thought-out theory in the background. Often it is left to the evaluator to assemble a sketch of a theory from the articulated assumptions, recorded decisions, and mental maps of the participants, and then to try to link the theory (which the evaluators developed) to the organization and strategies that they are evaluating (pg. 1-1).” This approach was used in this evaluation to outline a coherent program theory using the core components outlined above.

**Figure 2. Logic Model for the Blue Courage Training (Version 1)**

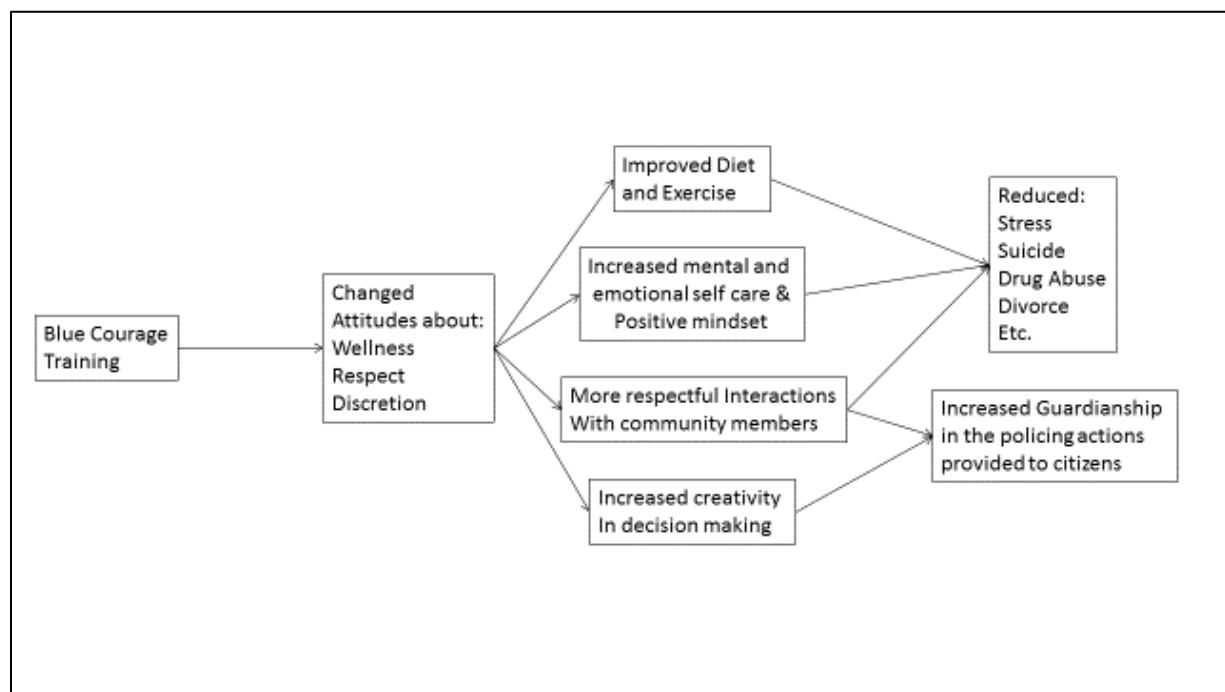


Figure 2 outlines a logic model for the underlying theory of the Blue Courage training. This logic model was developed in coordination with Michael Nila to validate its components. Nila argues that officers start with an idealistic sense of service to the public, and then grow cynical over time. With this in mind the training uses what behavioral economics refers to as a “nudge” to push officers back towards their commonly held attitudes about purpose of police work: service in the pursuit of helping people. A nudge is a process commonly used in public

policy where individuals are pushed to engage in different behaviors through the use of their currently held beliefs without mandating the behavioral change through legal change or through attitudinal change (Perry et al., 2015). An example of this is the use of calorie labels on restaurant menus (Perry et al., 2015). Proponents of social nudges argue that individuals have a general desire to consume smaller amounts of calories in an attempt to remain fit, and being provided calorie labels will activate this value and prompt behavioral changes (e.g. the selection of a lower calorie food choice).

Literature on nudges suggests that the way in which the nudge is framed influences its efficacy. Specifically, Perry et al. (2015) describe two framing mechanisms: “Framing...messages using social comparison via *descriptive social norms* (pointing out what is commonly done) or using *injunctive norms* (pointing out what is approved of) has been demonstrated to have behavior change potential” (emphasis in original; pg. 2). This process is similar to the previous discussion of treatment acceptability (Price et al., 2012; Dixon et al., 2016; Wilson et al., 2017) and suggests that to be effective nudges should be framing through descriptive and injunctive norms in a way that fit the target audience.

A second underlying framework in the Blue Courage training also relies on framing. This approach involves the attempt to change officer attitudes and beliefs regarding a number of topics and is distinct from nudges. A nudge is a process of changing behaviors without actually changing underlying values or beliefs (Thaler and Sunstein, 2009). Blue Courage works to change attitudes and beliefs in several areas other than cynicism, suggesting that in these areas the training may not operate as a nudge.

The literature suggests that changing attitudes and beliefs about a topic (e.g. emotional health) can be an important tool for prompting behavioral changes (Aronson, 1992; Smith and

Petty, 1996; Wood, 2000; Crano and Prislin, 2006). This literature also outlines a number of variables important to changing attitudes. Kelman (1938) discusses several avenues of attitudinal change: (1) compliance, (2) identification and (3) internalization. Compliance takes form when someone wants to receive a reward or avoid a punishment. Identification is a process where an individual chooses to be associated with an attitude of behavior of another person held in esteem. Last, internalization is the process by which an individual adapts an attitude because they believe in it intrinsically.

Due to the nature of these changes, Kelman (1938) argues that internalization is the longest lasting form of change. This type of attitudinal change is also most likely to persist in the absence of the change agent (e.g. a training instructor). Kelman (1938) also outlines a number of conditions that influence its effectiveness of attitudinal change. Relating to internalization he argues that messages that are provided by sources that are viewed with credibility by the audience are most likely to become internalized.

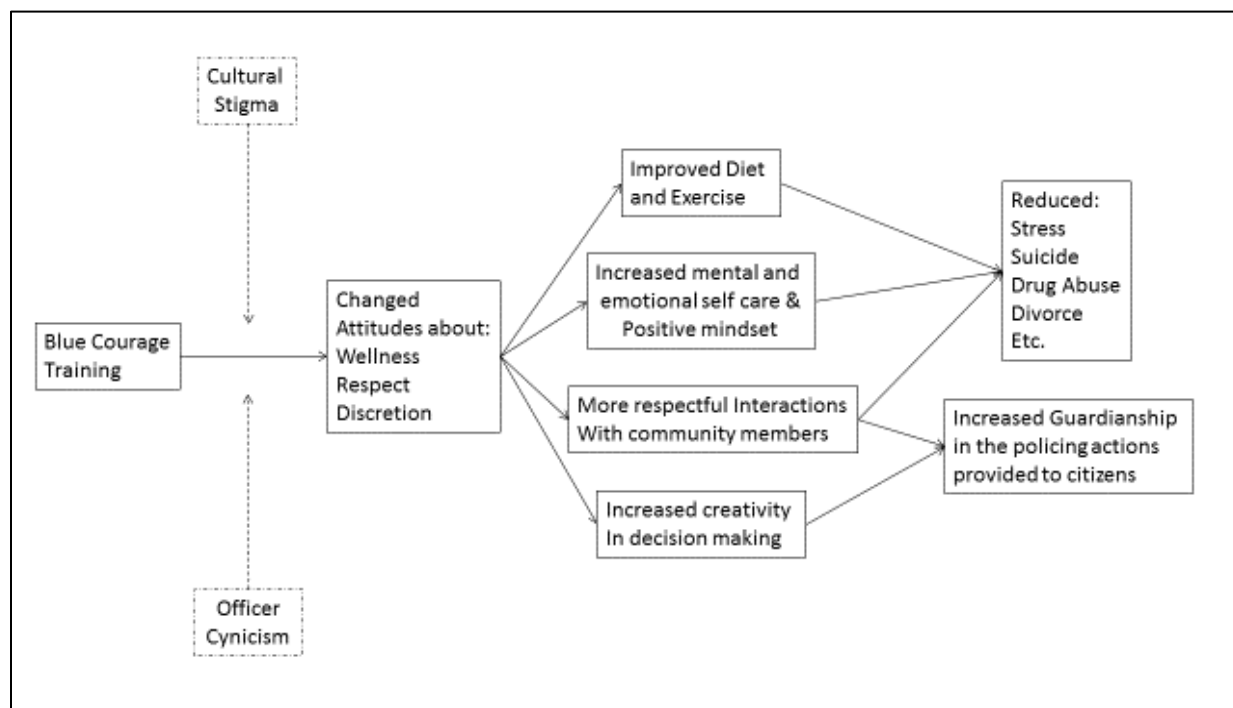
Research has identified a number of additional factors related to effectiveness at changing attitudes. Strangor (2017) outlines several factors related to the source of change (e.g. a training instructor) associated with effectiveness. Strangor (2017) argues that messengers that the audience views as similar to themselves, trustworthy in their motivations, and viewed as experts in the topical area are more likely to produce change in attitudes in the audience (Strangor, 2017).

Both of these frameworks, the use of “nudges” and the attempt to persuade officers to change attitudes, require appropriate framing mechanisms (Smith and Petty, 1996; Perry, et al., 2015). This framing must also be tailored to fit the audience, so that they find it be acceptable (Wood, 2000; Price et al., 2012; Dixon et al., 2016; Wilson et al., 2017). Examples of these

framing mechanisms can be found throughout the core components of the training delivery. When Blue Courage instructors tell participants that Navy Seals use breathing techniques to manage their emotional state and remain in peak state, effectively they are framing their “nudge” (i.e. use breathing techniques to manage emotional state) through descriptive social and injunctive norms of a social group held in reverence by the participants.

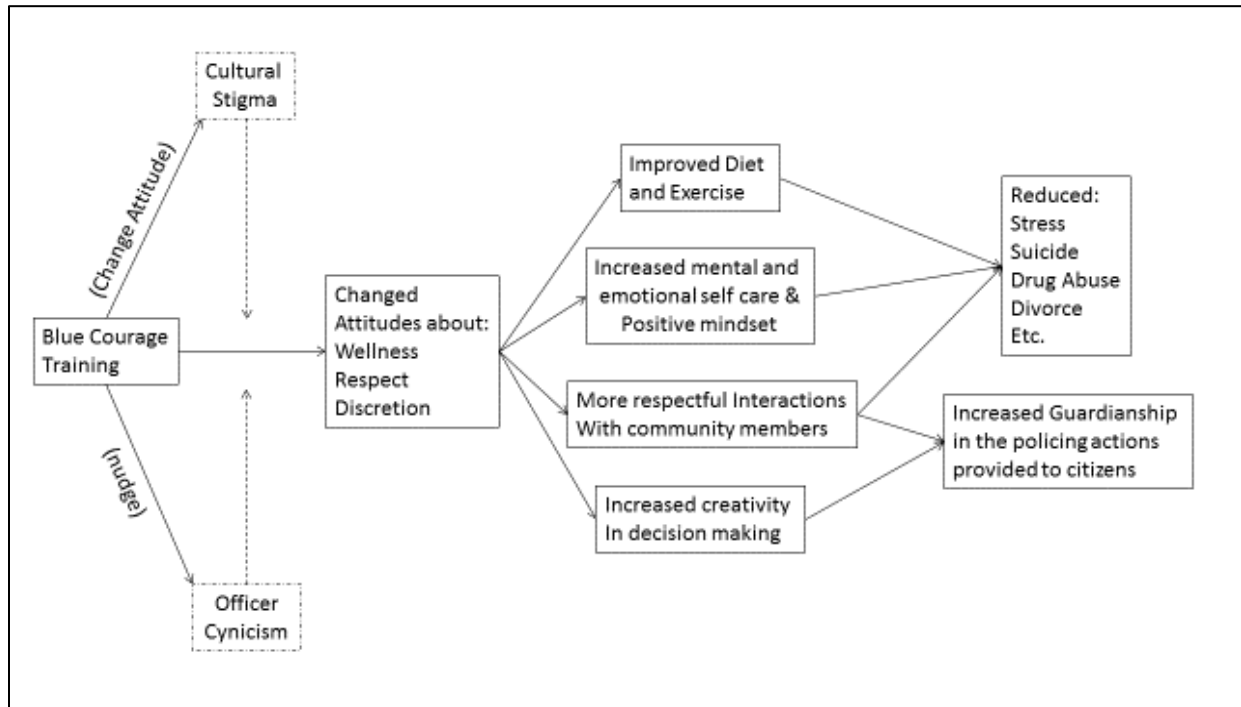
Nila recognizes, however, that changing the attitudes of officers in many of the domains desired in the training likely will not work in the current state of policing. Nila argues that cynicism makes officers non-receptive to many changes and that police culture stigmatizes self-care of mental and emotional health, a finding identified in other police interventions (Gilbert, Wakeling and Crandall, 2015), and that various aspects of police culture dissuade officers from engaging with emotional health and guardianship (Brown, 1980; Skolnick, 1996) and also hampers attitudinal change (Frymier and Nadler, 2010). These aspects prevent officers from being receptive to the changes in attitudes offered in the training, as seen in Figure 3 below.

**Figure 3. Logic Model for the Blue Courage Training (Version 2)**



This is why, in addition to building instructor legitimacy, the training focuses first on discussing the negative impacts of police culture with officers in an attempt to change their attitudes about police culture and make them open to altering it. This is also why the training immediately moves toward nudging officers to reduce cynicism afterwards, as seen in Figure 4. Targeting these two impediments is intended to open officers to the attitudinal changes the training uses (e.g. attitudes towards mental and emotional self-care and respectful behavior with citizens) to engage the behavioral changes it seeks (e.g. using breathing techniques and acting in respectful ways during encounters with citizens) to produce the outcomes it seeks (e.g. improved officer wellness and greater guardianship in the field of policing). This final process is outlined in the logic model in Figure 4, below.

**Figure 4. Logic Model for the Blue Courage Training (Version 3)**



There are several potential problems with this theory of change. First is an assumption about the nature of the participants. Nila argues that officers begin with noble purpose and that over time they grow cynical and apathetic, withdrawing from the core function of police work: service to the community. He argues that by targeting that cynicism, by reinvigorating a sense of nobility and purpose in officers, officers' attitudes can then be changed. Specifically, instructors in the training state that "rediscovering our Nobility will make us the servant leaders our communities need us to be" (emphasis added). The problem is that the policing culture literature suggests that not every officer strongly values a service orientation (Brown, 1980; Paoline, 2004). For those officers the machinations of the training might not be expected to work. One wouldn't expect a two-day training, with a two-hour focus on nobility and cynicism, to be able to change the value systems of officers from a crime-control orientation toward a service orientation.

When asked about this particular issue during an interview, Nila offered the following response. He argued that the training, specifically reminding officers of their original noble purpose in an attempt to reduce cynicism, should be effective across both of these groups. His argument was that the thread that tied these two groups together was a value intrinsic to all officers: the desire to help people. He argued that crime control oriented officers and service oriented officers both share this desire, but engage with it in different ways. Service oriented officers worked to engage the community and crime control officers worked to “catch bad guys” so as to reduce victimization. For example, an officer who arrests a rapist would feel like they are serving the community preventing a violent offender from offending again. Nila suggests that when these officers grow cynical they instead pursue job tasks in alignment with their crime control orientations (e.g. suspect chases and arrests) for personal fulfilment, in order to feel a “rush” or “thrill,” and not their original purpose of helping others. Under this framework perhaps crime control oriented officers can still be nudged by the training back towards their originally held attitude and thus become less cynical.

A second problem is that both nudges and persuasion ignore the structural problems associated with being a police officer that produces cynicism. For example, the literature argues that repeated failed change efforts within an organization and repeated failure in the work of policing can produce officer cynicism (Abraham, 2000). The absence of actually improving those sources ignores a critical aspect of officer attitudes and poses a serious question for the efficacy of the training: can a 16 hour training with a two hour focus on nobility nudge officers not to be cynical in the context of serious systemic forces that influence cynicism?

A third potential problem centers around the role that other aspects of decision making play on individual behavior. The literature suggest that attitudes towards a particular topic are

predictive of corresponding behaviors, but that the link between the two can be nuanced. Specifically research suggests that an individual may have a positive attitude towards a particular behavior, but if they do not possess the required self-efficacy they may not engage in that behavior (Frymier and Nadler, 2010). The Blue Courage instructors spend approximately five minutes discussing this topic, in their conversation about learned helplessness, but it is unlikely that amount of time would have much influence on ingrained concepts of efficacy.

Research on attitudes also argues that attitudes that are tapped infrequently hold little power over behavior, a concept called attitude accessibility (Frymier and Nadler, 2010). This suggests that participants may not engage in desired behaviors after the training if their attitudes towards those behaviors are not activated. Lastly, and perhaps most importantly, literature on the attitude – behavior link argues that situational factors are important (Frymier and Nadler, 2010). Specifically, Frymier and Nadler (2010) argue that in contexts rich in group behavior that the relationship between individual attitudes and behavior can be easily subsumed by the influence of culture. Considering the importance of cohesion on policing (Brown, 1980; Skolnick, 1996) one should question the potential efficacy of an attitudes based training on officer behaviors. The training does spend some time talking about culture, and trying to push officers to change department culture, but it seems unlikely that this would be sufficient enough to address this problem outright.

### **Research Question 2: What Impact does the Training have on Participants?**

The review of the content, concepts, delivery and underlying theory of change suggest that, with some limitations, the Blue Courage training has the potential to produce changes in participants. The delivery of the training is largely consistent with theory of changing attitudes, specifically the attempts to frame content and concepts through association and delivered by



instructors who are viewed with credibility. However, several other factors suggest that the training might not work, specifically the role that police culture likely plays in mitigating the effect of even well framed messages (Frymeir and Nadler, 2010). Which of these factors is most potent in the context of Blue Courage is an open question.

This section will attempt to answer this question by using data collected over the course of the evaluation to determine the extent of change in participants in six core domains of the training. This section will first provide an overview and description of the sample of data collected during the evaluation. Next, an analysis of independent sample *t*-test conducted on the pre-test and post-test samples of officers will be provided. Considering the limitations of independent sample *t*-tests, this section will also discuss and perform a method called record linkage in an attempt to pair individuals' pre-test and post-test measures. Next, this section will provide an analysis of paired samples *t*-tests conducted on a sample of linked training participants in an attempt to estimate the impact of the training on officers.

### **Description of the Data and Independent Variables**

Table 2 shows demographic information from the sample data. Nearly six-in-ten in the sample were between the ages of 21 and 40 at that the time of their training. The vast majority of the sample is male (65%) and White and Non-Hispanic (59%) which is largely consistent with the national population of police officers (Worrall and Schmalleger, 2016). Over half of the sample are officers (59%), nearly one-in-ten are detectives (9%), and about one-in-eight are sergeants (12%). An additional one-in-ten officers are rank Lieutenant or above.

Two-thirds of participants possessed a college degree, and half of the sample reported having at least a four-year degree. Data on police educational attainment finds that approximately one-in-four officers have a four-year degree, suggesting that the sample of

officers who participated in the Blue Courage training may be significantly more educated than the national population of officers (Carter and Sapp, 1990; Rydberg and Terrill, 2010). This may limit the generalizability of any significant findings of the dissertation.

Officers who participated in the training also come from agencies that serve different types of communities. Specifically the survey asks officers if the community they serve is primarily urban, suburban or rural. Almost half of officers came from departments that police in an urban setting (49%), more than one-in-three officers come from departments that police in a suburban setting (35%) and about one-in-six of the officers police in rural settings (15%). This distribution should allow for adequate comparisons across these groups.

Lastly, the officers in the sample were also trained in Blue Courage under two different training models. First, 239 officers, or about 35% of the sample, were trained directly by Blue Courage Master Instructors. Another 442 officers, or the remaining 65% of officers, were trained under the Blue Courage train-the-trainer (TTT) model. Under the TTT model instructors at local agencies are certified to provide the Blue Courage curriculum to fellow officers after attending the Blue Courage instructor program. Literature on TTT programs suggest that they can be effective but risk sacrificing intervention fidelity for expanded reach of the intervention (LaVigna, Christian, and Willis, 2005).

**Table 2. Pretest Demographics for Officers Trained in Blue Courage (n = 681)**

Age	Freq	%	Education	Freq	%
< 20	4	1%	High School/GED	45	7%
21-30	206	30%	Some College	179	26%
31-40	195	29%	Associates	116	17%
41-50	171	25%	Bachelors	279	41%
51-60	70	10%	Masters	53	8%
60+	17	2%	PhD/JD	4	1%
Missing	18	3%	Missing	5	1%
Gender Identity	Freq	%	Agency Type	Freq	%
Female	229	34%	Urban	331	49%
Male	440	65%	Suburban	237	35%
Transgender	4	1%	Rural	101	15%
Missing	8	1%	Missing	12	2%
Race and Ethnicity	Freq	%	Experience	Freq	%
Other	162	24%	More than 2 years	490	72%
White, Non-Hispanic	401	59%	Less than 2 years	184	27%
Missing	118	17%	Missing	8	1%
Rank	Freq	%			
Other	60	9%	Average Years of Exp.	13.3	
Officer	402	59%			
Detective	60	9%	Domain Score <sup>1</sup>	Mean	
Sergeant	85	12%	Physical Wellness	2.72	
Lieutenant or above	67	10%	Emotional Wellness	2.70	
Missing	7	1%	Positive Mindset	2.95	
Training Type	Freq	%	Respect	3.10	
Direct Training Model	239	35%	Discretion	2.49	
TTT Model	442	65%	Cynicism	2.03	

<sup>1</sup> All scores fall between a minimum of 1 and a maximum of 4

Also embedded in the survey are questions used to develop scale measures. As discussed previously, these scales are designed to tap the core domains in officers that the training targets: Attitudes towards respectful behavior (“Respect”), officer cynicism (“Cynicism”), physical wellness (“Physical Wellness”), attitudes towards emotional self-care (“Emotional Wellness”), positive mindset (“Positive Mindset”) and officer discretion (“Discretion”). Embedded within the survey are several questions targeting each of these core areas that were designed specifically to be combined into scale measures.

Appendix C details the questions used to create these scales. Each measure had the following categories “Never,” “Seldom,” “Often” and “Always” that were coded numerically for analysis 1, 2, 3 and 4, respectively. The scale measures were created by taking the mean of the

questions used to create them within the original survey, and questions were removed to improve internal consistency where needed. When a participant had missing data, their case was not removed list-wise. Responses for a minimum of four of the questions used to create each scale was required for inclusion, meaning that some participants were removed due to missing data. Sample sizes for each resulting scale are provided below. No measure had more than twenty-five cases removed during this process.

During the training instructors try to convince officers to improve their diet and increase the amount that they exercise. To capture this, the scale measure “Physical Wellness” (Cronbach’s  $\alpha = .744$ ) was created by taking the mean of the following measures:

- “I exercise several times a week to stay as healthy as possible.”
- “I follow a clear plan to improve myself.”
- “It is difficult for me to maintain a healthy lifestyle.” (reverse coded)
- “I eat right to stay as healthy as possible.”

Blue Courage instructors try to convince officers to take seriously their emotional health. To capture this, the scale measure “Emotional Wellness” (Cronbach’s  $\alpha = .736$ ) was created by taking the mean of the following questions:

- “My emotions get the better of me during stressful situations.” (reverse coded)
- “It is hard to maintain a sense of personal well-being on this job.” (reverse coded)
- “It is hard to maintain a positive attitude on this job.” (reverse coded)
- “I work at maintaining my emotional health.”
- “I make time to do things that can help maintain and improve my spiritual health.”
- “I take steps to maintain my emotional well-being.”

Next, instructors attempt to convince officer that maintaining a positive attitude can make officers more effective and reduce the negative impacts of stress. To capture attitudes towards positivity the scale measure “Positive Mindset” (Cronbach’s  $\alpha = .786$ ) was created by taking mean of the following questions:

“As an officer it is difficult to stay positive.” (reverse coded)  
“I find ways to stay positive on the job.”  
“Police work is very satisfying.”  
“I enjoy helping people in my work.”

Blue Courage instructors also try to teach participants that engaging with others in a respectful way is moral and can enhance officer safety. To capture attitudes towards respectful behavior, the scale measure “Respect” (Cronbach’s alpha = .790) was created by taking the mean of the following questions:

“Listening and talking to citizens is the best way to resolve most issues.”  
“I get treated with respect by the people I deal with on the job.”  
“With community members, I try to explain the reasons for my actions.”  
“People I deal with feel that have been treated with respect.”  
“It is important that people feel they have been treated with respect.”  
“The people I deal with feel that I have treated them fairly.”

The training also attempts to make officers more comfortable using their discretion in the pursuit of helping others, even when that means bending department policy. To capture these attitudes the scale measure “Discretion” (Cronbach’s alpha = .554) was created by taking the mean of the following questions:

“Doing things by the book is more important than exercising independent judgement.” (reverse coded)  
“Training is more important than experience.” (reverse coded)  
“I follow “the rules,” even if it doesn't result in the best outcome.” (reverse coded)  
“You have to bend the rules to do the right thing.”

Lastly, the training attempts to nudge officers so that they are less cynical and more idealistic. To capture this, the scale measure “Cynicism” (Cronbach’s alpha = .850) was created by taking the mean of the following questions:

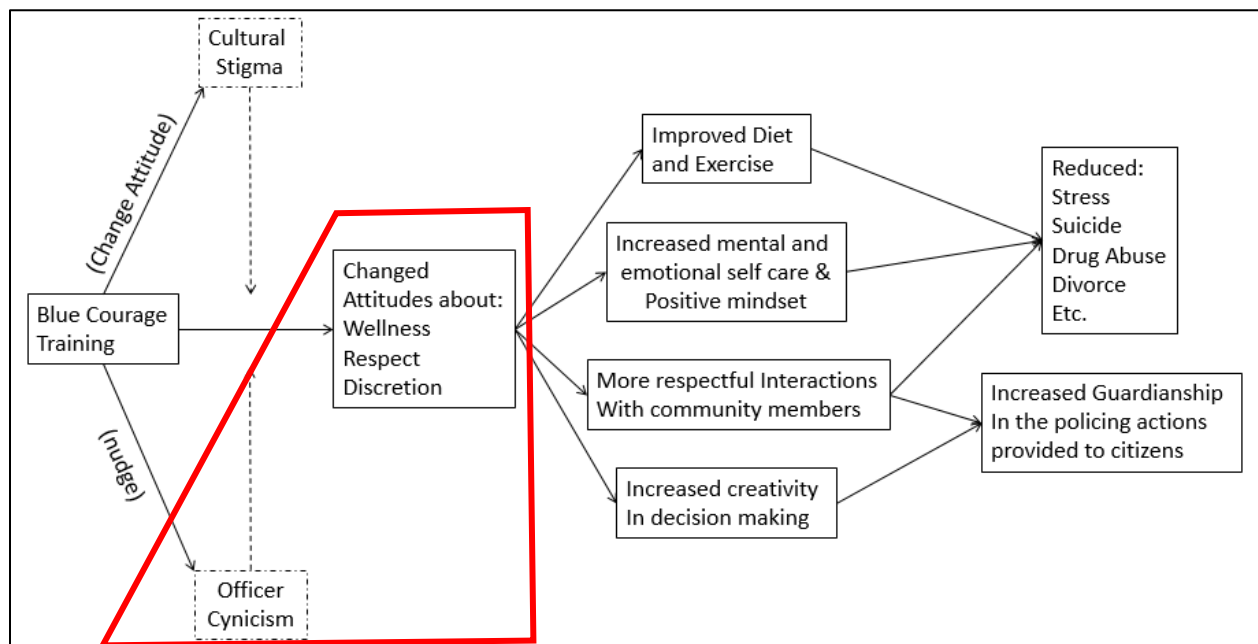
“The sacrifices I make to be a police officer are worth it.” (reverse coded)  
“The community looks up to me for my career choice.” (reverse coded)  
“If I were starting out I would choose this profession again.” (reverse coded)

“I would recommend this job to most people today.” (reverse coded)  
 “Policing is a rewarding profession.” (reverse coded)  
 “As an officer I do good things for the community.” (reverse coded)

Each of these measures would be considered as having at least acceptable internal consistency (DeVellis 2012). However, the scale measure for “Discretion” is considered to have questionable consistency (DeVellis 2012). This measure could not be improved by the removal of additional questions. This suggests that officer discretion in the context of Blue Courage might be difficult to measure or that the questions used to measure this concept were poorly designed.

Specific to the underlying theory of change outlined previously, these measures try to capture change in attitudes towards these domains within officers, with the hope that those attitudes will produce behavioral changes and improved outcomes for officers. This is outlined in Figure 5 below.

**Figure 5. Measures for Blue Courage Training**



The pretest measures for officers in the sample offer some insight into the types of officers being trained by Blue Courage. As discussed above, officers are not being randomly assigned to participate in Blue Courage. This opens the possibility that the training may not be targeted at officers who are of highest need for various aspects of the training (e.g. mental and emotional health). Analyzing the pre-test measures may allow us to assess this problem, and may become helpful in interpreting findings.

**Table 3. Participant Pre-test Domain Scores (n = 681)**

<b>Domain Score<sup>1</sup></b>	<b>Mean</b>	<b>SD</b>
Physical Wellness (n = 658)	2.88	0.56
Emotional Wellness (n = 681)	2.71	0.47
Positive Mindset (n = 656)	3.13	0.51
Respect (n = 676)	3.16	0.39
Discretion (n = 661)	2.23	0.39
Cynicism (n = 673)	2.03	0.58

<sup>1</sup> All scores fall between a min of 1 and a max of 4

Table 3 shows the pre-test means for all scale measures for all officers in the pre-test sample (n = 681). All measures fall between a minimum of one and a maximum of four. Two of the scale measures in particular, “Respect” and “Cynicism,” fall in areas of the range that suggest very little room for improvement. Specific to the score for Cynicism, research would suggest that this sample is perhaps comprised of officers who have lower cynicism than officers on average (Caplan, 2003; Enciso, Maskaly, and Donner, 2016). The unique nature of the other measures, which do not borrow from other scale measures, make it difficult to find a comparison in the literature. Based on this it is difficult to assess the representativeness of the sample with the measures used.

### **Analysis of Independent Samples *t*-Test on Pretest and Posttest Data**

The nature of the data, pooled pre-test measures for 681 training participants unlinked to an additional pool of 285 training participants’ post-test measures, limits the statistical

approaches that can be applied to analyze the impact of Blue Courage training on participants. This structure lends itself to the use of independent-sample *t*-test. An independent sample *t*-test is an inferential statistical analysis for determining the difference in means between two groups. For this analysis, group means for every scale measure can be compared across the pre-test sample and post-test sample to estimate a training effect. The logic model of the training suggests that the goal is to produce increases all of these measures within participants with the exception of the measure Cynicism, which the training seeks to decrease. As discussed previously, because no comparison group exists a treatment effect will be compared against the assumption of no change.

In an attempt to better substantiate any observed statistically significant difference between pre-test and post-test group means, a Cohen's *d* was calculated. Cohen's *d* converts unit difference between two groups in a *t*-test to be interpreted as the number of pooled standard deviations of difference between two groups. In this form, *d* can be interpreted as an effect size and can be compared across different groups (Cohen, 1988). Cohen (1988) outlines that a *d* of less than .2 should be viewed as statistically significant but substantively unimportant. A *d* between .2 and about .5 should be viewed as “weak,” between .5 and .8 should be considered “medium,” and those larger than .8 should be seen as a “strong” difference (Cohen, 1988).

**Table 4. Change in Blue Courage Domains among Training Participants  
(Independent Samples *t*-test)**

Domain	Average Score <sup>1</sup>		<i>t</i> - value	SD		Cohen's <i>d</i>	Sig.
	Pre	Post		Pre	Post		
Physical Wellness (n = 658)	2.88	2.87	-0.026	0.56	0.50	0.00	
Emotional Wellness (n = 681)	2.71	2.78	2.130	0.47	0.42	0.15	*
Positive Mindset (n = 656)	3.13	3.09	-1.204	0.51	0.45	-0.09	
Respect (n = 676)	3.16	3.19	1.047	0.39	0.36	0.07	
Discretion (n = 661)	2.23	2.31	2.910	0.39	0.36	0.21	*
Cynicism (n = 673)	2.03	2.06	0.900	0.58	0.53	0.06	

\* = significant at the .05 level

<sup>1</sup> All scores fall between a minimum of 1 and a maximum of 4



Table 4 provides the independent samples *t*-tests conducted for each of the scale measures in the analysis. Of the six measures, officer “Emotional Wellness” and officer “Discretion” both showed statistically significant positive differences between the pre-test and post-test samples. The measure “Emotional Wellness” showed a statistically significant ( $\alpha = .05$ ) increase from  $M = 2.71$  in the pretest sample to  $M = 2.78$  in the post-test sample ( $t = 2.13$ ). The measure “Discretion” showed a statistically significant ( $\alpha = .05$ ) increase from  $M = 2.23$  in the pretest sample to  $M = 2.31$  in the post-test sample ( $t = 2.91$ ).

The analysis also calculated Cohen’s *d* for each *t*-test. As stated above, a Cohen’s *d* is an effect size estimate for the difference observed in a *t*-test. The difference between the pre-test and post-test samples for the measure “Emotional Wellness” resulted in a  $d = .15$ , an effect size that Cohen (1988) argues is substantively unimportant. The difference between the pre-test and post-test samples for the measure “Discretion” resulted in a  $d = .21$ , a small effect size according to Cohen (1988). It would appear that Blue Courage has had some positive, though small, impact on officers in the sample.

However, before spending time interpreting these results it is important to discuss some of the limitations of the methodological approach used. One large problem using this method on repeated measures data is the risk of systematic bias in attrition across pre-test and post-test samples resulting in the comparison of non-similar groups. For example, one possible factor driving the attrition process might be that the officers who hold a favorable opinion of the training and received a larger benefit as a result of the training were more likely to complete the post-test instrument than officers who did not, confounding any observed difference in the pre-test and post-test scores as a treatment effect.

It is also possible given the electronic methodology for collecting pre- and post-measures that an unknown number of officers completed the post-test instrument who did not complete the pre-test instrument. It is possible the entire post-test sample of participants ( $n = 285$ ) are different participants than those in the pre-test sample ( $n = 681$ ). Without having pre-test and post-test cases linked in some way it is impossible to determine how many, if any, officers in fact did this.

Dependent, or paired,  $t$ -tests help control for both of these problems by limiting analysis only to officers who have both pre- and post-test measures. However, the current structure of the Blue Courage survey data makes this impossible as pre-test measures are not linked to post-test measures in any way. Additional analyses, such as regression analysis, are also challenging because analysis cannot predict within person change as a result of the training while controlling for, as an example, demographic information like sex and race. An additional data management approach is needed to address these issues.

### **Addressing Limitations with the Analysis through an attempt at “Record Linkage”**

The methodological approach of “record linkage” becomes helpful in this scenario. This approach is popular in medical research when researchers want to combine multiple data sets but individuals within both sets of data are not linked by unique identifiers (Bell, Keesey and Richards, 1997; Dusetzina et al., 2014). This methodology has two primary forms: “Deterministic” and “Probabilistic” (Dusetzina et al., 2014). The validity of both of these approaches have been tested with randomized data and show that post hoc record linkage can be accomplished with high degrees of confidence (Dusetzina et al., 2014). According to Dusetzina et al. (2014) in a probabilistic approach, “matched pairs can be designated as matches, possible matches, or non-matches based on the calculation of linkage scores and the application of

decision rules” (pg. 33). These linkage scores and decision rules are developed by the researcher based upon the unique nature of each of the data sets, the types of potential variables that can be linked on (i.e. the shared variables across the datasets) and the distribution of those potential linking variables (e.g. a variable with higher variance is more valuable than one in which most cases share the same characteristic).

A second approach to link data is referred to as the deterministic method. Dusetzina et al. (2014) argue that in this approach researchers must “determine whether record pairs agree or disagree on a given set of identifiers, where agreement on a given identifier is assessed as a discrete – ‘all or nothing’ – outcome” (pg. 32). However, this approach does allow for some amount of error. As Dusetzina et al. (2014) argue, if a variable “is missing or does not match, or two records fail to meet the initial match criteria, they may be declared a match if they agree on the match criteria in a second round of deterministic linkages” (pg. 32).

This analysis used an “approximate or iterative deterministic linkage method” to match post-test surveys to pre-test pairs within the Blue Courage data sample described above (Dusetzina et al., 2014). In this method potential matches are screened through two stages to identify pairs and minimize false positives in matching. Most commonly, this process screens potential matches based on the common variables that are most unique given a particular field of study or have the most variance within a dataset. Within the field of medicine this often includes variables like Social Security Number and Last Name but may differ based upon the field of study (Dusetzina et al., 2014).

The first stage identified possible matches between cases in the pre- and post-surveys on the variables “Training Site,” “Training Number” within the training site, “Training Model,” “Age” range, “Years of Experience,” “Gender,” “Race” and “Education” variables. As is

common in data linkage procedures, including deterministic linkage methods, this analysis allowed for small variation among the analysis allowed for the variable “Years of Experience” to differ by one year between pre-test and post-test (Dusetzina et al., 2014). The reasoning for this within the data linkage literature is that training participants and data entry personnel sometimes make errors when entering information. Participants also may have passed an additional year of experience in the one month lapse between pre- and post-test measures

Following the data linkage procedure outlined by Dusetzina et al. (2014), if a case was unable to be uniquely linked after the first stage, either because a key variable in the first stage did not match or if multiple cases matched, a second stage of matching took place. During the second stage of linking the variables “Agency type,” “Rank,” “Assignment” and “Assignment: Other” were used. In the last variable, “Assignment: Other,” participants were able to list out their assignment in a narrative section if it was not listed in the response categories provided.

Table 5 shows the outcomes of this linking procedure. Of the 285 total post-test cases that could be linked to pre-tests, 184 cases were identified as possible matches through the first stage of the linking procedure. Of those 184 cases, 114 (62%) were able to be linked through the first stage of the linking procedure (i.e. a single, unique case existed within the pre- and post-survey data with the same training site, training number within site, training type, age, experience, gender, race and education). An additional 40 cases (21.7%) were able to be matched during the first stage where only “Years of Experience” differed by one year. In total, 154 of the 184 (83.7%) possible matches were successfully matched during the first stage of the linking procedure.

Twenty cases (10.9%) were matched during the second stage of the procedure. In this stage, cases in which pre-and post-test instruments differed in one of the key linking variables in

the first stage could be considered a match if all of the additional linking variables described above matched. This stage was also used to identify unique matches when multiple possible pairs were found during the first stage of the procedure. In the second stage, only one key variable was allowed to differ in order to pass the screening.

**Table 5. Case Linking Justification**

	<b>Type of Match</b>	<b>Freq</b>
<b>Stage 1</b>	Perfect Link	114
	Experience Different by One Year	40
	<b>Total Linked during Stage 1</b>	<b>154</b>
<b>Stage 2</b>	Education Different	14
	Age Different by One Unit	3
	Race Different	2
	Unique “Assignment: Other”	1
	<b>Total Linked during Stage 2</b>	<b>20</b>
	<b>Total Linked after Stage 1 &amp; 2</b>	<b>174</b>
<b>No Match</b>	<b>Reason Not Linked after Stage 1 &amp; 2</b>	
	Gender Different	1
	Education Different	1
	Experience Different by Two Years	2
	Cases with Multiple Possible Matches	6
	<b>Total Not Linked</b>	<b>10</b>
<b>Total</b>	<b>Total Possible Matches</b>	<b>184</b>

Of the 20 cases matched in the second stage, 14 had different education listed in pre and post measures. In each of these cases the difference was between “Some College” listed in one instrument and either “Associates Degree” or “Bachelor’s Degree” listed in its corresponding possible match. It is believed that some respondents conflated these choices. An additional two cases listed different races but in both cases the difference involved was between the categories “Other” and “Mixed.” One case had missing data in the education and gender variables but was

able to be matched because it was consistent in all second stage variables and had a unique listed “Assignment: Other” in both the pre-test and post-test instrument. Last, three cases had different ages listed, and these cases were included due to potential input error because they were different by only one response category, as Dusetzina et al. (2014) argue.

A total of ten possible matches (5.4%) were determined to not be matched. Of these ten, one listed a different gender in pre and post measures and two listed “Years of Experience” that differed by two years. An additional pair listed an education that differed by two units within the response categories, but the responses were “High School” and “Associates Degree” in the pre- and post-test instruments, a difference not believed to be close enough for inclusion. Six additional cases are known to be able to be linked, but the linking methodology was unable to specify which case it could be linked to, among several, meaning linking might result in a potential false positive. The remaining 101 cases are believed to be from unique officers who completed the post-test survey instrument but did not complete a pre-survey instrument. This screening was purposefully designed to be conservative so as to decrease the possibility of a false positive.

One concern that arises is that systematic bias has resulted as a result of linking (i.e. different types of cases are easier to link and produce a final sample of analyzable data that differs in significant ways from all officers trained). Demographic information for cases that could be matched are listed in Tables 6-9, and the same information for cases that could not be matched are listed in Tables 10-13. Large variation in the number of cases across sites makes it difficult to determine if systematic bias in linking exist by observing these data alone. An additional diagnostic test is required.

**Table 6. Site Demographics: Sites 1 - 7 (Matched Cases Only n = 174)**

	All Officers		Site 1		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7	
Site Size	n = 174		n = 2		n = 1		n = 1		n = 3		n = 4		n = 12		n = 16	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	30	17%	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	10	63%
31-40	48	28%	1	50%	0	0%	0	0%	1	33%	2	50%	4	33%	2	13%
41-50	63	36%	0	0%	1	100%	0	0%	1	33%	2	50%	7	58%	3	19%
51-60	27	16%	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	1	6%
60+	5	3%	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%	0	0%
Missing	1	1%	0	0%	0	0%	1	100%	0	0%	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Male	134	77%	2	100%	0	0%	1	100%	3	100%	3	75%	9	75%	14	88%
Female	40	23%	0	0%	1	100%	0	0%	0	0%	1	25%	3	25%	2	13%
Transgender	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
White, Non-Hispanic	125	72%	2	100%	1	100%	1	100%	3	100%	3	75%	10	83%	13	81%
Other	42	24%	0	0%	0	0%	0	0%	0	0%	1	25%	2	17%	3	19%
Missing	7	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	77	44%	2	100%	0	0%	1	100%	2	67%	3	75%	2	17%	16	100%
Detective	18	10%	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%
Sergeant	34	20%	0	0%	1	100%	0	0%	0	0%	1	25%	6	50%	0	0%
Lieutenant or above	24	14%	0	0%	0	0%	0	0%	0	0%	0	0%	3	25%	0	0%
Other	12	7%	0	0%	0	0%	0	0%	0	0%	0	0%	1	8%	0	0%
Missing	9	5%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	11	6%	0	0%	0	0%	0	0%	3	100%	0	0%	1	8%	0	0%
Some College	49	28%	0	0%	0	0%	1	100%	0	0%	1	25%	6	50%	1	6%
Associates	28	16%	0	0%	0	0%	0	0%	0	0%	1	25%	1	8%	3	19%
Bachelors	66	38%	2	100%	1	100%	0	0%	0	0%	2	50%	2	17%	11	69%
Masters	18	10%	0	0%	0	0%	0	0%	0	0%	0	0%	2	17%	1	6%
PhD/JD	2	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	81	47%	2	1	1	100%	0	0%	1	33%	1	25%	2	17%	5	31%
Suburban	66	38%	0	0	0	0%	1	100%	0	0%	1	25%	7	58%	6	38%
Rural	26	15%	0	0	0	0%	0	0%	2	67%	2	50%	3	25%	5	31%
Missing	1	1%	0	0	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	66	38%	0	0	1	100%	1	100%	0	0%	0	0%	12	100%	0	0%
TTT Model	108	62%	2	1	0	0%	0	0%	3	100%	4	100%	0	0%	16	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	147	84%	1	50%	1	100%	1	100%	3	100%	4	100%	12	100%	4	25%
Less than 2 years	27	16%	1	50%	0	0%	0	0%	0	0%	0	0%	0	0%	12	75%
Average Years of Exp.	14.60		3.50		13.00		7.00		16.70		13.80		16.60		1.81	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.72		2.30		2.40		2.60		2.60		3.00		2.60		2.84	
Emotional Wellness	2.78		3.00		2.83		3.40		2.44		2.73		2.83		2.71	
Positive Mindset	2.94		3.21		2.86		2.83		2.81		2.85		2.97		2.99	
Respect	3.15		3.21		2.86		2.57		3.19		3.04		3.20		3.23	
Discretion	2.52		2.5		2.43		2.57		2.52		2.54		2.65		2.47	
Cynicism	2.04		1.83		2.67		2.33		1.78		2.00		2.03		1.80	

**Table 7. Site Demographics: Sites 8-13 (Matched Cases Only n = 174)**

	All Officers		Site 8		Site 9		Site 10		Site 11		Site 12		Site 13	
Site Size	n = 174		n = 8		n = 10		n = 0		n = 11		n = 14		n = 11	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
21-30	30	17%	1	13%	0	0%	NA	NA	3	27%	3	21%	2	18%
31-40	48	28%	3	38%	5	50%	NA	NA	6	55%	3	21%	3	27%
41-50	63	36%	0	0%	4	40%	NA	NA	2	18%	4	29%	4	36%
51-60	27	16%	4	50%	1	10%	NA	NA	0	0%	3	21%	1	9%
60+	5	3%	0	0%	0	0%	NA	NA	0	0%	1	7%	1	9%
Missing	1	1%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Male	134	77%	8	100%	9	90%	NA	NA	9	82%	7	50%	10	91%
Female	40	23%	0	0%	1	10%	NA	NA	2	18%	7	50%	1	9%
Transgender	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
White, Non-Hispanic	125	72%	8	100%	9	90%	NA	NA	10	91%	3	21%	10	91%
Other	42	24%	0	0%	1	10%	NA	NA	1	9%	11	79%	1	9%
Missing	7	4%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	77	44%	3	38%	3	30%	NA	NA	2	18%	4	29%	6	55%
Detective	18	10%	0	0%	0	0%	NA	NA	1	9%	1	7%	1	9%
Sergeant	34	20%	0	0%	4	40%	NA	NA	2	18%	1	7%	2	18%
Lieutenant or above	24	14%	4	50%	3	30%	NA	NA	0	0%	3	21%	1	9%
Other	12	7%	1	13%	0	0%	NA	NA	0	0%	5	36%	1	9%
Missing	9	5%	0	0%	0	0%	NA	NA	6	55%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	11	6%	1	13%	1	10%	NA	NA	0	0%	0	0%	0	0%
Some College	49	28%	1	13%	3	30%	NA	NA	2	18%	7	50%	2	18%
Associates	28	16%	1	13%	2	20%	NA	NA	4	36%	0	0%	2	18%
Bachelors	66	38%	4	50%	4	40%	NA	NA	3	27%	5	36%	5	45%
Masters	18	10%	1	13%	0	0%	NA	NA	1	9%	1	7%	2	18%
PhD/JD	2	1%	0	0%	0	0%	NA	NA	1	9%	1	7%	0	0%
Missing	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	81	47%	0	0%	3	30%	NA	NA	4	36%	8	57%	1	9%
Suburban	66	38%	5	63%	7	70%	NA	NA	7	64%	6	43%	9	82%
Rural	26	15%	3	38%	0	0%	NA	NA	0	0%	0	0%	1	9%
Missing	1	1%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	66	38%	0	0%	10	100%	NA	NA	5	45%	14	100%	0	0%
TTT Model	108	62%	8	100%	0	0%	NA	NA	6	55%	0	0%	11	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	147	84%	7	88%	10	100%	NA	NA	5	45%	12	86%	10	91%
Less than 2 years	27	16%	1	13%	0	0%	NA	NA	6	55%	2	14%	1	9%
Average Years of Exp.	14.60		18.60		15.10		NA		6.60		15.10		17.20	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.72		2.48		2.57		NA		2.82		2.86		2.82	
Emotional Wellness	2.78		2.69		2.62		NA		2.97		2.91		2.99	
Positive Mindset	2.94		2.82		2.71		NA		3.12		3.11		3.16	
Respect	3.15		2.95		3.03		NA		3.20		3.38		2.27	
Discretion	2.52		2.55		2.54		NA		2.54		2.53		2.58	
Cynicism	2.04		2.12		2.12		NA		1.67		2.03		1.94	



**Table 8. Site Demographics: Sites 14-19 (Matched Cases only n = 174)**

	All Officers		Site 14		Site 15		Site 16		Site 17		Site 18		Site 19	
Site Size	n = 174		n = 3		n = 4		n = 14		n = 2		n = 5		n = 1	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	30	17%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%
31-40	48	28%	0	0%	2	50%	1	7%	1	50%	1	20%	0	0%
41-50	63	36%	3	100%	1	25%	7	50%	0	0%	2	40%	1	100%
51-60	27	16%	0	0%	1	25%	6	43%	0	0%	2	40%	0	0%
60+	5	3%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Male	134	77%	2	67%	1	25%	13	93%	2	100%	1	20%	1	100%
Female	40	23%	1	33%	3	75%	1	7%	0	0%	4	80%	0	0%
Transgender	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
White, Non-Hispanic	125	72%	2	67%	2	50%	6	43%	0	0%	2	40%	1	100%
Other	42	24%	1	33%	2	50%	7	50%	1	50%	2	40%	0	0%
Missing	7	4%	0	0%	0	0%	1	7%	1	50%	1	20%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	77	44%	1	33%	1	25%	2	14%	1	50%	0	0%	0	0%
Detective	18	10%	0	0%	1	25%	0	0%	0	0%	0	0%	1	100%
Sergeant	34	20%	1	33%	1	25%	4	29%	1	50%	2	40%	0	0%
Lieutenant or above	24	14%	1	33%	1	25%	5	36%	0	0%	2	40%	0	0%
Other	12	7%	0	0%	0	0%	2	14%	0	0%	1	20%	0	0%
Missing	9	5%	0	0%	0	0%	1	7%	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	11	6%	0	0%	0	0%	0	0%	0	0%	1	20%	0	0%
Some College	49	28%	1	33%	0	0%	2	14%	1	50%	1	20%	1	100%
Associates	28	16%	0	0%	0	0%	2	14%	0	0%	1	20%	0	0%
Bachelors	66	38%	1	33%	2	50%	5	36%	1	50%	1	20%	0	0%
Masters	18	10%	1	33%	2	50%	5	36%	0	0%	1	20%	0	0%
PhD/JD	2	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	81	47%	3	100%	3	75%	8	57%	0	0%	2	40%	0	0%
Suburban	66	38%	0	0%	1	25%	4	29%	0	0%	3	60%	1	100%
Rural	26	15%	0	0%	0	0%	2	14%	2	100%	0	0%	0	0%
Missing	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	66	38%	0	0%	4	100%	14	100%	0	0%	5	100%	0	0%
TTT Model	108	62%	3	100%	0	0%	0	0%	2	100%	0	0%	1	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	147	84%	3	100%	4	100%	14	100%	2	100%	5	100%	1	100%
Less than 2 years	27	16%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Average Years of Exp.	14.60		18.70		14.80		22.70		12.50		22.80		20.00	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.72		2.87		2.50		2.74		2.63		3.00		3.00	
Emotional Wellness	2.78		2.83		2.88		3.11		2.83		3.03		2.50	
Positive Mindset	2.94		2.81		3.04		3.21		3.06		3.11		2.50	
Respect	3.15		3.19		3.32		3.51		3.14		3.23		3.29	
Discretion	2.52		2.67		2.54		2.55		2.57		2.46		2.43	
Cynicism	2.04		1.89		2.12		1.56		2.08		1.90		2.17	

**Table 9. Site Demographics: Sites 20-25 (Matched Cases Only n = 174)**

	All Officers		Site 20		Site 21		Site 22		Site 23		Site 24		Site 25	
Site Size	n = 174		n = 1		n = 4		n = 38		n = 6		n = 2		n = 1	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	30	17%	0	0%	2	50%	4	11%	2	33%	1	50%	0	0%
31-40	48	28%	0	0%	0	0%	11	29%	2	33%	0	0%	0	0%
41-50	63	36%	1	100%	1	25%	16	42%	1	17%	1	50%	1	100%
51-60	27	16%	0	0%	0	0%	6	16%	1	17%	0	0%	0	0%
60+	5	3%	0	0%	1	25%	1	3%	0	0%	0	0%	0	0%
Missing	1	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Male	134	77%	1	100%	4	100%	34	89%	5	83%	2	100%	0	0%
Female	40	23%	0	0%	0	0%	4	11%	1	17%	0	0%	1	100%
Transgender	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
White, Non-Hispanic	125	72%	1	100%	2	50%	30	79%	4	67%	1	50%	1	100%
Other	42	24%	0	0%	2	50%	5	13%	1	17%	1	50%	0	0%
Missing	7	4%	0	0%	0	0%	3	8%	1	17%	0	0%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	77	44%	0	0%	3	75%	19	50%	3	50%	2	100%	1	100%
Detective	18	10%	0	0%	0	0%	10	26%	2	33%	0	0%	0	0%
Sergeant	34	20%	0	0%	1	25%	7	18%	0	0%	0	0%	0	0%
Lieutenant or above	24	14%	0	0%	0	0%	0	0%	1	17%	0	0%	0	0%
Other	12	7%	1	100%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	9	5%	0	0%	0	0%	2	5%	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	11	6%	0	0%	0	0%	3	8%	0	0%	1	50%	0	0%
Some College	49	28%	0	0%	1	25%	15	39%	2	33%	0	0%	1	100%
Associates	28	16%	1	100%	2	50%	7	18%	1	17%	0	0%	0	0%
Bachelors	66	38%	0	0%	1	25%	12	32%	3	50%	1	50%	0	0%
Masters	18	10%	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%
PhD/JD	2	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	81	47%	0	0%	0	0%	36	95%	1	17%	0	0%	0	0%
Suburban	66	38%	0	0%	0	0%	1	3%	4	67%	2	100%	1	100%
Rural	26	15%	1	100%	4	100%	0	0%	1	17%	0	0%	0	0%
Missing	1	1%	0	0%	0	0%	1	3%	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	66	38%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
TTT Model	108	62%	1	100%	4	100%	38	100%	6	100%	2	100%	1	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	147	84%	1	100%	4	100%	36	95%	6	100%	1	50%	0	0%
Less than 2 years	27	16%	0	0%	0	0%	2	5%	0	0%	1	50%	1	100%
Average Years of Exp.	14.60		14.00		19.80		16.90		10.80		11.50		1.00	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.72		2.20		2.84		2.70		2.63		2.30		2.80	
Emotional Wellness	2.78		2.83		2.96		2.50		2.78		3.00		2.67	
Positive Mindset	2.94		3.14		3.00		2.69		2.91		3.07		3.14	
Respect	3.15		3.29		3.21		2.88		3.14		3.29		3.29	
Discretion	2.52		2.57		2.61		2.47		2.33		2.43		2.57	
Cynicism	2.04		1.50		1.92		2.47		2.14		2.25		2.00	

**Table 10. Post-test Site Demographics: Sites 1 - 7 (Non-Matched Cases Only n = 111)**

	All Officers		Site 1		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7	
Site Size	n = 111		n = 5		n = 2		n = 7		n = 2		n = 1		n = 2		n = 11	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	21	19%	1	20%	0	0%	0	0%	1	50%	0	0%	0	0%	5	45%
31-40	36	32%	3	60%	1	50%	0	0%	1	50%	1	100%	0	0%	3	27%
41-50	26	23%	0	0%	1	50%	0	0%	0	0%	0	0%	1	50%	2	18%
51-60	14	13%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	1	9%
60+	3	3%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%
Missing	10	9%	0	0%	0	0%	7	100%	0	0%	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	23	21%	2	40%	1	50%	1	14%	0	0%	0	0%	1	50%	0	0%
Male	84	76%	3	60%	1	50%	6	86%	2	100%	1	100%	1	50%	11	100%
Transgender	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	23	21%	0	0%	0	0%	3	43%	0	0%	0	0%	0	0%	4	36%
White, Non-Hispanic	79	71%	5	100%	2	100%	3	43%	2	100%	1	100%	2	100%	7	64%
Missing	9	8%	0	0%	0	0%	1	14%	0	0%	0	0%	0	0%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	60	54%	4	80%	0	0%	2	29%	1	50%	1	100%	1	50%	11	100%
Detective	6	5%	0	0%	0	0%	1	14%	0	0%	0	0%	0	0%	0	0%
Sergeant	20	18%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	0	0%
Lieutenant or above	15	14%	1	20%	2	100%	4	57%	0	0%	0	0%	1	50%	0	0%
Other	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	6	5%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	2	18%
Some College	29	26%	3	60%	0	0%	1	14%	1	50%	0	0%	1	50%	3	27%
Associates	15	14%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	2	18%
Bachelors	45	41%	2	40%	1	50%	5	71%	1	50%	1	100%	0	0%	3	27%
Masters	14	13%	0	0%	1	50%	1	14%	0	0%	0	0%	0	0%	1	9%
PhD/JD	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	54	49%	5	100%	1	50%	1	14%	2	100%	0	0%	0	0%	1	9%
Suburban	37	33%	0	0%	1	50%	6	86%	0	0%	0	0%	1	50%	5	45%
Rural	16	14%	0	0%	0	0%	0	0%	0	0%	1	100%	1	50%	5	45%
Missing	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	28	25%	0	0%	2	100%	7	100%	0	0%	0	0%	2	100%	0	0%
TTT Model	83	75%	5	100%	0	0%	0	0%	2	100%	1	100%	0	0%	11	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	85	77%	5	100%	2	100%	7	100%	2	100%	1	100%	2	100%	3	27%
Less than 2 years	22	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	8	73%
Average Years of Exp.	13.50		10.60		22.00		26.70		10.50		14.00		26.50		2.10	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.77		2.44		3.30		2.70		2.90		2.60		2.40		2.89	
Emotional Wellness	2.75		2.50		3.25		3.17		2.67		2.83		2.75		2.83	
Positive Mindset	2.93		2.80		3.21		3.04		2.57		3.14		2.79		3.17	
Respect	3.18		3.00		3.29		3.31		3.07		3.43		3.07		3.33	
Discretion	2.54		2.43		2.54		2.44		2.50		2.57		2.62		2.44	
Cynicism	2.10		2.33		1.62		1.98		2.42		1.83		1.92		1.85	

**Table 11. Post-test Site Demographics: Sites 8-13 (Non-Matched Cases  
Only n = 111)**

	All Officers		Site 8		Site 9		Site 10		Site 11		Site 12		Site 13	
Site Size	n = 111		n = 2		n = 8		n = 0		n = 6		n = 9		n = 2	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
21-30	21	19%	0	0%	0	0%	NA	NA	5	83%	0	0%	0	0%
31-40	36	32%	0	0%	3	38%	NA	NA	1	17%	5	56%	0	0%
41-50	26	23%	2	100%	2	25%	NA	NA	0	0%	3	33%	1	50%
51-60	14	13%	0	0%	1	13%	NA	NA	0	0%	1	11%	1	50%
60+	3	3%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Missing	10	9%	0	0%	2	25%	NA	NA	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	23	21%	0	0%	3	38%	NA	NA	2	33%	5	56%	1	50%
Male	84	76%	2	100%	4	50%	NA	NA	4	67%	4	44%	1	50%
Transgender	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	1	13%	NA	NA	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	23	21%	0	0%	2	25%	NA	NA	0	0%	9	100%	0	0%
White, Non-Hispanic	79	71%	2	100%	4	50%	NA	NA	6	100%	0	0%	2	100%
Missing	9	8%	0	0%	2	25%	NA	NA	0	0%	0	0%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	60	54%	0	0%	2	25%	NA	NA	5	83%	6	67%	1	50%
Detective	6	5%	0	0%	0	0%	NA	NA	0	0%	0	0%	1	50%
Sergeant	20	18%	0	0%	1	13%	NA	NA	1	17%	2	22%	0	0%
Lieutenant or above	15	14%	2	100%	1	13%	NA	NA	0	0%	0	0%	0	0%
Other	4	4%	0	0%	3	38%	NA	NA	0	0%	1	11%	0	0%
Missing	6	5%	0	0%	1	13%	NA	NA	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	4	4%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Some College	29	26%	0	0%	3	38%	NA	NA	0	0%	1	11%	0	0%
Associates	15	14%	0	0%	0	0%	NA	NA	0	0%	0	0%	1	50%
Bachelors	45	41%	2	100%	1	13%	NA	NA	5	83%	6	67%	0	0%
Masters	14	13%	0	0%	3	38%	NA	NA	1	17%	2	22%	1	50%
PhD/JD	0	0%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	1	13%	NA	NA	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	54	49%	1	50%	3	38%	NA	NA	1	17%	5	56%	2	100%
Suburban	37	33%	1	50%	4	50%	NA	NA	5	83%	4	44%	0	0%
Rural	16	14%	0	0%	0	0%	NA	NA	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	1	13%	NA	NA	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	28	25%	0	0%	1	13%	NA	NA	1	17%	9	100%	0	0%
TTT Model	83	75%	2	100%	7	88%	NA	NA	5	83%	0	0%	2	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	85	77%	2	100%	7	88%	NA	NA	1	17%	9	100%	2	100%
Less than 2 years	22	20%	0	0%	0	0%	NA	NA	5	83%	0	0%	0	0%
Average Years of Exp.	13.50		24.50		15.10		NA		4.20		13.30		17.50	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.77		2.80		2.80		NA		2.63		2.75		2.80	
Emotional Wellness	2.75		2.58		2.69		NA		2.56		3.17		3.17	
Positive Mindset	2.93		2.93		2.78		NA		2.88		3.03		3.07	
Respect	3.18		3.36		3.02		NA		2.99		3.49		3.36	
Discretion	2.54		2.64		2.63		NA		2.57		2.37		2.64	
Cynicism	2.10		1.83		2.29		NA		1.85		2.08		1.92	

**Table 12. Post-test Site Demographics: Sites 14-19 (Non-Matched Cases only n = 111)**

	All Officers		Site 14		Site 15		Site 16		Site 17		Site 18		Site 19	
Site Size	n = 111		n = 1		n = 0		n = 6		n = 2		n = 0		n = 1	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
21-30	21	19%	0	0%	NA	NA	0	0%	1	50%	NA	NA	0	0%
31-40	36	32%	1	100%	NA	NA	2	33%	0	0%	NA	NA	0	0%
41-50	26	23%	0	0%	NA	NA	0	0%	1	50%	NA	NA	1	100%
51-60	14	13%	0	0%	NA	NA	3	50%	0	0%	NA	NA	0	0%
60+	3	3%	0	0%	NA	NA	1	17%	0	0%	NA	NA	0	0%
Missing	10	9%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	23	21%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Male	84	76%	1	100%	NA	NA	6	100%	2	100%	NA	NA	1	100%
Transgender	0	0%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Missing	4	4%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	23	21%	0	0%	NA	NA	2	33%	0	0%	NA	NA	0	0%
White, Non-Hispanic	79	71%	1	100%	NA	NA	4	67%	2	100%	NA	NA	0	0%
Missing	9	8%	0	0%	NA	NA	0	0%	0	0%	NA	NA	1	100%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	60	54%	1	100%	NA	NA	0	0%	1	50%	NA	NA	1	100%
Detective	6	5%	0	0%	NA	NA	1	17%	0	0%	NA	NA	0	0%
Sergeant	20	18%	0	0%	NA	NA	1	17%	1	50%	NA	NA	0	0%
Lieutenant or above	15	14%	0	0%	NA	NA	4	67%	0	0%	NA	NA	0	0%
Other	4	4%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Missing	6	5%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	4	4%	0	0%	NA	NA	0	0%	0	0%	NA	NA	1	100%
Some College	29	26%	1	100%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Associates	15	14%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Bachelors	45	41%	0	0%	NA	NA	2	33%	2	100%	NA	NA	0	0%
Masters	14	13%	0	0%	NA	NA	4	67%	0	0%	NA	NA	0	0%
PhD/JD	0	0%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Missing	4	4%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	54	49%	1	100%	NA	NA	3	50%	0	0%	NA	NA	1	100%
Suburban	37	33%	0	0%	NA	NA	3	50%	1	50%	NA	NA	0	0%
Rural	16	14%	0	0%	NA	NA	0	0%	1	50%	NA	NA	0	0%
Missing	4	4%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	28	25%	0	0%	NA	NA	6	100%	0	0%	NA	NA	0	0%
TTT Model	83	75%	1	100%	NA	NA	0	0%	2	100%	NA	NA	1	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	85	77%	1	100%	NA	NA	6	100%	2	100%	NA	NA	1	100%
Less than 2 years	22	20%	0	0%	NA	NA	0	0%	0	0%	NA	NA	0	0%
Average Years of Exp.	13.50		13.00		NA		22.20		13.00		NA		16.00	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.77		3.40		NA		2.90		2.50		NA		3.00	
Emotional Wellness	2.75		2.67		NA		3.11		2.83		NA		2.17	
Positive Mindset	2.93		2.71		NA		3.10		3.07		NA		2.71	
Respect	3.18		3.00		NA		3.36		3.14		NA		2.86	
Discretion	2.54		2.86		NA		2.45		2.50		NA		2.29	
Cynicism	2.10		2.50		NA		1.89		2.25		NA		2.40	

**Table 13. Post-test Site Demographics: Sites 20-25 (Non-Matched Cases  
Only n = 111)**

	All Officers		Site 20		Site 21		Site 22		Site 23		Site 24		Site 25	
Site Size	n = 111		n = 1		n = 2		n = 26		n = 4		n = 2		n = 9	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	21	19%	0	0%	0	0%	2	8%	1	25%	0	0%	5	56%
31-40	36	32%	1	100%	1	50%	9	35%	1	25%	0	0%	3	33%
41-50	26	23%	0	0%	1	50%	7	27%	1	25%	2	100%	0	0%
51-60	14	13%	0	0%	0	0%	6	23%	0	0%	0	0%	0	0%
60+	3	3%	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%
Missing	10	9%	0	0%	0	0%	0	0%	0	0%	0	0%	1	11%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	23	21%	1	100%	1	50%	3	12%	0	0%	0	0%	0	0%
Male	84	76%	0	0%	1	50%	21	81%	4	100%	2	100%	8	89%
Transgender	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	0	0%	2	8%	0	0%	0	0%	1	11%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	23	21%	1	100%	0	0%	1	4%	1	25%	0	0%	0	0%
White, Non-Hispanic	79	71%	0	0%	2	100%	21	81%	3	75%	2	100%	8	89%
Missing	9	8%	0	0%	0	0%	4	15%	0	0%	0	0%	1	11%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Officer	60	54%	1	100%	1	50%	11	42%	2	50%	1	50%	7	78%
Detective	6	5%	0	0%	0	0%	2	8%	1	25%	0	0%	0	0%
Sergeant	20	18%	0	0%	1	50%	10	38%	1	25%	1	50%	0	0%
Lieutenant or above	15	14%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Other	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	6	5%	0	0%	0	0%	3	12%	0	0%	0	0%	2	22%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	4	4%	0	0%	0	0%	0	0%	0	0%	0	0%	1	11%
Some College	29	26%	0	0%	1	50%	9	35%	2	50%	2	100%	1	11%
Associates	15	14%	1	100%	0	0%	4	15%	2	50%	0	0%	4	44%
Bachelors	45	41%	0	0%	1	50%	11	42%	0	0%	0	0%	2	22%
Masters	14	13%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
PhD/JD	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	4	4%	0	0%	0	0%	2	8%	0	0%	0	0%	1	11%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	54	49%	0	0%	0	0%	24	92%	2	50%	0	0%	1	11%
Suburban	37	33%	0	0%	0	0%	0	0%	1	25%	2	100%	3	33%
Rural	16	14%	1	100%	2	100%	0	0%	1	25%	0	0%	4	44%
Missing	4	4%	0	0%	0	0%	2	8%	0	0%	0	0%	1	11%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	28	25%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
TTT Model	83	75%	1	100%	2	100%	26	100%	4	100%	2	100%	9	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	85	77%	1	100%	2	100%	23	88%	3	75%	2	100%	1	11%
Less than 2 years	22	20%	0	0%	0	0%	1	4%	1	25%	0	0%	7	78%
Average Years of Exp.	13.50		11.00		9.50		16.50		11.25		22.50		1.25	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Physical Wellness	2.77		2.60		3.10		2.79		2.55		2.20		2.87	
Emotional Wellness	2.75		3.67		2.67		2.45		3.00		2.28		2.73	
Positive Mindset	2.93		3.00		3.14		2.75		3.04		3.00		3.07	
Respect	3.18		3.86		3.42		3.05		3.11		3.07		3.11	
Discretion	2.54		2.14		2.50		2.61		2.64		2.71		2.63	
Cynicism	2.10		3.67		1.75		2.36		2.04		2.25		2.10	

An additional analysis was performed using stepwise backward elimination logistic regression to determine if the cases that were successfully linked differed in systematic ways from the cases that were not able to be matched. This approach iteratively identifies the predictor variables that best fit the model, removing variables that are least significant and recalculating a new model. After several steps only the significant predictor variables remain (Derksen and Keselman, 1992). In this diagnostic test, if any significant variables remain then the concern arises that the linked sample differs in systematic ways from the population of officers trained in Blue Courage.

The variables “Training Model,” “Education,” “Rank,” “Agency Type,” “Race,” and “Gender” were included in the analysis as dummy variables, as were the continuous variables for the pretest scale measures of the officer domains targeted by Blue Courage: “Physical Wellness,” “Emotional Wellness,” “Positive Mindset,” “Respect,” “Discretion” and “Cynicism.” The results of that analysis are found in Table 14. After sixteen steps, only one variable was significant in predicting whether a case resulted in a successful match (successful match = 1; non successful match = 0). “Training Model” (TTT model = 0; Direct Training model = 1) was significant at the .05 level ( $p = .03$ ; Exp (B) = 1.913), meaning that the odds that a case could be linked were about 1.9 times higher if the officer was trained under the Direct Training model than if the officer was trained under the TTT model.

This finding presents an important yet manageable problem. The resulting sample of linked participants is over represented by officers trained under the direct training model. This will impact the generalizability of any findings if the two models differ in significant ways. Despite this, it should still be possible to assess the impact of the training on officers nationally under these two training models as sufficient sample size exists for both modules.

**Table 14. Logistic Regression on Factors Linked to Successful Case Linkage**

Independent Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Training Model	.649	.301	4.655	1	.03	1.913
Constant	2.769	1.262	4.815	1	.03	15.950

### **Analysis of Paired Samples *t*-Test on Linked Sample**

The linking approach described above resulted in a sample of 174 successfully linked participants. This sample allows for a number of more robust statistical analyses. First and foremost, this sample allows for the use of paired samples *t*-tests to compare participants before and after the training. This is a preferred method of group mean comparison in the context of this evaluation because it removes the possibility that different participants are in either the pre-test or post-test samples. This becomes critically important considering that over 100 participants, or about 35% of the overall post-test sample, were believed to be identified during the record linkage strategy as having unique post-test measures but no corresponding pre-test measures. The strong possibility exists that differences in pre-test and post-test sample composition were being conflated with a treatment effect in the original independent sample *t*-test analysis conducted earlier in this evaluation.

**Table 15. Change in Blue Courage Domains among Officers in the Linked Sample (Paired Samples *t*-test)**

Domain	Average Score <sup>1</sup>		<i>t</i> - value	SD		Cohen's <i>d</i>	Sig.
	Pre	Post		Pre	Post		
<b>Physical Wellness (n = 170)</b>	2.89	2.86	-0.747	0.57	0.51	-0.08	
<b>Emotional Wellness (n = 174)</b>	2.71	2.78	2.478	0.50	0.41	0.27	*
<b>Positive Mindset (n = 163)</b>	3.14	3.11	-1.060	0.50	0.45	-0.12	
<b>Respect (n = 174)</b>	3.18	3.17	-0.185	0.36	0.37	-0.02	
<b>Discretion (n = 171)</b>	2.24	2.30	2.253	0.36	0.33	0.25	*
<b>Cynicism (n = 173)</b>	2.05	2.04	-0.252	0.56	0.54	-0.03	

\* = significant at the .05 level

<sup>1</sup> All scores fall between a minimum of 1 and a maximum of 4



The question now becomes: is there a Blue Courage treatment effect after attempting to control for non-comparability in pre-test and post-test groups? Table 15 shows the results from the paired samples *t*-test conducted on the linked sample's pre-test and post-test measures. After controlling for the potential problem of non-comparable pre-test and post-test groups the paired samples *t*-test found two scale measures with statistically significant differences between pre-test and post-test: "Emotional Wellness" and "Discretion." The effect size for "Emotional Wellness" was significant and positive, though small by Cohen's (1988) assessment ( $d = .27$ ). The effect size for "Discretion" was also significant and positive, and also small ( $d = .25$ ). The implications for these changes will be discussed in detail in the following chapter.

Though several questions remain, one critical aspect in understanding the impact of Blue Courage is understanding how the training impacts different types of officers. This affects the generalizability of the findings and has serious implications for the breadth, scope and applicability of the training across the nation. If, for example, the training effect is being driven largely by female officers the target audience can be altered for future implementations to maximize program efficiency. This is also true for differences in training delivery model, which is particularly important because officers who were trained under the Direct Training model were more likely to be included in the linked sample of training participants. Are the modest differences observed between the independent and paired samples *t*-tests the result of the sample having a larger proportion of officers trained under the Direct Training model? Is the observed training effect being driven by certain groups within the data? These questions are critical to fully understanding the impact of the training and require more robust analytical methods to address.

### **Research Question 3: What Types of other Factors Influence the Effectiveness of the Blue Courage Training?**

As described above, it is critical to understand the impact of the training across different groups within the sample of training participants. As discussed previously, literature on policing and police training suggests some theoretically relevant subgroups that may be impacted differently by training geared towards mental and emotional health and a cultural shift towards guardianship.

One methodological approach to comparing across these groups would be to isolate the groups and conduct paired samples *t*-tests, thus comparing training effect across, for example, male and female officers. This approach is limited in several ways however. First, it does not allow the analysis to control for covariation across subgroups. For example, the sample of female officers may also be disproportionately the rank of Sergeant, confounding any observed differences.

Another approach to answering this question would be to use Ordinary Least-Squares Regression to estimate the unique impact of each independent variable of interest, (Allen, 1997). This approach would help deal with the problem of covariation and allow for the estimation of significance and effect size for each independent variable, allowing the analysis to assess how different groups experience the training.

One additional problem that needs to be considered is that officers in the sample are nested within different training sites nationally. This structure violates the assumption on independence among observations (i.e. training participants) because they are experiencing the training in coordination with one another within each site. If differences exist across sites, then there is the potential for those differences to obscure model findings (Raudenbush and Bryk,

2002). If significant differences exist across sites, an approach to manage the impacted of these nested effects would be needed.

Tables 16-19 show the pre-test demographic information for each of the 25 sites in the total sample of participants ( $n = 681$ ). This sample was used because it was viewed as the most accurate sample from which to determine if significant differences existed at the *site* level.

Large site level differences were identified. One key difference was in site size, with the smallest site composed of two participants and the largest one-hundred and nine. This difference in size makes comparing demographic information across sites challenging as well, though several key trends became apparent that argue for an analytic model that addresses nesting. Specifically significant variation across sites can be seen in Training Model, Agency Type, and participant Age. These differences justify the use of multi-level models to account for differences across sites.

**Table 16. Pre-test Site Demographics: Sites 1 - 7 (Total Sample n = 681)**

	All Officers		Site 1		Site 2		Site 3		Site 4		Site 5		Site 6		Site 7	
Site Size	n = 681		n = 28		n = 10		n = 8		n = 11		n = 16		n = 23		n = 40	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	3%
21-30	206	30%	5	18%	0	0%	0	0%	2	18%	3	19%	0	0%	27	68%
31-40	195	29%	11	39%	2	20%	0	0%	1	9%	7	44%	8	35%	7	18%
41-50	171	25%	5	18%	6	60%	0	0%	4	36%	4	25%	13	57%	4	10%
51-60	70	10%	5	18%	2	20%	0	0%	3	27%	2	13%	1	4%	1	3%
60+	17	2%	2	7%	0	0%	0	0%	1	9%	0	0%	1	4%	0	0%
Missing	18	3%	0	0%	0	0%	8	100%	0	0%	0	0%	0	0%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	229	34%	10	36%	8	80%	0	0%	1	9%	1	6%	4	17%	6	15%
Male	440	65%	18	64%	2	20%	7	88%	9	82%	15	94%	19	83%	34	85%
Transgender	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	8	1%	0	0%	0	0%	1	13%	1	9%	0	0%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	162	24%	10	36%	2	20%	2	25%	0	0%	1	6%	5	22%	7	18%
White, Non-Hispanic	401	59%	15	54%	8	80%	5	63%	11	100%	15	94%	18	78%	33	83%
Missing	118	17%	3	11%	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	60	9%	0	0%	1	10%	0	0%	2	18%	0	0%	2	9%	1	3%
Officer	402	59%	21	75%	1	10%	2	25%	7	64%	15	94%	6	26%	39	98%
Detective	60	9%	3	11%	1	10%	2	25%	1	9%	0	0%	1	4%	0	0%
Sergeant	85	12%	0	0%	6	60%	0	0%	1	9%	1	6%	9	39%	0	0%
Lieutenant or above	67	10%	4	14%	1	10%	3	38%	0	0%	0	0%	5	22%	0	0%
Missing	7	1%	0	0%	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	45	7%	4	14%	0	0%	0	0%	4	36%	1	6%	2	9%	1	3%
Some College	179	26%	8	29%	5	50%	2	25%	4	36%	5	31%	8	35%	5	13%
Associates	116	17%	5	18%	0	0%	0	0%	1	9%	7	44%	3	13%	8	20%
Bachelors	279	41%	10	36%	2	20%	4	50%	2	18%	3	19%	7	30%	23	58%
Masters	53	8%	0	0%	3	30%	1	13%	0	0%	0	0%	3	13%	3	8%
PhD/JD	4	1%	1	4%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	5	1%	0	0%	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	331	49%	27	96%	8	80%	1	13%	4	36%	3	19%	4	17%	11	28%
Suburban	237	35%	1	4%	1	10%	6	75%	1	9%	6	38%	12	52%	15	38%
Rural	101	15%	0	0%	1	10%	0	0%	6	55%	7	44%	6	26%	14	35%
Missing	12	2%	0	0%	0	0%	1	13%	0	0%	0	0%	1	4%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	239	35%	0	0%	10	100%	8	100%	0	0%	0	0%	23	100%	0	0%
TTT Model	442	65%	28	100%	0	0%	0	0%	11	100%	16	100%	0	0%	40	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	490	72%	24	86%	10	100%	7	88%	11	100%	16	100%	22	96%	7	18%
Less than 2 years	184	27%	4	14%	0	0%	0	0%	0	0%	0	0%	1	4%	33	83%
Missing	8	1%	0	0%	0	0%	1	13%	0	0%	0	0%	0	0%	0	0%
Average Years of Exp.	13.30		12.40		17.10		22.90		19.70		13.10		17.00		1.60	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Health and Wellness	2.72		2.62		2.70		2.68		2.46		2.66		2.64		2.80	
Resilience	2.70		2.61		2.70		2.95		2.52		2.52		2.78		2.80	
Positive Psychology	2.95		2.94		2.91		2.78		2.84		2.77		3.01		3.12	
Respect	3.10		3.13		3.03		3.16		2.99		2.98		3.16		3.25	
Practical Wisdom	2.49		2.49		2.47		2.37		2.46		2.57		2.43		2.43	
Cynicism	2.03		1.96		2.19		2.36		1.95		2.23		1.99		1.61	

**Table 17. Pre-test Site Demographics: Sites 8-13 (Total Sample n = 681)**

	All Officers		Site 8		Site 9		Site 10		Site 11		Site 12		Site 13	
Site Size	n = 681		n = 24		n = 21		n = 12		n = 54		n = 90		n = 25	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	4	1%	0	0%	0	0%	0	0%	0	0%	2	2%	0	0%
21-30	206	30%	6	25%	3	14%	5	42%	29	54%	20	22%	4	16%
31-40	195	29%	7	29%	8	38%	3	25%	10	19%	19	21%	7	28%
41-50	171	25%	6	25%	7	33%	2	17%	6	11%	33	37%	8	32%
51-60	70	10%	5	21%	3	14%	1	8%	3	6%	10	11%	3	12%
60+	17	2%	0	0%	0	0%	1	8%	0	0%	5	6%	3	12%
Missing	18	3%	0	0%	0	0%	0	0%	6	11%	1	1%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	229	34%	0	0%	1	5%	2	17%	12	22%	52	58%	3	12%
Male	440	65%	24	100%	20	95%	10	83%	41	76%	36	40%	22	88%
Transgender	4	1%	0	0%	0	0%	0	0%	0	0%	2	2%	0	0%
Missing	8	1%	0	0%	0	0%	0	0%	1	2%	0	0%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	162	24%	2	8%	4	19%	1	8%	9	17%	72	80%	4	16%
White, Non-Hispanic	401	59%	21	88%	17	81%	10	83%	37	69%	16	18%	20	80%
Missing	118	17%	1	4%	0	0%	1	8%	8	15%	2	2%	1	4%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	60	9%	5	21%	1	5%	0	0%	1	2%	28	31%	2	8%
Officer	402	59%	11	46%	7	33%	8	67%	45	83%	35	39%	15	60%
Detective	60	9%	0	0%	0	0%	1	8%	1	2%	8	9%	1	4%
Sergeant	85	12%	3	13%	6	29%	2	17%	5	9%	9	10%	2	8%
Lieutenant or above	67	10%	5	21%	7	33%	1	8%	2	4%	10	11%	5	20%
Missing	7	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	45	7%	2	8%	2	10%	2	17%	0	0%	1	1%	1	4%
Some College	179	26%	1	4%	6	29%	4	33%	8	15%	31	34%	9	36%
Associates	116	17%	4	17%	4	19%	1	8%	14	26%	8	9%	2	8%
Bachelors	279	41%	15	63%	8	38%	4	33%	28	52%	36	40%	11	44%
Masters	53	8%	2	8%	1	5%	1	8%	2	4%	12	13%	2	8%
PhD/JD	4	1%	0	0%	0	0%	0	0%	1	2%	2	2%	0	0%
Missing	5	1%	0	0%	0	0%	0	0%	1	2%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	331	49%	3	13%	8	38%	3	25%	21	39%	43	48%	8	32%
Suburban	237	35%	11	46%	12	57%	3	25%	26	48%	46	51%	14	56%
Rural	101	15%	10	42%	1	5%	6	50%	0	0%	0	0%	3	12%
Missing	12	2%	0	0%	0	0%	0	0%	7	13%	1	1%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	239	35%	0	0%	21	100%	0	0%	18	33%	90	100%	0	0%
TTT Model	442	65%	24	100%	0	0%	12	100%	36	67%	0	0%	25	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	490	72%	23	96%	21	100%	9	75%	18	33%	76	84%	23	92%
Less than 2 years	184	27%	1	4%	0	0%	3	25%	36	67%	11	12%	2	8%
Missing	8	1%	0	0%	0	0%	0	0%	0	0%	3	3%	0	0%
Average Years of Exp.	13.30		15.30		14.70		12.20		6.50		14.30		17.90	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Health and Wellness	2.72		2.64		2.67		2.68		2.84		2.73		2.76	
Resilience	2.70		2.47		2.67		2.53		2.78		2.89		2.87	
Positive Psychology	2.95		2.78		2.78		2.71		3.12		3.12		3.12	
Respect	3.10		3.02		2.99		3.01		3.19		3.36		3.26	
Practical Wisdom	2.49		2.55		2.60		2.52		2.49		2.42		2.50	
Cynicism	2.03		2.23		2.08		2.40		1.65		2.02		1.93	

**Table 18. Pre-test Site Demographics: Sites 14-19 (Total Sample n = 681)**

	All Officers		Site 14		Site 15		Site 16		Site 17		Site 18		Site 19	
Site Size	n = 681		n = 4		n = 21		n = 23		n = 5		n = 25		n = 4	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
21-30	206	30%	0	0%	3	14%	0	0%	1	20%	6	24%	0	0%
31-40	195	29%	0	0%	10	48%	7	30%	1	20%	9	36%	0	0%
41-50	171	25%	3	75%	7	33%	9	39%	3	60%	7	28%	2	50%
51-60	70	10%	1	25%	1	5%	7	30%	0	0%	2	8%	2	50%
60+	17	2%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	18	3%	0	0%	0	0%	0	0%	0	0%	1	4%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	229	34%	1	25%	15	71%	2	9%	0	0%	21	84%	0	0%
Male	440	65%	3	75%	6	29%	21	91%	5	100%	3	12%	4	100%
Transgender	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	8	1%	0	0%	0	0%	0	0%	0	0%	1	4%	0	0%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	162	24%	1	25%	3	14%	10	43%	1	20%	8	32%	0	0%
White, Non-Hispanic	401	59%	3	75%	18	86%	11	48%	3	60%	15	60%	4	100%
Missing	118	17%	0	0%	0	0%	2	9%	1	20%	2	8%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	60	9%	1	25%	1	5%	3	13%	0	0%	4	16%	0	0%
Officer	402	59%	1	25%	14	67%	3	13%	3	60%	10	40%	1	25%
Detective	60	9%	0	0%	2	10%	1	4%	0	0%	0	0%	2	50%
Sergeant	85	12%	1	25%	2	10%	6	26%	2	40%	5	20%	1	25%
Lieutenant or above	67	10%	1	25%	2	10%	9	39%	0	0%	5	20%	0	0%
Missing	7	1%	0	0%	0	0%	1	4%	0	0%	1	4%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	45	7%	0	0%	1	5%	1	4%	0	0%	2	8%	1	25%
Some College	179	26%	1	25%	2	10%	6	26%	2	40%	7	28%	1	25%
Associates	116	17%	0	0%	3	14%	2	9%	1	20%	3	12%	1	25%
Bachelors	279	41%	1	25%	12	57%	6	26%	2	40%	8	32%	0	0%
Masters	53	8%	2	50%	3	14%	8	35%	0	0%	5	20%	1	25%
PhD/JD	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	5	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	331	49%	3	75%	18	86%	10	43%	0	0%	10	40%	3	75%
Suburban	237	35%	1	25%	3	14%	9	39%	1	20%	15	60%	1	25%
Rural	101	15%	0	0%	0	0%	4	17%	4	80%	0	0%	0	0%
Missing	12	2%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	239	35%	0	0%	21	100%	23	100%	0	0%	25	100%	0	0%
TTT Model	442	65%	4	100%	0	0%	0	0%	5	100%	0	0%	4	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	490	72%	4	100%	21	100%	23	100%	4	80%	18	72%	4	100%
Less than 2 years	184	27%	0	0%	0	0%	0	0%	0	0%	6	24%	0	0%
Missing	8	1%	0	0%	0	0%	0	0%	1	20%	1	4%	0	0%
Average Years of Exp.	13.30		23.30		13.50		20.10		18.20		12.00		21.50	
Domain Score	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Health and Wellness	2.72		2.80		2.82		2.62		2.40		2.86		2.71	
Resilience	2.70		2.75		2.69		2.93		2.69		2.55		2.29	
Positive Psychology	2.95		2.89		2.90		3.15		2.78		3.00		2.46	
Respect	3.10		3.14		3.11		3.32		2.97		3.18		3.11	
Practical Wisdom	2.49		2.54		2.51		2.43		2.46		2.56		2.36	
Cynicism	2.03		2.00		2.35		1.73		2.34		1.91		2.58	

**Table 19. Pre-test Site Demographics: Sites 20-25 (Total Sample n = 681)**

	All Officers		Site 20		Site 21		Site 22		Site 23		Site 24		Site 25	
Site Size	n = 681		n = 2		n = 10		n = 109		n = 16		n = 12		n = 88	
Age	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
< 20	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	1	1%
21-30	206	30%	0	0%	4	40%	20	18%	3	19%	4	33%	61	69%
31-40	195	29%	0	0%	1	10%	42	39%	7	44%	5	42%	23	26%
41-50	171	25%	1	50%	2	20%	31	28%	3	19%	2	17%	3	3%
51-60	70	10%	0	0%	1	10%	14	13%	3	19%	0	0%	0	0%
60+	17	2%	0	0%	2	20%	2	2%	0	0%	0	0%	0	0%
Missing	18	3%	1	50%	0	0%	0	0%	0	0%	1	8%	0	0%
Gender Identity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Female	229	34%	0	0%	2	20%	13	12%	4	25%	0	0%	13	15%
Male	440	65%	1	50%	8	80%	96	88%	12	75%	11	92%	71	81%
Transgender	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	2	2%
Missing	8	1%	1	50%	0	0%	0	0%	0	0%	1	8%	2	2%
Race and Ethnicity	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	162	24%	1	50%	3	30%	13	12%	1	6%	2	17%	10	11%
White, Non-Hispanic	401	59%	1	50%	7	70%	89	82%	14	88%	9	75%	78	89%
Missing	118	17%	0	0%	0	0%	7	6%	1	6%	1	8%	0	0%
Rank	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Other	60	9%	1	50%	0	0%	0	0%	2	13%	0	0%	5	6%
Officer	402	59%	0	0%	6	60%	53	49%	7	44%	9	75%	83	94%
Detective	60	9%	0	0%	0	0%	31	28%	4	25%	1	8%	0	0%
Sergeant	85	12%	0	0%	2	20%	22	20%	0	0%	0	0%	0	0%
Lieutenant or above	67	10%	0	0%	2	20%	1	1%	3	19%	1	8%	0	0%
Missing	7	1%	1	50%	0	0%	2	2%	0	0%	1	8%	0	0%
Education	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
High School/GED	45	7%	0	0%	1	10%	7	6%	2	13%	1	8%	9	10%
Some College	179	26%	0	0%	4	40%	30	28%	5	31%	2	17%	23	26%
Associates	116	17%	1	50%	4	40%	25	23%	2	13%	0	0%	17	19%
Bachelors	279	41%	0	0%	1	10%	44	40%	6	38%	8	67%	38	43%
Masters	53	8%	0	0%	0	0%	3	3%	1	6%	0	0%	0	0%
PhD/JD	4	1%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Missing	5	1%	1	50%	0	0%	0	0%	0	0%	1	8%	1	1%
Agency Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Urban	331	49%	0	0%	2	20%	104	95%	5	31%	0	0%	32	36%
Suburban	237	35%	1	50%	1	10%	4	4%	10	63%	11	92%	26	30%
Rural	101	15%	1	50%	7	70%	0	0%	1	6%	0	0%	30	34%
Missing	12	2%	0	0%	0	0%	1	1%	0	0%	1	8%	0	0%
Training Type	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Direct Training Model	239	35%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
TTT Model	442	65%	2	100%	10	100%	109	100%	16	100%	12	100%	88	100%
Experience	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
More than 2 years	490	72%	1	50%	10	100%	100	92%	16	100%	8	67%	13	15%
Less than 2 years	184	27%	0	0%	0	0%	8	7%	0	0%	3	25%	75	85%
Missing	8	1%	1	50%	0	0%	1	1%	0	0%	1	8%	0	0%
<b>Average Years of Exp.</b>	13.30		15.00		15.30		14.40		12.80		9.90		1.50	
<b>Domain Score</b>	Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Health and Wellness	2.72		2.58		2.46		2.74		2.49		2.45		2.82	
Resilience	2.70		2.37		2.60		2.49		2.62		2.57		2.80	
Positive Psychology	2.95		2.71		2.83		2.74		2.87		2.95		2.99	
Respect	3.10		3.46		3.09		2.91		3.17		3.18		3.13	
Practical Wisdom	2.49		2.71		2.48		2.52		2.55		2.53		2.47	
Cynicism	2.03		2.04		2.07		2.35		2.25		1.89		1.86	

One approach to manage the statistical issues with this problem would be the use of Hierarchical Linear Modeling, or HLM (Raudenbush and Bryk, 2002). HLM accounts for the nested nature of data, and allows for the inclusion of additional site level variables like different instructors. This approach would also control for site level differences, in addition to individual level differences, broadening the ability of the model to isolate the unique effects of individual independent variables of concern for the analysis.

These models also require a certain data structure to produce a stability in modeling. Specifically, the higher level clusters within the data structure require a minimum of five observations nested within each (Clarke, 2008; McNeish, 2017). Using this approach on data with clusters that are smaller than five units can lead to the overestimation of group level variance but having cluster with at least “five observations per group, valid and reliable estimates of all parameters can be obtained when using a [multilevel] model” (Clarke, 2008, pg. 752). As can be seen in figures 16-19, almost half of the sites within the sample have less than this requirement, making this methodological approach ill-suited to manage the particular problems of this analysis.

Another methodological approach to manage the problem of hierarchically nested observations is the use of Cluster Robust Standard Errors (Moulton, 1986; Peper, 2002; Cameron and Miller, 2010). A statistical problem that presents with clustered data is that units associated with one another in a cluster produce a downward bias in standard errors that can produce misleading results in an Ordinary Least-Squares regression model (Moulton, 1986). Specifically, this bias produces false positives in estimation leading to some associations being interpreted as statistically significant when they are not in fact. The “Cluster” command in Stata accounts for clustering in an OLS model and can calculate Cluster Robust Standard Errors so long as a cluster



variable is assigned to individual participants (Cameron and Miller, 2010). The training site within which an individual participant was training is available within the sample, meaning that Cluster Robust Standard Errors can be calculated for this analysis.

Unlike HLM, this approach does not control for covariation in site-level variables across the different sites, resulting in some key violations of assumptions. In particular this violates the stable unit treatment value assumption, or SUTVA. This assumption rests on the idea that units within a treatment are not influenced by others within the treatment (Cox, 1958). Due to the limitations in the structure of the sample data the analysis will have not capacity to control for this potential influence. Though this is a limitation, the use of Cluster Robust Standard Errors manages some problems with nesting and improves the overall model compared to traditional OLS regression and should produce interpretable model findings.

### **OLS Regression Analysis with Cluster Robust Standard Errors to Explain Differences in Treatment Effect across Different Types of Officers**

As discussed previously, a key research question for this section is determining how the training impacts different types of officers. These key groups are participant rank, participant gender, participant race, officer cynicism and the agency type that officers work in. Additionally, a variable for participant education was added after observations of the training suggested that the advanced concepts within the training might be challenging to understand. Most of these variables were created using a dummy structure which will be detailed below.

Additionally, this research sought to determine the impact of training fidelity on training outcomes. Because of the significant differences in training fidelity assumed across the two models of delivery, a comparison of officers trained through the Direct Training and Train-the-Trainer models was offered as a proxy for training fidelity. In an ideal setting, this variable

could be applied at the site level in a hierarchical model. Due to the limitations in the data structure however, training model will be regressed at the individual level, along with the other demographic variables described.

The dependent variables for this analysis are change scores for officers in the scale measures described above. These measures were created by subtracting participants' post-test measures from their pre-test measures. Allison (1990) argues for the use of change scores as dependent variables within OLS regression models as a standard approach to analyze intervention treatment effects with pre-test and post-test measures. Only the change scores for those measures that saw statistically significant differences in the paired samples *t*-test will be examined here. The first will regress change in scores in the measure "Emotional Wellness" on the independent variables. The second will regress change in scores for "Discretion." The distributions for these dependent variables can be found in Appendix D.

As describe above, there are a number of theoretically relevant groups that the training likely impacts differently. This section will review why these variable are included in the analysis. This section will also detail how these variables are operationalized for the analysis.<sup>2</sup>

The size of the agencies where officers work may play a role in how those officers are impacted by the training. The literature suggests that differences in agency size influence the development of cynicism in officers, largely due to the increased presence of bureaucratic layers in larger departments (Rafky, 1975; Regoli, 1988; 1989; Hickman, 2008; Enciso, Maskaly, and Donner, 2016). This literature also suggests that officers who work in higher crime areas, associated with urban settings in the United States, are more likely to develop cynicism (Klinger,

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<sup>2</sup> A test for multicollinearity among the independent variables was performed using Pearson correlation coefficients. A correlation matrix with each independent variable was conducted. The highest Pearson's R among independent variables was .297. This is well within the acceptable cutoff of .700 (Berry and Feldman, 1990; Fidell & Tabachnick, 2003).

1997; Richardsen, Burke, and Martinussen, 2006; Hickman, 2008) in part because they perceive their work to be ineffective (Klinger, 1997). The surveys allow participants to report working in either an “Urban,” “Suburban” or “Rural” department. For this analysis dummy variables were created for the department type “Suburban” and “Rural” (yes = 1, no = 0). Officers from “Urban” departments served as the reference category.

The organizational literature suggests that members of different rank perform different and critical functions within organizations. Organizational leaders are key to setting the tone of organizational culture and creating organizational structures (Jacobs, 1978; Mastrofski, 2001; Willis, Mastrofski, and Weisburd, 2004; Schein, 2005), line-level workers are responsible for enacting, or changing the formal policy of an organization (Lipsky, 1980; Maynard-Moody and Musheno, 2003) and mid-level managers are critical to the efficiency of organizations by bridging the divide between leadership and line-level workers (Engel, 2001). Understanding the impact of Blue Courage on officers of different ranks is critical to understanding not only the potential of the training to ameliorate some of the negative consequences of the profession on individual officers, but also the training’s capacity to alter organizations as well. For this analysis a dummy variable was created for the rank “Sergeant” (Sergeant = 1, Others = 0). The variable “Command Staff” was created by combining officers who reported being of rank “lieutenant or higher” and “Chief or Deputy Chief.” A dummy variable was then created for “Command Staff” (Command Staff = 1, Others = 0). Officers ranked “Patrol Officer” served as the reference category.

The policing literature is clear that many police officers develop an innate cynicism after a short period of time on the job (Caplan, 2003). Officer cynicism is critical to training success

because, as Gilbert, Wakeline and Crandall (2015) discovered in a training regarding procedural justice in Chicago, Illinois:

Soon after the training began, the Chicago PD training team observed that cynicism – expressed as frustration, disillusionment, and distrust – limited officers’ openness to the course content. The trainers all knew that interacting with people at the lowest points in their lives – a common daily experience for police – often had serious effects on officers’ personal relationships and professional experiences. The instructors, drawing on their own insights and the work of consultant Kevin M. Gilmartin, developed a course component that prompted participants to reflect on and recognize their own cynicism and distrust. That facilitated an open, candid and constructive discussion on ways that cynicism can be a barrier to improving relationships with the community. The acknowledgment of cynicism in the training allowed for authentic engagement about the personal and professional value of procedural justice, the importance of a strong police-community relationship and the ways officers’ behavior can affect it (pg. 5).

A variable for officers with “High Cynicism” was operationalized by creating a dummy variable for officers with an above average pre-test scale measure of Cynicism,  $M = 2.05$ , (Above average Cynicism = 1, Others = 0). Officers with below average cynicism served as the reference category. This variable was dichotomized to more closely match the concept of “cynical officers” identified by Gilbert, Wakeling and Crandall (2015).

Literature on police stress suggests that both female officers and minority officers are at risk of higher rates of stress when compared to their male and non-minority counterparts, respectively (Robinson, MacCulloch, and Arentsen, 2014). It is possible that these officers may be impacted more by the training because they have greater room for improvement or may have different stress related capacities compared to their respective counterparts (Schneider, Lyons, and Khazon, 2013). A dummy variable for officers that reported being “Female” (Female = 1, Male = 0). Males served as the reference category. A dummy variable for White non-Hispanic officers (White, non-Hispanic = 1, Others = 0) was created. Hispanic and non-White officers served as the reference category.

After describing the training, an additional variable was included in the model to control for participant education. The content of the training was observed to include content and concepts that might be better understood by participants that have a higher level of education. To control for this, a dummy variable was included in the analysis for participants who attained at a minimum an associate's degree (Attained College Degree = 1, Other = 0). Participants with less than a college degree served as the reference category.

The use of a train-the-trainer (TTT) model of delivery for the Blue Courage training potentially introduces some problems into the evaluation. A central problem is the risk that the training delivered in this form is done so with lower fidelity than when it is provided directly from the training developers. To test this, a variable was created to compare training outcomes for participants trained under these two models. A dummy variable was created for participants trained under the Direct Training model (Direct Training Model = 1, TTT Model = 0). Officers training under the TTT Model served as the reference category.

### **OLS Regression Analysis Predicting Change Scores**

Table 20 shows the two OLS Regression models for change in the scale measures “Emotional Wellness” and “Discretion.” Robust Standard Errors were calculated in STATA using the “Cluster” function on the sites that participants were trained in. Model 1 regresses change in participant Emotional Wellness score on the independent variables. Overall, the model was able to explain ten percent of the variation in change in attitudes towards mental and emotional health ( $R^2 = .100$ ,  $F = 16.84$ ,  $p < .001$ ). Controlling for all other variables in the model, three independent variables were statistically significant in predicting change in attitudes towards emotional wellness. There was a significant positive relationship between participant rank and change in “Emotional Wellness.” Specifically, participants ranked Sergeant showed greater

change in the measure ( $B = .1848, p < .05$ ). There was also a significant positive relationship between participant cynicism and change in this measure. Participants with above average pre-test cynicism showed larger change in “Emotional Wellness” than those with below average cynicism ( $B = .1180, p < .05$ ). Lastly, there was a significant negative relationship between participant race and change in the measure. Participants who were White and non-Hispanic showed smaller change in “Emotional Wellness” compared to other officers ( $B = -.0032, p < .05$ ). Department type, gender and training model were not statistically related to change in “Emotional Wellness” after controlling for all other variables in the model.

Model 2 regresses change in participant Discretion on the independent variables. Overall, the model was able to explain about 9 percent of the variation in change in attitudes towards officer discretion ( $R^2 = .090, F = 17.59, p < .001$ ). Controlling for all other variables in the model, two independent variables were statistically significant in predicting change in attitudes towards officer discretion. There was a significant positive relationship between department type and change in the measure. Participants from rural departments showed a larger amount of change than other participants ( $B = .2120, p < .05$ ). Also, there was a significant positive relationship between training model type and change in “Discretion.” Participants who were trained under the Direct Training Model showed a larger change in the measure than other participants ( $B = .1243, p < .05$ ). Participant rank, gender, race and cynicism were not statistically related to change in participant “Discretion” after controlling for other variables in the model.

**Table 20: Regression of Change in the Measures Emotional Wellness and Discretion on the Independent Variables, with Robust Standard Errors <sup>a</sup>**

	<i>Model 1</i>		<i>Model 2</i>	
	Change in Emotional Wellness (n = 170)		Change in Discretion (n = 165)	
<b>Variable</b>	<b>B</b>	<b>Robust SE</b>	<b>B</b>	<b>Robust SE</b>
Constant	-.1127	.081	.1152	.081
Direct Training Model	-.1372	.092	<b>.1243*</b>	.063
Suburban Department	.1069	.057	.0479	.056
Rural Department	.0570	.088	<b>.2120*</b>	.095
Sergeant	<b>.1848*</b>	.059	.0187	.050
Command Staff	.1457	.087	-.0947	.080
High Cynicism	<b>.1180*</b>	.053	-.0734	.052
White, non-Hispanic	<b>-.0032*</b>	.001	-.0009	.001
Female	.0361	.067	-.0657	.062
College Degree	-.0680	.048	-.0277	.062
R <sup>2</sup>	.10*		.09*	
F	16.84		17.59	

<sup>a</sup> In this table "B" refers to regression coefficient

\* = significant at the  $\alpha = .05$  level

In summary, it is clear that the theoretically relevant variables outlined in the extant policing and police training literature appear to have some impact on change in the measures. However, these impacts were inconsistent and uneven across the dependent variables, and some predictors, like gender, appear to have little association with the magnitude of change in either measure. Of important consideration to this dissertation is the role that training model played. The implementation science literature would suggest that the TTT model would struggle delivering the training with high fidelity, meaning that the TTT model would be less effective. In this analysis, the Direct Training Model was positively associated with change in Discretion, offering support to this conclusion, but the model was not significantly associated with change in the measure for Emotional Wellness. In fact, though not significant statistically, the Direct

Training model was associated negatively with change in this measure suggesting that officers trained under this model performed *more poorly*<sup>3</sup>. This runs contrary to the implementation science literature. Implications for these findings will be discussed in greater detail in the following chapter.

#### **Research Question 4: What Influence does Training Fidelity, Specifically the Delivery Model, have on Program Outcomes?**

The above quantitative analysis of Blue Courage found limited evidence of change under both training models (two of six dimensions witnessed change). As described above, there was also limited evidence of difference between the direct training and the TTT model. Only one scale displayed change consistent with the prediction that the TTT model might have problems delivering the training with high fidelity. This section continues to examine this issue through a case study of one of the Blue Courage sites as it attempted to use to the Blue Courage TTT model to train more than 200 officers. Originally, the case study was identified as a place to observe the variables identified in the implementation science literature that might produce worse outcomes in the TTT model. With consideration to the mixed findings surrounding the TTT and Direct Training models described above, observing this case study site is valuable because it might help identify areas where the Blue Courage TTT model is able to overcome problems identified in the implementation science literature.

This section will detail several topics. First, it will review the *Blue Courage Academy*, the instructor program that Blue Courage uses to certify instructors to teach the training, and

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<sup>3</sup> An additional series of Cluster Robust OLS Regression models were conducted regressing change in the additional four scale measures on training model alone. Training model was only significantly related to change in one scale measure: Positive Mindset. The Direct Training Model was negatively associated with change in Positive Mindset, suggesting that the TTT model, contrary to predictions, was more impactful in this measure.



outline a series of specific implementation fidelity research questions that present due to the specific structure of the *Academy*. Second, a narrative of how the training was delivered in the case study site, pulled together from interviews with key delivery staff at Blue Courage and the case study site, will be provided. Third, three observations of the training delivered to officers in the case study site will be detailed with a focus on program fidelity. Fourth, information from interviews with the staff who oversaw and delivered the training will be discussed with a focus on what Bertram, Blasé and Fixsen (2015) call “Implementation Drivers.” Lastly, this section will provide a discussion of the linkages between these drivers of implementation and observed fidelity within the case study site.

### **The Blue Courage Academy: Blue Courage’s train-the-trainer (TTT) Program**

The case study site delivered the Blue Courage training to officers through the Blue Courage TTT model. Blue Courage developed its TTT program because it faced an increased demand for *Blue Courage: The Heart and Mind of the Guardian* that couldn’t be accommodated by the limited number of Blue Courage Master Instructors. TTT programs operate by certifying members of a profession (e.g. police officers) to teach a particular training to their peers in that profession (e.g. other officers) in the place of topical experts. The tradeoff inherent in this approach is, typically, the risk of sacrificing fidelity and quality of the training for expanded reach of its content (LaVigna, Christian and Willis, 2005).

To gather details on the Blue Courage TTT model, two observations of the certification process were observed, and interviews with Michael Nila and other Blue Courage program staff were conducted. Blue Courage calls their TTT instructor school the *Blue Courage Academy*. Each *Blue Courage Academy* is structured the same and is required to be taught by a Blue Courage Master Instructor. These courses begin with the basic instruction of *Blue Courage: The*

*Heart and Mind of the Guardian*. This is designed to give attendees an overview of the content of the training they will be certified to teach. These first two days are indistinguishable from the original *Blue Courage: The Heart and the Mind of the Guardian*. The *Blue Courage Academy* then builds an additional sixteen hours of instructor training for officers, meaning that the *Blue Courage Academy* runs for thirty-two hours, or four full days.

At the opening of the *Academy*, officers are provided with a bag of additional instructor materials. This bag has a detailed 204-page instructor manual and a flash drive with the software content required to teach the course. This software includes videos, PowerPoint slides and fliers for the course. Attendees are also given access to the Blue Courage Portal. This is an online resource run by Blue Courage Staff that has access to additional videos, articles, and even a series of recordings of Blue Courage Master Instructors teaching each module while providing advice on how best to cover the content. After the *Academy*, certified officers are also able to engage in “Coaching Calls” with Master Instructors where they can ask questions and get feedback on how best to teach the course. These newly certified officers would then be allowed to provide the *Blue Courage: The Heart and Mind of the Guardian* training to other officers.

During the *Blue Courage Academy*, the instructors outline some of the structural elements of the *Blue Courage: The Heart and Mind of the Guardian* training. First, they argue that they attempt to provide the training through the Empowered Learning Model (ELM). According to the instructors, this model suggests that there are three learning phases during a training course: pre-event, event, and post-event. The instructors argue that a minority of learning, twenty-five percent, takes place during an actual training. An additional twenty-five percent of learning comes before a training, and another fifty percent comes after.

To take advantage of this additional “pre-event” potential, instructors suggest that participants should be primed with information before an event. This should include sending fliers, emails, academic or news articles, and videos before a training. To take advantage of the “post-event” potential for learning, instructors suggest that potential attendees of a training should be encouraged to take part in a number of activities. These include emailing lists, building elements of training into daily roll call or other in-service trainings, mentorship between certified TTT instructors and department officers, and subscribing to Blue Courage’s “Daily Dose.”

The first aspect of the TTT course is a lecture in which the instructors present the key underlying concepts at the heart of teaching the Blue Courage training:

1. What’s Important Now (WIN) – The process of situational awareness and identifying key aspects of the audience they are teaching.
2. Disruption – The Willingness of attendees to ‘disrupt mediocrity’ within their departments.
3. Provocateur – Willingness to discuss difficult topics as well as provoking thought and change with the field of policing.
4. Predictive Surprise – Process of identifying areas in their departments with predictable problems that are not often addressed.
5. Possibilities – Focus on what is possible, not practical (e.g. President John F. Kennedy’s moon landing initiative).
6. Opportunities – The expectation that attendees will seize the chances they are given.

These underlying themes are primarily designed to push participants to embrace the role of challenging the cultural norms of their departments and fellow officers. To accomplish this, the Master Instructors emphasize that participants must embrace and believe in the philosophy of the training.

This first section lasts approximately six hours. Attendees are allowed to leave several hours early on the first day of the *Academy* with the intention that they spend the additional time, and a significant part of their personal time that night, organizing a twenty-minute condensed

presentation of an assigned module from *Blue Courage: The Heart and Mind of the Guardian*. The instructors remain in the classroom to help those who want additional help.

To open the second day, participants break into smaller groups. Participants then provide their module practice presentations to their smaller groups one by one. Each presentation was followed by constructive critiques by participants within the group. Due to this format, most presentations are not viewed by Master Instructors and are not critiqued by Master instructors.

The practice presentations take about half of the second day. The remaining time is built around the instructors providing teaching assistance to attendees. First, the instructors describe the role of several teaching aids. They suggest that videos can be helpful for condensing material and showcasing concepts, but can also dominate a course if they are relied upon too much. Case studies can be used to similar effect. Small group discussions are used to break up a training, stymie boredom, and engage attendees. Lastly, journaling forces attendees to be introspective, think and can also be used to ask attendees to commit to the core principles of Blue Courage.

Next, the instructors provide guidelines on how to be effective instructors in the Blue Courage training. First, they suggest that intense preparation is necessary for success. Second, the instructors urge attendees to be informal in their teaching style, work to be engaging with participants, and suggest that officers in attendance personalize their training by building in one personal story to each module. This approach, they argue, builds trust within the training and develops buy-in from officers going through the training. Lastly, the instructors suggest that passion is key to effective instruction. Passion in teaching the principles of Blue Courage gives those principles credibility and, like personalization, develops buy-in to the course content from officers in attendance.

In summary, the certification process can be summarized into several steps. First, Master instructors show participants the content of the training by teaching it to them. Second, Master instructors present participants with the concepts underlying successful instruction and a few tips about how best to provide the Blue Courage training. Next, participants practice instructing a single module with peers and limited instructor feedback, before being certified to provide the training to others.

This review of the certification process for the Blue Courage TTT program outlines some important research questions regarding its efficacy. First, in the parlance of Bertram, Blase and Fixsen's (2015) framework on implementation fidelity, is the certification process described above sufficient to produce adequate "competence" in instructors so that they can provide the training? The certification is only the review of the material and an additional sixteen hours of instructor training. Considering how challenging the curriculum appeared during the review earlier in this chapter, it is challenging to assume that certified instructors would be prepared to provide the training to others after the *Academy* alone. It seems critical that these instructors receive what Bertram, Blase and Fixsen (2015) call "coaching" to increase their competency after the initial certification process or engage in the type of personal "intense preparation" that Blue Courage suggests is required to instructors to be successful.

Second, how does Blue Courage handle instructors that appear to be either poor fits for the training, because they lack the commitment to the material and passion required, or are ill prepared to provide it to others? No such mechanisms were observed during the observation of the certification process, and during interviews with Blue Courage staff the process described was that everyone who applied to take the *Blue Courage Academy* received a certification to

provide the training at its conclusion. This presents a problem for Blue Courage if poorly prepared or ill-suited instructors are delivering their curriculum to others.

Third, it seems key that, in this context, at the organizational level these instructors are being supported so that they can overcome what seems a likely lack of competency with the material. This is what Bertram, Blase, and Fixsen (2015) describe as “facilitative administration.” These instructors likely require additional time to prepare, a reduction in other workload and other resources to provide the training with fidelity. The absence of these supports would make an already challenging task more difficult.

### **Background and Themes in Delivery of the Training in the Case Study Site**

The case study site was given funding to train more than 200 officers in the Blue Courage training. In an effort to save money, the site provided this training to officers through the TTT model. A total of ten instructors were certified through the *Blue Courage Academy*. Of those ten, six became responsible for delivering the training at the case study site. After being certified, the training director was concerned that the instructors were not prepared to provide the training, so several additional steps were put in place. First, the Blue Courage Master instructor who certified the instructors at the case study site returned for two additional study and practice sessions. These included observing the Master instructor teach the training curriculum an additional two times, and fielding questions to the master instructor regarding delivery of the training. Additionally, the lead Blue Courage instructor at the case study site led a number of study sessions with the other instructors at the case study site that included studying the training material and performing “teach-backs” to the lead instructor.

Following this preparation, officers in the department started to be trained in Fall<sup>4</sup>, about a year after the instructors were initially certified to provide the training. A total of 246 officers were trained in the cases study site by the certified instructors. These officers were trained over the course of eleven trainings.

Mowbray et al. (2003) outline a series of approaches evaluators have used to assess program fidelity in the published literature. Mowbray et al. finds that most common are approaches that ask program staff experts to self-report the use of various program components and reviewing program notes and documents for the presence of the same. Less common in the published literature are interviews with program staff and, especially so, observations of the intervention being implemented to discuss the presence and absence of program components. Arguably, the approach of observing programs, assuming the observer has a clear understanding of the core program components, allows for the most robust assessment of fidelity. This is particularly true with a scripted training program like Blue Courage. This approach was used in the case study site in an attempt to assess fidelity in training delivery. The following section is a summary of the training delivered in the case study site.

With limited exception, the training was delivered similarly across the three observations. The Blue Courage training was incorporated into required in-service training for officers who were required to complete four hours of basic in-service training in the morning. This largely constituted an update on case law that changed from the previous year. Due to this, the 16-hour training needed to be compacted into 12 hours.

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<sup>4</sup> The month and year of the training delivery are not provided here to help protect the identity of the case study site.

The Blue Courage training was taught out of its traditional order, which had some implications for the flow of the training. The nine modules that form the curriculum of the *Blue Courage: The Heart and Mind of the Guardian* training is designed to be taught in this order:

1. Foundations
2. Culture
3. Nobility
4. Respect
5. Resilience
6. Positive Psychology
7. Practical Wisdom
8. Health and Wellness
9. The Immortal Cop

As discussed previously, this order is critical to the success of the training, as each module contains material that aids in the understanding of successive modules. For example, Nobility is designed to build a sense of purpose in officers which is used to convince officers to commit to the principles in the other modules. The most poignant example is that of emotional wellness, the Resilience module. Positive psychology is a tool which officers can use to regulate their emotional state, and thus follows resilience.

The instructors in the case study site did not use this order during the course. In the case study site the following order of the modules was used for all of the eleven trainings:

1. Foundations
2. Practical Wisdom
3. Health and Wellness
4. Nobility
5. Respect
6. Culture
7. Positive Psychology
8. Resilience
9. The Immortal Cop



This order made for awkward transitions and made it difficult for instructors in what are intended to be later modules to draw on content from what are intended to be earlier models, as is the intended structure of the delivery.

Across all three observations, most of the instructors were ineffective in their presentations. This was the result of several factors: (a) poor presentation and facilitation skills, (b) lack of commitment to the content of the training, (c) an apparent lack of understanding of the content of the course material, and (d) an apparent lack of understanding of the concepts that underlie the training. These will be described in detail in the following section.

Many of the instructors struggled with their basic presentation and facilitation skills. Most did not project audibly to the class, and it was difficult for them to be heard in the back of the room. Many of the instructors also had a difficult time presenting the course material. They relied heavily on the PowerPoint slides provided by Blue Courage staff and most, with few exceptions, did not build in additional material and stories. All of the presentations were considerably shorter than the typical 90 to 120 minutes allotted them and contained very little group discussion, either class-wide or in smaller sections.

These instructors also had a challenging time facilitating discussions in the training, which led to almost no discussions being held during the training. In one situation during the respect module an officer stated “we’re already respectful,” arguing that they did not need to internalize the content being given to them. The instructor for that module was unable to engage with that participant to describe how the officer’s definition of respect differed from the new definition being offered by Blue Courage. In a second example, during the Resilience module, in response to a slide discussing the need for police to manage stress in healthy ways an officer stated “do you need a foot rub?” In response, the instructor was unable to engage the class in a

larger discussing about the relationship between stress, mental and emotional health and health outcomes for officers and instead simply moved on.

Second, as alluded to previously, instructors appeared uncomfortable with both the content of the course material as well as the concepts that underlie it. Many of the instructors read directly from the PowerPoint slides, and appeared in several instances as though they were looking at the material for the first time. The Blue Courage curriculum relies heavily on stories, videos, anecdotes, and famous quotes to convey important concepts. The instructors showed only a superficial understanding of the backstory of each, with few exceptions. In particular, the instructors showed very little understanding of the famous quotes used. At least one of the instructors stated openly to the class that they did not have time to prepare for the presentation.

An additional and troubling problem was the lack of understanding that many of the instructors showed for many of the concepts of Blue Courage. The instructors repeatedly failed to discuss key concepts within the modules, and sometimes even presented arguments that undercut the concepts. The most problematic occurrence of this was during the “Respect” module. Instructors are asked to tell the story of officer Larry DePrimo, the NYPD officer who purchased an expensive pair of boots to give to a homeless man who was living outside during the winter. The homeless man, Jeffery Hillman, refuses to use the boots, fearing that he will be killed by someone who wants to steal them from him.

The story is designed to convey several concepts. First, the officer DePrimo’s act is a noble gesture from a police officer serving his community. Second, and perhaps most important, the story is designed to force officers to, empathetically, see the world through the eyes of those they serve. Many would see the failure to use the boots as scoffing at the generosity of officer DePrimo. Engaging officers to understand the social context that many of the individuals that

they serve (i.e. living under the threat of violence and robbery) is designed to develop empathy that might carry over into other interactions with citizens.

The instructor that taught this module not only failed to use this story to highlight these concepts, they used it in a way that appeared to reinforce officer cynicism. The instructor highlighted the generosity of officer DePrimo's act, and then highlighted what the instructor saw as a lack of gratefulness on behalf of Jeffery Hillman for choosing not to use the boots. This produced an audible groan among that class, and prompted several officers in the class to exclaim with comments similar to: "Well I guess it doesn't matter what we do, huh?" The instructor failed to highlight the perspective of Hillman (i.e. wearing these boots might lead to my death) which may have reduced empathy among members of the class and further reinforcing feelings of cynicism among the officers in attendance.

Lastly, several of the instructors appeared to lack commitment to training. The lead instructor discussed earlier opened the training with the "Foundations" module by openly stating that the training was not worth the officers' time, that "Blue Courage is long term focused when officers need short term help to stay safe," and that "if it was up to me we would train officers in hard skills that would keep them safe." That instructor later said that "hard skills" was a reference to firearm training.

Several instructors made comments that openly questioned the quality and effectiveness of the training. During interviews with the researcher, two instructors at the site argued that this occurrence undercut the credibility of the training among participants. The most poignant example was during the introduction module "Foundations" when one instructor was sharply critical of the "Respect" module. The Blue Courage curriculum states that officers should be "curious" instead of "suspicious," and that simply "tolerating" citizens doesn't produce a

positive officer-citizen interaction. The curriculum suggests that officers often need to engage citizens in a positive manner, even if the citizen is being aggressive, insulting, or generally disrespectful in return. Blue Courage argues that this helps deescalate situations, reducing assaults against officers, the need to use force, and also officer stress, a lynchpin of the Blue Courage training. In response to this the instructor stated “we didn’t like this. We’re not going to tell you eat shit out there. You need to receive respect first before you give it.” Additionally, the instructors argued that the developers of Blue Courage were “older cops who didn’t understand” modern policing. These sentiments cut against the effectiveness of the training.

Despite these problems, two instructors were effective in their presentations, compared to the other instructors. The instructors, who taught the Health and Wellness and Resilience Modules, projected their voices with confidence, didn’t read off of the slides, engaged the officers in conversation, seemed to understand the content on each slide, showed an understanding of the concepts within the module that they taught, and were able to build practical examples from their experience as officers and as a member of the department into their presentations to convey the concepts within the module. Of particular effect was when the Health and Wellness instructor read a list of names of officers that had “left” the department as a powerful way to convey the potentially destructive impact that the profession can have on individuals. The Resiliency Module instructor was equally adept at building in his personal experience as an immigrant to the United States and the role that his childhood in a violent part of the world impacted his mental and emotional health.

### **Assessing Fidelity in the Blue Courage Training Delivered at the Case Study Site**

If poor fidelity in training delivery through the Blue Courage TTT model was a general concern at the outset of the evaluation, a review of the instructor certification process suggested

this is an area of concern to the success and failure of the training. The observations of the training delivered at the case study site appear to substantiate these fears. There are several ways to define implementation fidelity and a review of the literature identified several key components of fidelity that are helpful for assessing the Blue Courage training implemented in the case study site: adherence to core aspects of delivery, quality of delivery, and dosage of the intervention. This section will attempt to classify the Blue Courage training delivered at the case study site through a lens of implementation fidelity and will use these key components to provide a more robust assessment of the training.

Adherence to core implementation components is perhaps the most understood way to conceptualize implementation fidelity in the literature (Mowbray et al., 2003). According to Mowbray et al., adherence can be defined as “actual treatment delivery to the protocol originally developed” including the presence of core program components and the absence of extraneous components (pg. 316). Mowbray et al. (2003) suggests that the simplest way to assess adherence is to calculate a score based on the percentage of “core components” present and absent from an intervention during implementation. Table 21 outlines the key underlying concepts identified in each module of Blue Courage, as discussed previously in this chapter, and details their presence and absence during the implementation of Blue Courage training in the case study site. Treating these concepts as “core components,” a fidelity score can be computed for implementation in the case study site<sup>5</sup>.

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<sup>5</sup> Each of these core components were present in each of the three observations of the Blue Courage training delivered under the Direct Training model observed during the course of this evaluation. During interviews, both Michael Nila and Blue Courage Master Trainers stated that they do not deviate from these guidelines. While fidelity to these core components is not likely to be *perfect*, it is believed that fidelity to these components and the delivery mechanisms described below is close to 100% when the training is delivered under the Direct Training model. No measures of fidelity exist for the training delivered under the Direct Training model however, so this assessment is difficult to validate.

**Table 21. Presence of Core Components during Blue Courage Training in the Case Study Site**

<b>Module</b>	<b>Core Component (Underlying Concepts)</b>	<b>Yes</b>	<b>No</b>
<b>Culture</b>			
	Police have a unique subculture	x	
	Culture can be both harmful and protective	x	
	Individual officers can change culture through action		x
<b>Nobility</b>			
	Policing is a noble profession	x	
	Many officers have grown cynical and forgotten their purpose		x
	Officers have to be exceptional because their work is so important		x
	Officers have to take care of themselves so that they can help others		x
<b>Respect</b>			
	It is the moral responsibility of officers to act in respectful ways	x	
	Respectful behavior can enhance officer safety		x
<b>Resilience</b>			
	Stress produces chemicals that are harmful in the long term	x	
	People have the power to regulate our emotional state	x	
	Breathing techniques are a tool for emotional regulation		x
<b>Pos. Psychology</b>			
	Positive thought is a way to regulate emotions		x
	Mindfulness is an approach to improve awareness of emotions		x
<b>Practical Wisdom</b>			
	Policing is becoming more complex and requires new approaches		x
	This means developing skills beyond arrest		x
	Discretion should always be used to serve the community		x
	Sometimes this means challenging supervisor or agency policy		x
<b>Health and Wellness</b>			
	Police die sooner than others	x	
	Proper diet and exercise improve longevity	x	
	Diet and exercise are linked to stress	x	

During observations of the training in the case study site, the Health and Wellness module resonated as one of the most effective. Consistent with this, this module also contained all of the core components of the curriculum, which helps explain why it seemed most effective. The training overall, with the exception of this module, was provided with poor fidelity based on

the method derived from Mowbray et al. (2003). Only nine of twenty-one core components, or about 43%, were present during the training provided at the case study site, suggesting that the vast majority of the concepts within the Blue Courage training were not provided to participants.

The presence of underlying concepts are not the only way to evaluate training fidelity. Blue Courage also has several unique aspects of delivery. A similar score can be computed for presence of these unique delivery aspects of Blue Courage. Table 22 outlines these delivery aspects, and their presence and absence in the case study site.

**Table 22. Presence of Delivery Mechanisms during Blue Courage Training in the Case Study Site**

<b>Delivery Mechanism</b>		<b>Yes</b>	<b>No</b>
	Modules Taught in sequential order		x
	Use of all Materials		x
	PowerPoint Lecture	x	
	Discussion	x	
	Small Group Discussion		x
	Journaling		x
	Officer Memorial Homework		x
	Nobility Book Homework		x

In an interview, Nila described each of these approaches as key for officer learning. He argued that group discussion and journaling were key for officers to challenge, engage with, process and then internalize the concepts within the training. These and the other delivery mechanism were key to attitude change. Simply being lectured to is not sufficient to break through to what is a difficult audience, he argued. As can be seen in Table 22, the only key delivery mechanisms used by the instructors in the case study site was the PowerPoint lecture and discussion facilitated by the instructors. This means that approximately two of eight core delivery mechanisms, or 25%, were used during delivery of the training at the case study site. As described above, the lecture was provided with, on average, poor fidelity. The discussion that

was used was sporadic, primarily by the two instructors who were most effective, and largely done poorly outside of those two examples.

Quality of intervention delivery is conceptually separate from adherence to core components of implementation (Breitenstein et al., 2010). Adherence is best understood as the presence or absence of core components but quality of delivery involves the “interpersonal and process level skills” needed to provide the intervention *well* (pg. 165). In the context of the Blue Courage training implementation quality involves the capacity of the instructor to effectively present, use the content of the training (i.e. videos, stories and famous quotes) and to field questions effectively from participants all in an effort to support the underlying concepts described above.

Details from the observations of the training suggest that quality of the instruction provided at the case study site was also poor. Instructors were frequently unfamiliar with the content on the PowerPoint slides, unfamiliar with the quotes used, did not know the backstory behind many videos and stories and in one situation told a story incorrectly to such a degree that it cut against the underlying concept within the training. Instructors would often rush through slides without covering the content, and in one situation an instructor stated that they didn’t understand the meaning of a quote used on one slide of the presentation. With limited exception, these examples were typical of the quality of the training delivered in the case study site.

Proper dosage is key to understanding implementation fidelity (Mowbray et al., 2003). Dosage has been used to understand implementation in medical research (Conn and Chan, 2016) and also in the criminal justice system (Haerle, 2016). Dosage is distinct from adherence, the presence of core components of an intervention, and focuses primarily on the amount, interval and duration of an intervention (Conn and Chan, 2016). In the context of the Blue Courage



training dosage can be viewed in terms of time spent engaging in the training. Specific to each module in the training, this means adhering to the 90-120 minute allotment to cover content. In the case study site, each module lasted approximately 20-40 minutes, suggesting that the training was not provided with the prescribed dosage. It is difficult to assume that any training “effect” could be conveyed with a dosage of approximately one-third of that formally outlined in curriculum of the training.

### **What Role did the Observed Delivery have on Training Outcomes?**

The literature suggests that poor implementation fidelity is key to understanding program failure (Mills and Ragan, 2000) including a larger review of several dozen programs by Durlak and DuPre (2008). Poor implementation fidelity likely played a role in training outcomes in the case study site as well. Data on the scale measures was also captured for the case study site. Of the 246 officers trained in the case study site, 109 completed the pretest measure and 64 completed the posttest measure. Originally an independent samples *t*-test was going to be performed on these samples, but after the linking methodology described previously in this chapter was performed a large number of participants were identified that completed the post-test measure and not the pre-test measure, complicating any analysis of this sample. Table 23 shows the paired samples *t*-test conducted on measures for the 38 officers in the case study site that were successfully linked. No scale measure showed a statistically significant change from pretest to posttest. The highest p-value was for the difference in the measure Emotional Wellness ( $t=1.185$ ,  $p=.244$ ). Low power is also not likely masking positive findings as directionally the measures Physical Wellness, Respect, Discretion and Cynicism all worsened among participants. Given the observations, the lack of change in pre- and post-scores is not

**Table 23. Change in Blue Courage Domains among Officers in the Case Study Site (Paired Samples *t*-test)**

Domain	Average Score (n = 38) <sup>1</sup>		<i>t</i> - value	Standard Deviation		Cohen's <i>d</i>	Sig.
	Pre	Post		Pre	Post		
Physical Wellness	2.88	2.85	-.421	.63	.61	-.10	
Emotional Wellness	2.43	2.50	1.185	.48	.47	.27	
Positive Mindset	2.81	2.85	.543	.58	.58	.12	
Respect	2.92	2.87	-.820	.36	.40	-.19	
Discretion	2.30	2.24	-1.055	.31	.38	-.24	
Cynicism	2.41	2.47	1.105	.62	.64	.25	

\* = significant at the .05 level

<sup>1</sup> All scores fall between a minimum of 1 and a maximum of 4

surprising. To further shed light on the TTT model, interviews with staff responsible for the training were conducted.

### **Interviews with Key Staff to Understand Implementation Fidelity**

Observations of the training helped to identify a number of key issues with delivery and fidelity in the case study site. In addition to this, interviews with key program staff were conducted to identify possible influences of implementation fidelity in the case study site. These interviews used a semi-structured format (Appendix B) and were designed to tap into the three core drivers of implementation offered by Bertram, Blase, and Fixsen (2015): Competency Drivers, Leadership Drivers and Organizational Drivers.

These interviews were conducted with: (a) the director of training at the case study site, who helped facilitate instructor selection and the early stages of the training; (b) the lead certified Blue Courage instructor at the site, who led the instruction and facilitated study groups with other instructors; and (c) three of the remaining five certified Blue Courage instructors at the site. The remaining two instructors, perhaps not incidentally, were the two largest sources of negative comments made against the training when it was delivered, refused the opportunity to be interviewed.

All of these interviews took place in the training department at the case study site over the course of a single day and lasted between thirty and sixty minutes. Each of the interviews followed a semi-structured format, using the survey instrument found in appendix B. Detailed notes were taken during these interviews, and a thematic analysis (Emerson, Fretz and Shaw, 1995) was used to code themes that emerged from them. These themes, and the underlying interview instrument used, were guided by the implementation drivers discussed in the work of Bertram, Blase and Fixsen (2015).

Several themes emerged from these interviews. The first was related to instructor credibility. The training director argued that maintaining a balance between credibility in the eyes of the officers in the department, by maintaining deference to the values of the warrior culture, and giving adequate credence to the guardianship principles within the training was exceptionally difficult. The lead instructor argued that as he and the other instructors grappled with this problem he and other instructors began to worry about their credibility as instructors *in other trainings that they were responsible for outside of Blue Courage*. He stated “you don’t want to look like you’ve drunk the Kool-Aid.” The lead instructor suggested that they personally, and several of the other instructors, worried that if they embraced Blue Courage that they would become less effective at their other assigned, more permanent, tasks.

This tension between credibility as warriors and guardians within officer culture was something referenced by the training director as well. He stated that when he first observed Blue Courage being taught that the case study site would need “to have the right people to teach this.” He was concerned that few people from the case study site could both be credible enough as warriors to be listened to by officers in the department and credible enough as guardians to be torch bearers for Blue Courage.

After the training had been completed, the time when the interview had taken place, his fears were largely confirmed. The training director assessed the TTT model by stating “the fatal flaw is the non-professional instructor teaching Blue Courage.” He observed that to be an effective Blue Courage instructor and have credibility as a guardian, it is difficult if you have a reputation for devaluing guardianship. He argued that many of the instructors that were selected had these reputations and thus reduced their credibility as guardians. Due to this, outside professional trainers were best, in part, because “you can’t impugn an outside instructor.”

Bertram, Blase and Fixsen (2015) argue that a number of factors during the implementation of interventions influence the fidelity of the intervention, something they refer to as implementation drivers. The interviews with the program staff at the case study site were focused in part on assessing these drivers. The next section will discuss the state of these drivers in an attempt to link them back to the assessed fidelity of the training in the case study site.

Bertram, Blase and Fixsen (2015) suggest that staff competency is key to successful and high fidelity implementation. Staff competency is key because program staff are the focal point of an intervention’s delivery. Leadership in an organization may be strong, skilled and intelligent but line-level individuals tasked with delivering an intervention are key to its success. In the context of the Blue Courage training, the most important staff are the instructors. Several components comprise what they call Competency Drivers including staff selection, staff training, staff coaching and staff assessment.

Staff selection is the first component of Competency Drivers (Bertram, Blase and Fixsen, 2015). Based on the assessment of the Blue Courage training discussed earlier, staff selection, identifying instructors who will provide the Blue Courage training, seems key to delivering the training with higher fidelity. In the case study site instructors were selected for (a) their

reputation as warriors and (b) their reputation as individuals who were comfortable with issues surrounding mental and emotional health. These instructors were thought to have credibility as either warriors or guardians, respectfully. The problem, outlined earlier by the training director, is that no instructor was able or willing to develop a sense of credibility in *both* of those camps, at least not in the eyes of the officers trained.

Staff training is the second component important to developing competency. The direct analog for this component for the Blue Courage training is the Blue Courage Academy, the TTT instructor certification program. It clear that this program is designed in ways that might produce instructors that are not prepared to provide the Blue Courage training with high fidelity. This helps explain why fidelity was low in the case study site. What is perhaps most problematic about the case study site is that additional training was built in beyond what is typical for certified Blue Courage instructors. Instructor competency appeared low despite an additional two observations of the training.

It is also clear that instructors are not prepared to teach beyond the module that they practice during the training, or about one ninth of the training. This became problematic when one instructor stated that they were forced into a situation where they had to teach several modules that they were not prepared to teach. This was an instructor who expressed a commitment to the philosophy of the training, but simply lacked the competence to provide it to others, something tied directly to the structure of the certification program itself. The lead instructor summarized these problems by likening the TTT model to the making of photocopies: “each layer of the [TTT] erodes the quality of the instruction.”

The component Coaching is designed to serve as a bridge between the sufficiency of staff training and the competency required for high fidelity implementation. In the context of the Blue

Courage training, the gap between these two is likely large for most certified instructors. The lead instructor organized several study sessions with the other instructors. These sessions also included teach-backs for instructors to practice their modules. Despite this the lead instructor argued that instructors were not prepared to provide the training, stating “I treat this as a personal failure as an instructor. I know we could have done better.” He expressed particular regret that he did not work harder to coach two of the instructors who were openly hostile to the philosophy of the training.

Blue Courage uses several approaches for added coaching after the certification process has completed. First, Master Trainers make themselves available for coaching via phone call or email. One instructor at the case study site said that they had reached out to a Master Instructor via email to ask several questions about instruction and received support. Second, Blue Courage provides access to certified instructors to what they call the Blue Courage Portal. This is a resource for certified instructors to bolster their competence by, for example, listening to recordings of Michael Nila and others present the training. Certified instructors are given information about the Portal during the Blue Courage Academy. No instructors took advantage of this resource, and several stated that they were unaware of its existence.

The last component of Competency Drivers is assessment. Assessment is required to determine the fidelity of implementation as it occurs, and then intervene as necessary to improve staff competency. Outside of the lead instructor being present for the introductory module at the very beginning of the training, neither the training director nor the lead instructor observed any of the other modules as they were taught. The lead instructor did observe many of the negative comments made during the introduction module, and in his interview expressed regret that he did not intervene when other instructors described the training as “shit” to the training participants.

The lead instructor also expressed regret that he never asked the instructors to meet during the time period when the training was being given. This would have allowed him to assess implementation and intervene in areas of need (e.g. provide additional coaching, etc.). He argued that his additional obligations prevented him from having time to have these meetings.

In addition to Competency Drivers, Bertram Blase and Fixsen (2015) argue the organization where an intervention is being undertaken, for example the case study site, can do things that either ease or hamper high fidelity implementation by program staff. These are referred to as Organizational Drivers. Organizational drivers are key to high fidelity but are often overlooked during implementation (Bertram Blase and Fixsen, 2015).

A key component to Organizational Drivers is the organization's capacity to facilitate implementation. Facilitative administration is the use of organizational structures to assist with implementation. This includes creating structures to assist in other drivers. Examples might include providing overtime, reassigning personnel or reassigning organizational tasks to lessen the burden on key program staff to allow for additional coaching.

Organizational leadership at the case study site did not provide much support for the certified instructors to improve their competency with the training. One area where the organization could have helped that came up in every interview would have been the lessening of other burdens placed on the instructors. Every instructor expressed frustration that they had 40-60 weekly hours of other duties to perform *beyond their duties as Blue Courage instructors*. Several instructors were responsible for other co-occurring training programs, including a "SWAT School" and one instructor was also on patrol over the course of the three months that the training was provided. Every instructor said that they dedicated more than ten hours per week of their own personal time to practice their instruction, but that simply was not sufficient.

Poor facilitative management also helps explain why the modules in the training were delivered out of order. Interviews with the instructors revealed that scheduling conflicts produced this problem. Because instructors were only able to provide a single module of the training, a result of the Blue Courage certification process described above, scheduling conflicts required a reorganization of the order of the training because several of the instructors, who were responsible for the Culture and Nobility modules, and were unavailable the first day of the training. Recognition of this problem could have led the case study department to change the schedules of the instructors to better accommodate the delivery of the training.

A second component to organizational drivers of implementation is the use of data systems to assess the fidelity of the intervention in real time and then intervene in areas of need. These systems were absent from the case study site. The pre-post survey instrument was used but isn't a tool that allows for real time adjustments to implementation. Blue Courage master instructors use an instructor evaluation form after every training so that every participant can grade instructors on their performance and leave comments. These instruments might have been useful in the case study site to identify poor instruction early during implementation so that the lead instructor or training director could have intervened.

The last organizational driver is the influence of system level intervention. Systems-level interventions are macro-level events, changes, or contexts that impact implementation. In the context of the Blue Courage training delivered at the case study site, department culture and cynicism are the backcloth that the training was provided against. The training director suggested that the culture was toxic. These aspects both necessitated the training and also are the context within which implementation took place. The training is designed to overcome these influences during delivery, but these influences also play a role for other implementation drivers.



For example, these influences played a role in limiting the applicable pool of officers that could be selected as certified instructors.

The last set of important influences on implementation outlined by Bertram, Blase and Fixsen (2015) are Leadership Drivers. Two types of leadership are outlined by Bertram, Blase and Fixsen: Technical Leadership and Adaptive Leadership. Technical leadership is best understood as the skills required for operational maintenance, observing the implementation process and keeping key players on task, and the resolution of procedural problems. This approach is most appropriate at times of consensus among the implementation team. Contrary to this, Adaptive Leadership is required at times of disagreement and strife amongst the implementation team. Adaptive leadership requires observing the implementation process and identifying when various aspects need change and how to change them.

Instances of poor technical leadership were embedded throughout the interviews. Technical leadership is required for many of the other implementation drivers to operate. The lack of implementation assessment, data systems tools and facilitative management were all due to poor technical leadership at different levels of the case study organization. The command staff at the case study site were rhetorically supportive of the Blue Courage training and its philosophy, several instructors stated, but then played little to no role during the implementation of the training. During an interview Michael Nila stated that at other sites department leadership would talk to officers at the beginning of training. This provides a signal to officers in the training that the philosophy of Blue Courage is valued by the department. This process did not take place in the case study site.

The training director also played a minimal role in the implementation of the training. He was involved in the early stages of implementation, including identifying the training as an

intervention and helping to select staff, but then largely delegated oversight of the training to the lead instructor. The training director was on the cusp of retirement, and this might have influenced his lack of engagement in the later stages of the training.

The training director and lead instructors argued that adaptations to the training were made as a way to better tailor the training to the culture of the case study site department. In the implementation literature this is described as adaptation of core aspects of delivery (Castro, Barrera Jr. and Martinez Jr., 2004). Implementation adaptation is the changing of core components of an intervention in an attempt to overcome challenges unique to the implementation site (Castro, Barrera Jr. and Martinez Jr., 2004). This was referenced in the interview with the training director, the lead instructor and two of the interviews with other instructors. This group described several areas where adaptations were made including removing the section of the training regarding the use of breathing techniques, removing the “Happy” video from the Positive Psychology module and removing some delivery elements of the training including journaling and small group discussion.

The staff interviewed thought that these elements were a poor fit for the culture of the case study site department. The training director, when articulating the training site’s needs for the Blue Courage training, suggested that the culture of the department was very toxic. The instructors believed that making these changes would improve officer receptiveness to the remaining aspects of the training. Through the framework offered in this dissertation to understand the delivery of the training, this approach was thought by the instructors to increase the credibility of the content of the training. Though this suggests a level of adaptive leadership in the case study, something Bertram, Blase and Fixsen (2015) suggest can be necessary for quality implementation, the problem with this approach is that the adjustments made to the

content reduced training fidelity in some core areas. This is an inherent tension with adaptation in implementation (Castro, Barrera Jr. and Martinez Jr., 2004), and must be done with planning and care.

Despite the problems identified in the implementation drivers and fidelity scores, and despite finding no statistically significant improvements in any of the scale measures targeted by the training, some good was described by the instructors. The lead instructor said that he was called by approximately six officers within the department with whom the training resonated. The topic referenced most in these calls was that of longevity, a section in the Health and Wellness module discussing officer mortality and suicide. This module seemed most effective during observation and, recalling the fidelity scores in the case study site, this module was scored the highest. The lead instructor suggested that the awareness of the officers, but not their behaviors, had been raised. This suggests that some measure of the training was forcing these officers to reflect on their lives. It is difficult to assess the degree to which that awareness might change behaviors and to what degree changes might sustain over time.

One other instructor told a story about a sergeant who came to her about an emotionally charged work related incident with a child that had died. The sergeant suggested that multiple officers had been witness to the incident and that there were likely some lasting emotional impacts. This instructor was also a peer support officer so she was able to tie this incident into her role as a peer support officer and convened a “listening session” with officers involved in the incident. The instructor suggested that this session was productive and allowed officers involved in the incident an opportunity to express their feelings in a healthy way.

In summary, the case study site struggled with many of the implementation drivers outlined by Bertram, Blase and Fixsen (2015). These struggles help to make sense of why

fidelity was observed to be so low in the case study site. What should not be lost in this assessment is the role that the initial staff training played at producing poorly competent certified instructors at the case study site. Initial staff training is likely the most important of all of the discussed drivers. Other drivers, like coaching and facilitative management, are largely supplementary to initial staff training, particularly in the context of the Blue Courage training. If the initial staff training is sufficient, or if the task to be completed is so easy to as not to require any training at all, many of the additional drivers become unnecessary. The summary finding from this analysis of implementation drivers is that poor fidelity likely lies as much with the problematic structure of the Blue Courage instructor certification program as it does with the case study site failure to implement these supplementary processes.

### **Summary of the Key Findings**

This chapter sought to answer the research questions outlined in the previous chapter. Each of these questions were able to be answered in the chapter. First, the training was observed and a logic model regarding the underlying theory of the training was developed. Key to the theory of the training was the use of framing mechanisms designed to build credibility in training content in a way to maximize persuasion of training participants. Second, an analysis was conducted to estimate the effects of the training on officers. That analysis found that two measures, Emotional Wellness and Discretion, saw small but statistically significant increases from pre-test to post-test. The four additional measures did not change, on average. Third, an analysis was conducted to determine if the training impacted different types of officers differently. That analysis found that several theoretically important variables, with the exception of officer gender, were important for understanding the impact of the training.

Lastly, two approaches were used to assess the importance of training fidelity, specifically delivery of the training through a TTT model, on training outcomes. These two approaches painted different pictures of the role that fidelity plays on training outcomes. First, a comparison of training outcomes found that officers trained under the Direct Training model saw larger, statistically significant, growth in the measure Discretion when compared to officers trained under the TTT model. However, these same officers saw less growth than officers under the TTT model in the measure of Emotional Wellness, though this difference was not significant. The second approach, a case study involving a department that provided the training under the TTT model, identified that the training was provided with very low fidelity. A review of the Blue Courage TTT certification process and interviews with program staff at the case study site identified several areas where the TTT model struggled with implementation fidelity. This evidence also suggested that the training would be a challenge for other TTT sites to deliver with high fidelity.

## **Chapter 6: Discussion and Implications of the Findings**

This dissertation serves as the first evaluation of the police training program Blue Courage. Blue Courage is one of the few training programs developed in the time since President Obama's Task Force on 21<sup>st</sup> Century Policing that focuses on improving mental and emotional health in police officers. The analysis found that the training can improve officer attitudes towards mental and emotional health and attitudes towards using discretion to serve the community. The process assessment portion of the evaluation suggests that the observed impact on officers is likely due to unique delivery mechanisms that Blue Courage employs to break through to this unique audience. The program is not without its limitations, however. The changes observed in Emotional Wellness and Discretion were small in size, and the analysis also found that other important attitudes remained unchanged. This suggests that the training has some promise for improving the lives of officers and the communities which they serve but also has significant room for improvements.

The following section of this dissertation will address the questions remaining from the evaluation of Blue Courage. This section will first review the findings of the evaluation before discussing the implication of this research on the potential for mental and emotional health training in policing, the role of message framing and messenger credibility in police training and the impacts that the changes observed in this evaluation might have on policing writ large. Next, a series of policy recommendations for the Blue Courage training and its delivery will be provided. Lastly, outstanding limitations of this evaluation and future directions to address those limitations will be discussed.

## **Discussing the Implications of Blue Courage Improving Emotional Wellness and Discretion**

One goal of this dissertation was to evaluate the impact of the Blue Courage training on officer attitudes towards a number of topics found within the content of the training. After using a number of analytic strategies this evaluation found that officers who participated in the training showed significant positive increases in both the scale measure for Emotional Wellness ( $t=2.478$ ,  $d=.27$ ) and Discretion ( $t=2.253$ ,  $d=.25$ ) after conducting a paired samples  $t$ -test. This means that officer attitudes improved towards mental and emotional health and comfort using discretion. In contrast, an additional four measures within the evaluation did not show significant change: Cynicism, officer cynicism; Respect, or officer attitudes towards using respectful behavior; Positive Mindset, or officer positivity; and Physical Wellness, officer attitudes towards using proper diet and exercise.

The results of the training suggest that officers showed improvement in arguably the most important goal of the training, improving officer attitudes towards mental and emotional health. This suggests that participating officers began to value the importance of mental and emotional health, including values towards mental and emotional self-care like using breathing techniques to regulate emotions. President Obama's Task Force on 21<sup>st</sup> Century Policing and other examples within the extant literature suggest that improved mental and emotional health will improve the lives of individual officers as well as the communities which they serve. Specifically, work by Tanigoshi, Kontos and Remley (2008) suggest that improving officer wellness might be able to improve on the negative consequences of police work including strengthening social relationships between officers and others, reducing the unhealthy coping mechanisms that officers have used historically to manage stress like drug and alcohol use and even reduce rates of depression and suicide. At the community level the literature suggests that

these changes might lead to improved police-citizen interactions. In a report to the National Institute of Justice, Scrivner (1994) identified a link between stress and police inability to control emotional responses during interactions, leading to excessive reliance on force to resolve problems. The findings from this evaluation that participants saw improved attitudes towards mental and emotional health suggests that the training might serve as one tool to make needed improvements in these areas. The magnitude of the observed change was small however, suggesting that the impact of these changes would also expected to be small.

The analysis also observed that the training was associated with an increase in the measure Discretion. As conceptualized within the training, and operationalized within the survey instrument, this finding suggests that officers who participate in the training are more likely to value engaging in creative discretionary police action *in the pursuit of service to the community*. As the training describes, officer discretion should be in the pursuit of service, justice and fairness for citizens. Change in this measure implies that officers have internalized this philosophy to some extent. In practical terms, officers who participated in the training would be expected to rely on force less, including arrest, and be more creative in their decision making, including the use of problem solving in their work. The change in officer attitudes observed in the analysis was small however, suggesting that changes in these behaviors would likely be uneven and limited to a smaller number of officers who participated in the training.

A second implication of improvements in the measure for Discretion is the role that officers play in changing organizational culture. During the training instructors state that changing officer discretion towards the pursuit of service means openly challenging peers and supervisors. Making these changes means openly challenging department policies that impede service. Items within the measure for Discretion tap into these aspects directly. Improvements



in this measure suggest that officers are more likely to challenge others in their department, suggesting a capacity for the training to lead to long term cultural change within the field. This change is unlikely to occur simply due to the training itself, but this finding suggests the potential for the training to serve as the foundation for other types of organizational change, particularly if they could be paired with the training in some way.

In contrast to these two measures, the training was not associated with change in respectful behavior. The lack of change in the measure for Respect suggests that many of the positive benefits of respectful interactions with citizens including improved emotional health (Goerling, 2012), increased compliance (Tyler, 2006), and even improved officer safety (Hepburn, 1985; Raven, 1993; Sunshine and Tyler, 2003; Tyler, 2006; Nagin and Telep, 2017) are not accruing for training participants. This also suggests that the training is having no impact on police legitimacy, another dimension with potential benefit of improved interactions with citizens (Tyler, 2006).

There are several ways to understand why the measure for Respect did not change. One way to understand this is poor message framing within the delivery of the training. This will be discussed in greater detail later. A second way might be that the pre-test measure for respect for participants was the highest, or closest to the maximum in the desired direction of the training. As can be seen in Table 24, participants on average scored 3.10 out of a maximum of 4.00 on this measure. This suggests that the training was unable to make improvements in officers because there was no room for improvement. This suggests that participants did see some shift in attitudes towards guardianship, as captured by the measure for Discretion, but simply that additional growth was not possible in the measure for Respect.

**Table 24. Participant Pre-test Domain Scores (n = 681)**

<b>Domain Score<sup>1</sup></b>	<b>Mean</b>
Physical Wellness	2.72
Emotional Wellness	2.70
Positive Mindset	2.95
Respect	3.10
Discretion	2.49
Cynicism	2.03

<sup>1</sup> All scores fall between a min of 1 and a max of 4

The findings from the analysis suggest that the training had no impact on officer positivity. The training argues that positivity can be a tool for officers to become more proficient in their work and maintain sound emotional health. This finding suggests that officers who participate in the training are not able to use this tool to better regulate their emotions (Arnetz et al., 2009; Galatzer-Levey et al., 2013; Wang, Xu, and Luo, 2016; Fredrickson, 2001; Bolier et al., 2013; Froman, 2010; Rana, 2015; Goerling et al, 2016).

The training had no impact on officer attitudes towards physical wellness. The literature suggests that police suffer higher than average heart disease, cancer, diabetes, obesity, and chronic lower back pain (Lowden et al., 2010; Tanigoshi, Kontos, and Remley, 2008). Diet and exercise are also linked to stress (Anshel, Umscheid, and Brinthaup, 2013; Lowden et al., 2010; Fodor et al., 2014; Rethorest, Wipfly, and Landers, 2009; Tanigoshi, Kontos, and Remley, 2008). This finding suggests that the training does little to reduce the impact of poor diet and exercise on officers, like increased risk of heart disease, and suggests that officers are no more likely as a result of the training to use exercise to manage stress and regulate their emotional state.

The training also did not appear to be successful in reducing officer cynicism on average. As articulated in the logic model of the Blue Courage training, and supported by the cynicism literature, officer cynicism is key to understanding officer behavior. The training argues that officers who are cynical withdraw from engagement in police work and instead perform the tasks

of the job for personal enrichment. Toch, Grant, and Galvin (1975) perhaps described this best when they described officers who “[feel] isolated and estranged, and dependent on material rewards for incentives (pg. 4).” For these officers, performing tasks of service become more difficult.

This finding suggests that the Blue Courage training is not reducing withdrawal and apathy associated with cynical police officers. This is a missed opportunity for the training because of the consequences outlined by Abraham (2000), Toch, Grant, and Galvin (1975) and others outlined above. The positive news is that this did not impact the outcomes of the training, at least not to such a degree to render the training to produce no significant changes. This has implications for understanding the theory of change underlying the Blue Courage training. First, perhaps this finding implies that the underlying theory of change regarding the impediment of cynicism is wrong. Another possibility is that the underlying theory is correct, but that the inability of the training to impact cynicism helps to explain why effect sizes were small. That several of the multi-variate OLS regression models suggest that the training has a *larger* impact on highly cynical officers suggests that the former is more likely the case, though additional research is required to validate this thought<sup>6</sup>.

Another possibility is that some officers *are* showing reductions in cynicism as a result of the training, and this reduction is key to their success in the remaining portions of the training, but that other officers are showing *greater* cynicism in comparable rates. An additional analysis was conducted as a further test of the underlying logic model of the training. This analysis replicated the original models while including an additional dichotomous variable that compared

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<sup>6</sup> An additional model was conducted predicting change scores across all measures on highly cynical officers only. This model was consistent with other models conducted and did not change the interpretation of the role played by officer cynicism.

participants that showed reductions in cynicism to those who did not. If the underlying logic model of the training is correct, then officers who showed reductions in cynicism would be expected to show larger change scores in both measures. The models found that reductions in cynicism were associated with larger change scores in the measure for Emotional Wellness ( $B=.245, p<.001$ ) but not for the measure for Discretion ( $B=-.078, p=.214$ ), offering at least some support for the logic model. In addition, when this variable was included in the model for change in Emotional Wellness the impact of pre-test cynicism shifted from significant ( $B=.118, p=.036$ ) to insignificant ( $B=.028, p=.637$ ).

It is also possible that this relationship is working in reverse, meaning that officers who dislike the training, and show no change as a result, are also becoming more cynical due to another failed attempt at change in their organization. This would be consistent with the organizational cynicism literature (Abraham, 2000). Despite this challenge, the absence of three time periods of data (e.g. pre-test data in time one, time two showing change in cynicism at the early stages of the training and corresponding to changes in emotional wellness at the completion of the training) makes it impossible to disentangle this relationship and further test this aspect of the logic model.

### **Understanding why these Changes Occurred**

Of important interest to this evaluation is assessing not only if the training is able to produce changes in officers but *why* some measures saw improvements while others did not. One of the benefits of engaging in a process and impact evaluation is that the researcher can assess the impacts of an intervention through the lens of understanding the components of the intervention. Specifically, this approach heightens our understanding of the importance of message credibility and message framing. In the course of this evaluation several elements of

the training were identified that help to understand why some scale measures saw change and others did not.

Message framing and credibility likely led to increased capacity of the training to persuade officers and change attitudes. During the critical assessment of the Blue Courage training delivery, several elements were identified that improved message credibility with an audience of police officers. Specifically, (a) the individualized focus of the training, (b) the use of current and former, and (c) associating content with groups held in reverence to officers (i.e. Navy SEALs) appeared particularly effective as cutting through the cultural stigma associated with, particularly, elements of mental and emotional wellness in the training.

Poor message framing likely helps to understand why other modules were not effective at producing change in their underlying measures. Several underlying concepts within both the Respect and Positive Psychology modules seemed poorly framed for the officers. In the Respect module the use of the “Spirit of Ubuntu” section appeared to be a poor fit with the audience. This section, specifically the content directed at persuading officers to appreciate the shared humanity of others despite differences, seemed to conflict directly with some elements of police culture. Classical literature like Van Maanan (1978) and more contemporary work by Maynard-Moody and Musheno (2003) suggest that a powerful overtone in police culture is the use of moralistic judgements of citizens during decision making, making this change difficult. Perhaps more importantly the use of African tribes to relate this content to an audience of U.S. police officers seemed to do a poor job of lending credibility to the content of the material. Under the framework found within the communications literature (Kelman, 1938; Strangor, 2017) a more successful approach would be to use a reference group that officers view as credible, for example elite members of the military, and provide a story about how engaging in respectful behaviors,

like using listening and consideration during interactions with others, produce an outcome considered valuable to participating officers, for example preventing the death of a child.

Many of these same message framing problems could be found within the positive psychology module. Specifically, two topics appeared to be poorly framed for participants: the use of the “Happy” and mindfulness videos, described above. These videos cut against traditional elements of officer toughness (Day and Hong, 2012; Goerling, 2012; Tucker, 2012). For example, during the “Happy” video, officers were recorded dancing and lip syncing to the music. During the presentation of both of these videos the instructors openly discuss with participants that this material is a challenging fit for officers. This may have led these modules to be less effective, thus leading to the finding of no significant change in their underlying measures. A more effective approach based on the framework offered within the communications literature (Kelman, 1938; Strangor, 2017) might have been to offer a story with a credible subject who successfully used the elements of a positive mindset to overcome some great challenge. The training instead closed this module with a powerful video regarding the aftermath of the Sandy Hook Elementary shooting in 2012. The video shows the story of a Connecticut State Trooper who bonded with the sibling of one of the child victims. During observations of the training several participants could be seen crying after the video. The video represents many of the elements found within the Nobility and other modules, but is perhaps a poor fit to represent the importance of a positive mindset in police work.

The challenge is inherent within these credibility-focused message framing approaches: the same conditions that necessitate a change from the perspective of the proponents of the Blue Courage training, for example stigmatizing mental and emotional health, also make persuading participants challenging because the conditions also reduce credibility of any messages.

Overcoming these challenges is incredibly hard. The training appeared to find success with this approach in the Resiliency Module, but struggled in other areas. Considering this challenge Blue Courage should refocus its efforts to identifying messages that resonate with participating officers. Talking with officers who participate in the training would be a fruitful way to identify these messages, as will be discussed in the recommendations section below.

The challenges in the delivery of the Health and Wellness module differed from those within the Respect and Positive Psychology modules. The content within the Health and Wellness module was framed in ways that conformed to traditional police culture, by highlighting elements of physical activity and toughness, before linking diet and exercise back into the concepts of stress management and increased longevity. This suggests that the content would have credibility with training participants and that attitudes would be expected to be changed (Smith and Petty, 1996; Perry, et al., 2015). During observations of the training, this module did seem to suffer from an awkward placement in the training. As the last module before the conclusions section of the training participants seemed to be tired and worn out. Engagement seemed to be low. An interview with a Blue Courage master trainer confirmed that maintaining participant engagement towards the later stages of the training was a challenge. It is possible that fatigue played a significant role in the efficacy of producing change in attitudes towards diet and exercise.

Contrary to problems in these three modules, the delivery of the Nobility Module did not appear to suffer from poor message framing or problematic placement within the training. No change was observed in officer cynicism, but the messages within were framed to conform to the audience in ways that were observed to be among the best in the training. If message framing is important to nudges and persuasion, then something else might help explain why participants

saw no significant change in this measure. The first possibility is that the underlying assumption of agreed upon core values of service offered by Michael Nila might be incorrect. During an interview Nila argued that the thread that ties all officers together is a valuation of service to others. This is an argument that receives some pushback from the police culture literature (Brown, 1980; Paoline, 2004). This assumption is important because the content of the Nobility module, and found in many elements throughout the training, hinges on this core belief. A hanging question after the critical assessment of the delivery of the training was whether or not this assumption was correct. It is possible that the finding of no significant change in officer cynicism suggests that this assumption was not correct, meaning that the content of the Nobility module was not properly targeted at the actual values of officers who participated in the training.

A second possibility for understanding this finding is the powerful role that police culture plays on the activation of attitudes. After the critical analysis of the training an additional hanging question was whether or not officers could be persuaded to change attitudes given the powerful influence of police culture on the activation of attitudes (Frymier and Nadler, 2010). As discussed previously, Frymier and Nadler (2010) argue that in contexts rich in group behavior that the relationship between individual attitudes and behavior can be easily subsumed by the influence of culture. The power of police culture is something well agreed upon within the policing literature (Brown, 1980; Skolnick, 1996). This process might help explain why officer cynicism remained unchanged despite the module containing well framed messages.

In summary, several key goals of the training found support as a result of this evaluation. Specifically, attitudes towards mental and emotional health and officer discretion saw improvements. Two remaining, linked, questions are if the attitudinal changes observed can persist over time and if they can translate to behavioral changes in officers. As discussed



previously theory suggests that the capacity of officers to tap new attitudes and change behaviors is limited by the impact of police culture (Brown, 1980; Skolnick, 1996; Frymier and Nadler, 2010). This suggests that participants may not engage in desired behaviors after the training if their attitudes towards those behaviors are not activated because other officers are policing the boundaries of acceptable social behavior. The question posed in this dissertation is whether or not a training like Blue Courage could overcome these limitations. There is some evidence in the psychological literature that suggests an approach like Blue Courage can be effective even in the absence of structural change within officer's lives or the departments within which they serve.

In some ways the Blue Courage training operates similarly to Solution-Focused Brief Therapy, or SFBT. SFBT is different from traditional psychotherapeutic approaches in that it is solutions oriented rather than attempting to identify the source of problems (e.g. childhood trauma) in clients' lives (Trepper, Dolan, McCollum and Nelson, 2006). SFBT begins when a client identifies a problem and then engages in a process of identifying solutions to solve that problem. This process involves working with clients to identify what aspects of their lives they have power to change and which they do not (Trepper et al., 2006).

Elements of solution-focused content can be found throughout the training. Particularly during the Culture module instructors direct participants towards common problems in the profession (e.g. poor leadership, lack of an understanding community and stress) and orient officers away from aspects beyond their control (i.e. poor leaders) and towards aspects that they can control (e.g. their coping mechanisms for managing stress that results from interacting with poor leaders). Research on these approaches suggest that attitudinal and behavioral changes can be made to improve clients' lives even in the absence of changing these larger structures

(Gingerich and Eisengart, 2000; Trepper et al., 2006). This is particularly important in the context of the Blue Courage training where the intervention works by changing attitudes and offers little to alter the structures within which officers operate.

### **Discussion of the Implications of the Research for Different Types of Officers**

The third research question of this dissertation involved assessing the impact of the training on types of officers. To answer this question an OLS Regression model was conducted on change scores for each of the two scale measures that showed significant differences as a result of the training: Emotional Wellness and Discretion. The findings from these models suggest that some variables were important in predicting differences in treatment effect of the Blue Courage training while others were not. The follow section will attempt to explain these findings and discuss their implications for police training and policing writ large.

Minority officers showed larger gains in Emotional Wellness than White, non-Hispanic officers, but did not show significant differences in change in the measure for discretion. This finding is consistent with literature on race and stress. Robinson, MacCulloch, and Arentsen, (2014) found that minority officers are placed under greater stress because they have to face the standard pressures of police work in addition to having to navigate life as a racial minority. This finding suggests that the training was able to tap into this situation and serve a population in greater need of the training.

The findings for both models, the impact of race on both change in Emotional Wellness and Discretion, are also problematic considering their exceptionally small coefficients and standard errors. One possibility is that the use of cluster robust standard errors produced a result not supported by the underlying data. To test for this, a supplementary analysis was performed reproducing the same models without cluster robust standard errors. These models suggest that

the finding of significant impact of race on change in these measures was likely an artifact of the use of cluster robust standard errors. Many minority officers must have been clustered oddly within the sites producing this odd finding. When these regression models are calculated without using cluster robust standard errors, the difference between minority and white officers became insignificant for both Emotional Wellness ( $B=.060$ ,  $p=.409$ ) and Discretion ( $B=-.031$ ,  $p=.668$ ). This suggests that white and minority officers did not experience the training differently, contrary to the suggestions of Robinson, MacCulloch, and Arentsen, (2014).

Despite consideration in the literature that officer gender likely plays a key role in understanding the impact of the Blue Courage training (Schneider, Lyons and Khazon, 2013), gender was not significantly associated with change in Emotional Wellness or Discretion after controlling for all other variables. This might suggest that the unique delivery, content and concepts within the training were able to cut through gendered differences among officers. In fact, no aspect of the training discussed specifically the difference between male and female officers and most content that involved female officers evoked themes of bravery, courage and determination in ways that diminished differences between officers of different genders. This finding likely requires additional research to validate and, as will be discussed later, future research would benefit from talking with different types of officers who participated in the training to validate this thought.

This dissertation was interested in understanding the impact of the Blue Courage training on officers of different rank because the organizational literature suggests that officers of different rank perform different and critical functions within organizations. Organizational leaders are key to setting the tone of organizational culture and creating organizational structures (Jacobs, 1978; Mastrofski, 2001; Willis, Mastrofski, and Weisburd, 2004; Schein, 2005), line-

level workers are responsible for enacting the formal policy of an organization (Lipsky, 1980; Maynard-Moody and Musheno, 2003) and mid-level managers are critical to the efficiency of organizations by bridging the divide between leadership and line-level workers (Engel, 2001). Understanding the impact of Blue Courage on officers of different ranks is critical to understanding not only the potential of the training to ameliorate some of the negative consequences of the profession on individual officers, but also the training's capacity to alter organizational culture as well (Zucker, 1987).

The analysis found that sergeants experienced a larger change in attitudes towards mental and emotional health than officers of other ranks. This finding is critical because of the central role that sergeants play in police organizations (Engel, 2001). Improved attitudes towards mental and emotional wellness in sergeants might mean two additional benefits for policing. First, because sergeants play a supervisory role for line-level officers, improved wellness in staff at this level of police organizations might have the added effect of better policing outcomes from the officers that these sergeants supervise.

Second, and also owing to their placement within police organizations, improved attitudes towards mental and emotional health for sergeants might also facilitate cultural change within police departments to reduce the stigma surrounding mental and emotional health, a process Zucker (1987) call generative institutionalization. Producing this shift at the organizational and professional levels was a primary goal of the Blue Courage training. Though this goal was not tested within this evaluation, if the training was ever going to produce long-term change in police culture, specifically around the valuation of mental and emotional health, this is a key first step. A key for future research will be to understand how mid-level police

managers incorporate the principles of Blue Courage, including producing culture change, into their roles as supervisors and intermediaries between patrol officers and department leadership.

Originally department type was considered because of its relationship with officer cynicism. The literature argues that officers from larger, urban, departments are more likely to develop cynicism because of the fast pace of calls for service (Klinger, 1997; Hickman, 2008), added layers of bureaucratic organization (Rafky, 1975; Regoli, 1988; 1989; Hickman, 2008; Enciso, Maskaly, and Donner, 2016) and the perception of repeated failure in their interactions with the community (Klinger, 1997). However, as the model controls for cynicism separately department type likely means something different in the analysis. One consequence of fast pace described by Klinger (1997) and Hickman (2008) is that officers from urban settings may have less time to devote to service and may be more inclined towards a crime-fighting orientation than officers from suburban and rural departments. As discussed in the outline of the training, these distinctions are key to Michael Nila's conception of police work and likely impact how different types of officers are impacted by the training.

In support of this thought, the model findings suggest that officers from rural departments experienced the most change in the measure for Discretion, but did not differ significantly from officers from other departments in change in the measure for attitudes towards mental and emotional health. This lends some support to the idea that service oriented officers might be more impacted by the training. Further research that better operationalizes and measures officer orientation would be useful to validate this interpretation.

Perhaps surprisingly the models found that officer cynicism was positively related to change in attitudes towards mental and emotional health. This suggests that officers with above average cynicism saw larger gains in this measure. This finding runs contrary to the literature

which suggested that officer cynicism would serve as an *impediment* to the training (Gilbert, Wakeline and Crandall, 2015). This might suggest an interesting process is taking place during the training. Previously discussed was the disappointing finding that the training was not associated with change in officer Cynicism. This was critically important because of the impeding role that Gilbert, Wakeline and Crandall (2015) describe cynicism playing during the delivery of police training. That officer cynicism was not changed overall but that high cynicism was predictive of growth in other measures suggests that perhaps this mechanism manifested in a slightly different way in the Blue Courage training, at least for the measure of Emotional Wellness. Perhaps certain components of the training, particularly within the Nobility module, resonated with more cynical officers and led them to be more engaged in subsequent components like the Resiliency module. This might be intuitive because the sources of cynicism for officers described above (e.g. poor leadership) remain unchanged after the training (see Abraham, 2000).

#### **Supplemental Analysis: Impact of the Independent Variables on other Scale Measures**

The analysis described in Table 4 found that only two of the scale measures, Emotional Wellness and Discretion, showed significant change after the training. For this reason, those measures were the only measures included in models designed to assess the impact of key demographics on training outcomes (Table 20). Even though the additional four measures did not show significant change as a result of the training on average, it is still possible that individual participant change might be predicted by the same independent variables.

Tables 25 and 26 show four regression analyses (Models 3-6) with cluster robust standard errors assessing the impact of the independent variables on change in the measures Physical Wellness, Positive Mindset, Respect and Cynicism, respectfully. Each of these models use the

same independent variables used in Table 20 with the exception of Model 6, which excludes the variable High Cynicism.

**Table 25: Regression of Change in the Measures Physical Wellness and Positive Mindset on the Independent Variables, with Robust Standard Errors <sup>a</sup>**

	<i>Model 3</i>		<i>Model 4</i>	
	Change in Physical Wellness (n = 153)		Change in Positive Mindset (n = 154)	
<b>Variable</b>	<b>B</b>	<b>Robust SE</b>	<b>B</b>	<b>Robust SE</b>
Constant	.0183	.124	-.3114	.090
Direct Training Model	-.1284	.118	<b>-.2972*</b>	.072
Suburban Department	<b>.1466*</b>	.068	.0379	.052
Rural Department	.2653	.166	.0403	.085
Sergeant	.1115	.089	<b>.2653*</b>	.077
Command Staff	.0269	.116	<b>.1911*</b>	.066
High Cynicism	-.0629	.051	<b>.1674*</b>	.044
White, non-Hispanic	<b>-.0018*</b>	<.001	-.0030	.001
Female	.1560	.086	<b>.1246*</b>	.058
College Degree	-.0928	.066	.0463	.046
R <sup>2</sup>	<b>.10*</b>		<b>.20*</b>	
F	54.69		6.29	

<sup>a</sup> In this table "B" refers to regression coefficient

\* = significant at the  $\alpha = .05$  level

**Table 26: Regression of Change in the Measures Respect and Cynicism on the Independent Variables, with Robust Standard Errors <sup>a</sup>**

	<i>Model 5</i>		<i>Model 6</i>	
	Change in Respect (n = 170)		Change in Cynicism (n = 171)	
<b>Variable</b>	<b>B</b>	<b>Robust SE</b>	<b>B</b>	<b>Robust SE</b>
Constant	-.1549	.062	.0514	.057
Direct Training Model	.0170	.052	.0836	.088
Suburban Department	.0563	.052	<b>-.1602*</b>	.051
Rural Department	.1226	.059	-.0381	.073
Sergeant	<b>.1902*</b>	.055	<b>-.2086*</b>	.053
Command Staff	.0489	.045	.0061	.065
High Cynicism	<b>.0893*</b>	.038	----	----
White, non-Hispanic	<b>.0017*</b>	<.001	-.0003	<.001
Female	.0151	.054	-.0580	.065
College Degree	<b>-.1143*</b>	.048	.0242	.073
R <sup>2</sup>	<b>.13*</b>		<b>.08*</b>	
F	26.38		5.56	

<sup>a</sup> In this table “B” refers to regression coefficient

\* = significant at the  $\alpha = .05$  level

As can be observed in Tables 25 and 26, despite the lack of change in these four measures as a result of the training on average, a large number of the variables account for significant differences among officers across the four models. With regards to the measure Physical Wellness, officers from suburban departments showed a significant larger change ( $B=.1466$ ,  $p=.04$ ) when compared to officers from urban departments. White officers also differed from non-white officers, but as discussed earlier, this is likely due to the use of cluster robust standard errors.

With regards to the measure Positive Mindset, several of the independent variables significantly predicted change. Female participants saw a significant and larger change ( $B=.1246$ ,  $p=.04$ ) in the measure compared to males. This was the only measure where



participant gender produced different outcomes, providing partial support to work by Robinson, MacCulloch, and Arentsen (2014). Participants with high pre-training cynicism showed significantly larger growth ( $B=.1674$ ,  $p<.01$ ). Compared to patrol officers, both sergeants ( $B=.2653$ ,  $p<.01$ ) and command staff ( $B=.1911$ ,  $p=.01$ ) also showed significantly larger improvements in the measure. White officers also differed from non-white officers, but as discussed earlier, this is likely due to the use of cluster robust standard errors. All of these differences are consistent with the justifications discussed in the previous section. The exception to this is the comparison of officers trained under different training models. Officers trained under the direct training model fared significantly worse in this measure ( $B= -.2972$ ,  $p<.01$ ) than officers trained under the TTT model.

One possible explanation for this seemingly counterintuitive finding might be differences in fidelity between the two models. During observations of the Blue Courage training provided by Blue Courage Master Trainers, the “Culture” module appeared to be used as a place to build credibility between instructors and participants. This credibility was built by instructors discussing in harsh terms the day-to-day realities of the police. It is possible that this process produces a backfire in the measure for positive mindset. Differences in officers trained across the models might be the result of instructors in the TTT model not performing this tact as well as Master Trainers. This seems particularly possible because certified instructors are not taught this tool during the Blue Courage Academy.

Several variables significantly predicted differences in change in the measure Respect. Compared to patrol officers and participants with low pre-training cynicism, sergeants ( $B=.1902$ ,  $p<.01$ ) and participants with higher pre-training cynicism ( $B=.0894$ ,  $p=.03$ ) showed significantly larger growth, respectfully. White officers also differed from non-white officers, but

as discussed earlier, this is likely due to the use of cluster robust standard errors. These differences are consistent with the justifications discussed in the previous section.

Lastly, two independent variables significantly predicted change in Cynicism. Sergeants ( $B = -2086, p < .01$ ), compared to patrol officers, and participants from suburban departments ( $B = -1602, p = .01$ ), compared to urban departments, showed significantly larger reductions in the measure. These changes are also consistent with the discussion in the previous section.

### **Supplemental Analysis: Lagged Dependent Variable Analysis**

Several problems exist with the use of change scores as dependent variables in regression analysis. While the use of change scores address some statistical problems Johnson (2005) argues that they may produce model specification issues in situations when “initial levels of outcome variables have a causal influence on later levels (pg. 1065).” In the context of Blue Courage, if any of the groups within the analysis, for example officers trained under the TTT and direct training models, have substantially different pretest means in either of the dependent variables then the use of change score may be problematic (Johnson, 2005).

Table 27 details the zero-order mean comparison for each of the independent variables in the original regression analysis (Table 20, pg. 134). Table 27 suggests the problem outlined by Johnson (2005) is likely occurring within the sample of participants. In particular it appears that officers trained under different training models, officers with different pre-test measures in cynicism and officers of different races showed large differences in the pre-test measure for Emotional Wellness. Additionally, officers from different department types showed large differences in the pre-test measure for Discretion. These differences may produce hard to interpret coefficients, as some groups have larger room for growth than others.

**Table 27. Mean Comparison for Emotional Wellness and Discretion Scores across Independent Variables**

Emotional Wellness Scores						Discretion Scores					
		Mean		SD				Mean		SD	
	N	Pre	Post	Pre	Post		N	Pre	Post	Pre	Post
<b>Training Model</b>						<b>Training Model</b>					
Direct	66	2.89	2.93	0.51	0.34	Direct	64	2.24	2.36	0.36	0.31
TTT	108	2.60	2.70	0.46	0.42	TTT	106	2.23	2.27	0.36	0.33
<b>Department Type</b>						<b>Department Type</b>					
Urban	89	2.67	2.71	0.52	0.44	Urban	87	2.26	2.27	0.34	0.36
Suburban	60	2.80	2.91	0.45	0.33	Suburban	58	2.28	2.35	0.35	0.28
Rural	25	2.68	2.74	0.52	0.41	Rural	24	2.05	2.29	0.38	0.31
<b>Rank</b>						<b>Rank</b>					
Patrol Officer	82	2.74	2.74	0.5	0.42	Patrol Officer	80	2.20	2.26	0.4	0.35
Sergeant	32	2.68	2.83	0.35	0.34	Sergeant	32	2.30	2.41	0.3	0.24
Command Staff	27	2.79	2.92	0.49	0.34	Command Staff	25	2.29	2.33	0.34	0.28
<b>Cynicism</b>						<b>Cynicism</b>					
High	69	2.56	2.61	0.49	0.41	High	69	2.25	2.27	0.33	0.37
Low	97	2.81	2.91	0.48	0.36	Low	94	2.22	2.32	0.39	0.29
<b>Race and Ethnicity</b>						<b>Race and Ethnicity</b>					
White, non-Hispanic	130	2.64	2.73	0.46	0.41	White, non-Hispanic	128	2.26	2.32	0.35	0.33
Non-White, or Hispanic	41	2.94	2.95	0.56	0.36	Non-White or Hispanic	40	2.15	2.27	0.36	0.33
<b>Sex</b>						<b>Sex</b>					
Male	140	2.69	2.76	0.49	0.42	Male	137	2.24	2.31	0.35	0.33
Female	33	2.81	2.88	0.52	0.34	Female	31	2.24	2.29	0.39	0.32

In this situation Johnson (2005) argues for the use of the lagged dependent variable approach. In this approach change scores are replaced by a post-test measure (e.g. post-test measures for Emotional Wellness) as the dependent variable and the corresponding pre-test measure (e.g. pre-test measures for Emotional Wellness) is included in the model as an additional independent variable. Table 28 below shows the outcome of that analysis on the measures Emotional Wellness and Discretion. For consistency, these models were calculated using robust standard errors.

**Table 28: Regression of Post-training Measures Emotional Wellness and Discretion on the Independent Variables, with Robust Standard Errors <sup>a</sup>**

	<i>Model 7</i>		<i>Model 8</i>	
	Post-Training Emotional Wellness (n = 170)		Post-Training Discretion (n = 165)	
Variable	B	Robust SE	B	Robust SE
Constant	<b>1.4185*</b>	.160	<b>1.3037*</b>	.207
Direct Training Model	-.0440	.084	<b>.1043*</b>	.042
Suburban Department	<b>.1343*</b>	.046	.0613	.056
Rural Department	.0407	.078	<b>.1069*</b>	.047
Sergeant	.1282	.073	.0690	.051
Command Staff	<b>.1059*</b>	.046	-.0353	.072
High Cynicism	-.0486	.053	-.0047	.048
White, non-Hispanic	<b>-.0030*</b>	.001	<.0001	<.001
Female	.0820	.049	-.0648	.050
College Degree	.0102	.039	-.0464	.023
Pre Emotional Wellness	<b>.4923*</b>	.054	-----	-----
Pre Discretion	-----	-----	<b>.4291*</b>	.089
R <sup>2</sup>	<b>.51*</b>		<b>.27*</b>	
F	71.15		24.59	
<sup>a</sup> In this table “B” refers to regression coefficient				
* = significant at the a = .05 level				

These models are largely consistent with the analyses that used change scores as a dependent variable. It is somewhat difficult to compare across these models. An additional table was created to help make these comparisons (see Table 29).

**Table 29. Comparing key Findings between Change Score and Lagged Dependent Variable Models**

	Emotional Wellness			Discretion	
	Change Scores	Lagged DV		Change Scores	Lagged DV
Direct Training Model	Neg	Neg		Pos*	Pos*
Suburban Department	Pos (p=.08)	Pos*		Pos	Pos
Rural Department	Pos	Pos		Pos*	Pos*
Sergeant	Pos*	Pos (p=.09)		Pos	Pos
Command Staff	Pos (p=.11)	Pos*		Neg	Neg
High Cynicism	Pos*	Neg		Neg	Neg
White, non-Hispanic	Neg*	Neg*		Neg	Neg
Female	Pos	Pos		Neg	Neg
College Degree	Neg	Pos		Neg	Neg

Pos = Positive association, non-significant ( $\alpha=.05$ )

Neg = Negative association, non-significant ( $\alpha=.05$ )

Pos\* = Positive association, significant ( $\alpha=.05$ )

Neg\* = Negative association, significant ( $\alpha=.05$ )

Table 29 compares the substantive differences across both types of analysis. Examining the impact of the independent variables on the measure for Discretion, the direction and significance in the relationship of every independent variable remained the same across both approaches. This suggests that the use of change scores did not mask any of the relationships in the model.

This comparison differed when it came to the measure of Emotional Wellness. First, across both the change score and lagged dependent variable approaches the direction and significance in the relationship of training model, race and sex remained the same. Second, three independent variables, officers who work in suburban departments, sergeants and command staff, differed in statistical significance across the two approaches. As displayed in table 29, it appears that differences in the approaches produced small differences in the p-values for each of the variables, leaving them just outside of the cutoff for the critical values. This suggests few substantive differences in the interpretations of the importance of each of these variables across each of the approaches.

Lastly, for one variable it appears that, to the argument made by Johnson (2005), the use of change scores failed to account for differences in pre-test measures in Emotional Wellness. Observed in table 29, officers with high pre-test cynicism also had lower scores in emotional wellness, and thus a larger room for growth. After accounting for these differences using the lagged dependent variable approach, the influence of pre-training cynicism became non-significant, a finding more consistent with the extant literature (Gilbert, Wakeline and Crandall, 2015).

### **Discussing the Implications for the Role Played by Training Fidelity**

Perhaps the most interesting research question in this dissertation regarded the role that implementation fidelity, specifically the delivery of the training through the train-the-trainer model, played in training outcomes. The analysis plan used two approaches to attempt to answer this question. First, a variable was added to the OLS Regression model to compare change in training outcomes across the two delivery models. Second, qualitative data was collected from a case study site that used the TTT model to deliver the training to officers in an attempt to assess implementation fidelity. This evaluation fills a gap in the literature because there is little research on the efficacy of the TTT model of training in policing.

The OLS Regression models found that officers trained under the Direct Training model saw larger, statistically significant, increases in the measure for Discretion. In contrast, officers trained under the Direct Training model appeared to perform worse than officers trained under the TTT model in the measure for Emotional Wellness, though this association was not significant. The implementation science literature would suggest that the training model would be a strong and consistent predictor across all of the measures. Nothing in the assessment of the content and delivery of the training suggest that Blue Courage would be different. Contrary to

this, the assessment of the training and its TTT component suggests that this problem would be *larger* for Blue Courage. The case study site identified the types of problems (e.g. low competence in instructors) that would be expected given these considerations, but the available quantitative data simply do not support this conclusion.

Understanding why this finding took place is key to understanding the training. One possibility is the role that department culture plays. The change in officers observed in the paired samples *t*-test was small, perhaps suggesting that the forces pushing back against change in attitudes, for example culture, may effectively limit the possible change that the training could achieve on officers. In this scenario perhaps the difference in impact between a well implemented training and a poorly implemented training would be negligible.

A second interpretation is that fidelity in delivery between the two models is similar. This may be the result of several possibilities. First, the case study site may be an outlier and other sites may be providing the training with a high degree of fidelity, comparable to delivery under the Direct Training model. A second possibility is that the Direct Training Model is not delivered with high fidelity consistently across all sites. The three observations of the Direct Training model captured in this analysis identified a high degree of structure to the proscribed model, suggesting that this perhaps more unlikely. This finding heightens the need for additional research with a focus on measuring implementation fidelity in both TTT and Direct Training sites to help answer this question.

Several questions remained after looking solely at the OLS Regression model outcomes. First, this research did not know how well the training was being implemented through the TTT model because no measures for fidelity were collected as a part of the national evaluation. Second, as stated above, little was known about the challenges that non-professional instructors

might have in delivering the Blue Courage training in the unique context of policing. To better answer these questions this dissertation first reviewed, documented and critically assessed the Blue Courage instructor certification program before collecting data from a case study site that delivered the Blue Courage training to officers under the TTT model. The review of the certification process outlined a number of additional research questions for the case study site evaluation. First, owing to its short nature, would the instructor certification program be sufficient to produce adequate “competence” in instructors so that they could provide the training with high fidelity (Bertram, Blase and Fixsen, 2015)? Second, considering the lack of observed filters for identification, how would the model handle instructors who were a poor fit for delivering the training? Lastly, considering these two problems, how would organizations who host the training support the training given these needs?

Observations of the training observed that the training was provided with low fidelity. A fidelity assessment tool was developed borrowing from Mowbray et al. (2003) where the training was observed for the presence of core elements of the training. This assessment observed that approximately 43% of the key concepts of the training and about 25% of the within-training delivery mechanisms were present during the training in the case study site. Interviews with program staff in the site outlined a number of reasons for why this took place, and many tied directly to the structure of the TTT model.

First, program staff in the case study site, certified instructors, argued that they felt unprepared to deliver the training after the Blue Courage instructor certification process. To compensate for this the program staff all stated that they practiced for hours outside of work preparing their presentations. The lead instructor in the site also organized coaching meetings



for staff to prepare as well. Despite this added preparation more than half of the core element of the training were missing from the delivery of the training in the case study site.

In addition to the problem of poor competency (Bertram, Blase and Fixsen, 2015) several program staff were openly hostile to the training. This undercut the credibility of the training, something core to its theory of change (Kelman, 1938; Strangor, 2017). The lack of a screening mechanism for poor instructors seemed critical and was likely responsible for this problem.

Lastly, interviews with program staff identified that the supplementary aspects of quality implementation outlined by Bertram, Blase and Fixsen (2015) were largely absent. Department leadership were supportive in rhetoric only, facilitation designed to improve the training (e.g. by shifting schedules to allow for additional training or coaching) did not happen and structures of assessment of the training delivery were not in place. Many of these aspects are left to the control of host agencies, but structured guidance could be provided to them by Blue Courage to reduce their negative impact. This guidance will be outlined in the recommendation section below.

The impact of poor fidelity was clear in the case study site. Overall, no measure showed significant change from pre-test to post-test. However, analysis of officers' raw changes suggested that a significant backfire took place in the site. Officer attitudes towards mental and emotional health improved, but the measures Discretion, Respect and Cynicism all worsened. These changes were also consistent with the level of fidelity for corresponding modules, suggesting that fidelity is an important indicator of training success.

Abraham's (2000) framework helps us understand why officers in the case study site might have grown more cynical as a result of the Blue Courage training delivered there. Abraham argues that cynicism can develop as a result of repeated failed change efforts within an

organization. This is a result of observing “the predictable sequence of lofty pronouncements, rapid implementation, and inevitable failure, to be followed immediately by the next new program (pg. 272).” Abraham (2000) suggests that the development of organizational change cynicism becomes cyclical and self-fulfilling because cynical members become disengaged and uncommitted to the organization and its endeavors. The absence of organizational leadership’s presence in the delivery of the training likely did little to assuage these perceptions. Combined with the specific instances within the training that appeared to reinforce cynicism it should not be surprising that this backfire took place.

Leaving out key concepts of the training and failing to use key aspects of delivery also likely played a role in the poor outcomes. One unique aspect of the training is that the concept of nobility is reinforced throughout. For example, the homework assignments given to participants as designed to inform participants when they complete them but also serve the function of breaking up the training on the second day while reinforcing the underlying concepts within the nobility module. The absence of these assignments may also help to understand why cynicism appeared to have worsened in the case study site, in addition to an ineffective lecture during the Nobility module and several comments made by instructors throughout the delivery that undercut the training.

An additional aspect of the training that was missing from the delivery in the case study site was the ability to tie content and concepts from different modules together. Discussed in brief during the literature review of this dissertation was that many of the underlying concepts in the training are linked to one another. For example, well-regulated emotions are required for officers to have the capacity to engage in creative discretion to serve the public. Besides an

exception in the Health and Wellness module, that exercise is linked to reductions in stress, this was absent in the case study site.

The ability of instructors under the TTT model to link concepts across modules is likely not possible given to the structure of the TTT instructor certification program. During instructor certification participants only practice providing *one* module of the training. This means that instructors likely have a limited understanding of the additional content from which to establish links. During observations of the Blue Courage training delivered by Master Trainers this capacity was one of the more effective tools. Given the structure of the instructor certification however, it seems unlikely that many TTT instructors nationwide would be able to do this effectively.

The Gilbert, Wakeling and Crandall (2015) finding regarding cynicism appeared to be important during implementation not for participant outcomes, as discussed above, but for program staff. This is an important adaptation to our understanding of the importance of cynicism in police training, particularly considering the use of the TTT model for additional interventions outside of Blue Courage. The finding supports the development of a screening tool for TTT instructors, which will be discussed in a later section.

It is difficult to know how representative the experience of the case study site is of other sites using the Blue Courage TTT model. Several features make the case study site different than other sites nationally. Table 30 shows the pre-test measures for officers in the case study site compared to all other officers in the national sample.

**Table 30. Participant Pre-test Domain Scores**

<b>Domain Score<sup>1</sup></b>	<b>Mean</b>	
	<b>All Other Officers (n = 572)</b>	<b>Case Study Site (n = 109)</b>
Physical Wellness	2.85	2.88
Emotional Wellness	2.75	2.49
Positive Mindset	3.16	2.90
Respect	3.21	2.89
Discretion	2.22	2.29
Cynicism	1.98	2.35

<sup>1</sup> All scores fall between a min of 1 and a max of 4

On average, with the exception of Physical Wellness and Discretion officers from the case study site scored more poorly on the measures than officers nationally. This suggests perhaps that this department is not representative. The data collected from the case study site is still incredibly helpful for understanding the delivery of Blue Courage through its TTT model, particularly as the program continues to grow. The reason for this is that the case study site is also the largest site in the sample. If the training is going to increase the scope of its TTT model these departments cannot be avoided if they want to reach a national audience. These issues will present themselves again and will need to be addressed in order for the training to be more effective in those sites.

The positive aspect of the case study site differing in these ways is that many of the problems observed in the case study site might not be as pronounced in other sites. For example, department culture made instructor selection challenging and led to the inclusion of poor fitting officers serving as instructors in the site. This problem may not manifest in all other sites, suggesting the training may not backfire in those places. However, this finding also suggests that the neediest departments are those least able to be reached by the TTT model of delivery, meaning that the model requires significant structural changes to overcome the problems

identified by this analysis, or possibly that the Direct Training model would be a better delivery mechanism for those places.

### **Construct Validity and the Measure Discretion**

As noted previously, the measure Discretion showed questionable scale reliability (Cronbach's  $\alpha = .554$ ). One potential reason for this might be that the measure suffers from issues of construct validity. A closer examination of the items used to create this measure suggests that the measure might be conceptually similar to Caldero and Crank's (2004) noble corruption. Caldero and Crank defined noble corruption as actions advancing a value system held by officers to improve the lives of citizens, even when those actions violate department policy or procedural law. While the items used to create the measure Discretion link directly to the topics discussed within the training regarding guardianship, these measures also might unintentionally tap into the concept of noble corruption.

This is perhaps exactly what the training seeks to do; convince officers to bend department policies for the greater good. The distinction between the two concepts might best be understood as a difference in value systems and acceptable behaviors. Within the concept of noble corruption, doing the right thing means justifying *unlawful* behaviors. Within Blue Courage doing the right thing means breaking through personal apathy and *bending department policy*. This distinction is largely captured within the items used to create the measure. Despite this, if some function of the training, or another event that takes place coinciding with the training, produces a change in attitudes around the concept of noble corruption, it is possible that those changes are being captured within the measure Discretion.

## **Program Recommendations**

In sum, the Blue Courage training appears to be a promising program with the potential to positively influence some of the problems identified in President Obama's Task Force on 21<sup>st</sup> Century Policing. However, the changes observed were small and the training was ineffective in other areas. With these conclusions in mind, this evaluation identified a number of areas where the program could be improved. These recommendations will focus on three areas identified in the analysis: (1) changes to the content of the training to maximize message credibility, (2) changes to the Blue Courage TTT model, and (3) the development of an additional delivery model focused on using sergeants as a locus for department-wide change.

The first program recommendation is that Blue Courage should rework some of its course content with an eye towards changing some of the problematic framing mechanisms identified over the course of this evaluation. The areas where the training seemed most effective were where instructors would weave underlying concepts of the training, like the importance of emotional wellness, into stories involving individuals or groups with high credibility in policing, like Navy SEALs using emotional regulation to stay safe and execute tactics with precision during combat. The areas that seemed least effective were when concepts were associated with individuals or groups that had little credibility with officers, like meditation experts or African tribes. This is consistent with the underlying theory of change within the training (Kelman, 1938; Strangor, 2017).

Of particular interest to Blue Courage as they reframe some content within their training should be officers who adhere to a warrior mentality. Though limited, the available evidence within the dissertation, that officers from rural departments responded best to the training, may suggest that officers who have a warrior orientation may need additional effort to internalize the

messages received. This was true during observations of the training as well. Instructors seemed aware that the messages that they were conveying would be viewed as “soft” or “weak” by officers with a crime-fighting orientation but were easier for service oriented officers to internalize. This suggests that framing messages for warrior oriented officers is likely the most necessary change.

There are several areas that arose during the evaluation where Blue Courage could easily make these changes. First, the training should place greater emphasis on tying respectful interactions with citizens to officer safety. The training currently pitches respect as important for because it is required to properly serve the public. This message likely conflicts with the values of warrior minded officers. Placing emphasis on maximizing personal safety and reducing stress and its consequences on officers, perhaps by finding a story about a warrior oriented officer who used the elements of respectful behavior to defuse a situation, is a value held across both groups and would likely do a better job reaching warrior minded officers without sacrificing efficacy among those with a guardian orientation.

The training could have similar success by (a) discussing to a greater extent the link between mental and emotional wellness and individual officer quality of life and (b) linking mental and emotional wellness to increased capacity to perform crime-control oriented tasks. Both of these elements were observed in the training but placing a greater emphasis on them would likely reach warrior minded officers more effectively. Identifying stories with officers who embody a warrior orientation who apply the principles of mental and emotional health in their individual and professional lives would also add credibility to these messages during the training (Kelman, 1938; Strangor, 2017).

Blue Courage staff argued that they feel pressure to remove content from the training due to time constraints. Adding additional content, like that described above, would likely be a challenge for instructors. To help with this challenge several aspects of the training were identified as being problematic in their ability to reach some training participants, particularly those with a warrior mindset, and is recommended for removal. Specifically, (a) the section in the Respect module regarding the “Spirit of Ubuntu,” (b) the video in the Positive Psychology module where officers sang and lip synced to “Happy,” (c) the section of the Resilience and Hope module where meditation expert DavidJi provided an exercise using breathing techniques and (d) the section of the Positive Psychology module that used the video about mindfulness. All of these parts of the training were challenges for warrior oriented officers, and would have benefited from different approaches to convey their messages.

The second set of recommendations for Blue Courage revolve around making improvements to the Blue Courage TTT model. The first component of this is making the Blue Courage Academy, the Blue Courage TTT instructor certification program, more robust. Several problems relating to poor staff competency in the case study site were linked back to the perceived inadequacies of the certification process. Making improvements likely involves making the certification process longer so that Blue Courage instructors can work more closely with individual participants. Blue Courage should work with other organizations that employ TTT models to identify best practices that they could incorporate into their approach.

The process would also be strengthened with the development of better screening mechanisms at the entry and conclusion of the process. First, development of a screening instrument for higher quality staff selection would be helpful. This instrument would be used to identify instructors that are a good fit to provide the training in an attempt to avoid some of the



problems that arose with poor staff in the case study site. Criteria for this instrument would need to be based on identifying instructors with high credibility from the perspective of officers with both a warrior and a guardianship orientation. The criteria would include: (a) instructor experience as an officer, so that the officer is well respected and has a number of personal stories from which to tie key underlying concepts within the training; low cynicism, to avoid instructors who undercut the training as observed in the case study site; and (c) an openness to talking about issues of mental and emotional health.

Second, Blue Courage should develop a more stringent screening mechanism for allowing officers to provide the training. Currently, all officers who complete the TTT certification program are certified to provide the training. This allows certified instructors to provide the training who may not be capable of providing it with high fidelity, as was observed in the case study site. The development of a screening mechanism would tighten this process and would likely lead to higher fidelity delivery of the training nation-wide. The trade-off inherent is that few officers could be trained, but considering the risk of a backfire effect observed in the case study site, this is a trade-off Blue Courage is likely willing to make.

An additional improvement to the TTT model includes more follow-up with certified officers after their instructor training is complete. During interviews, Blue Courage staff said that they regularly keep in contact with these trainers, but the process is not formalized. One place that could strengthen this process is a better incorporation of the Blue Courage Portal into the delivery process of the training. The Portal is an on-line based tool that TTT certified instructors can use to practice the delivery of their training. No instructors at the case study site mentioned using the Portal. Identifying ways to bridge this gap with certified instructors would likely improve the delivery of the training under the TTT model.

Lastly, Blue Courage should develop a fidelity tracking system for training delivered under both the TTT and Direct Training models. Before the analysis of the case study site, Blue Courage staff mentioned that they had little awareness of what the training looked like when it was delivered by TTT certified instructors. The finding from the case study site suggest that many other sites likely struggle in their delivery of the training. Blue Courage should develop a process for better oversight of the training delivered through the TTT model. The case study portion of this dissertation outlined the severity of poor oversight of this model, with several potential backfire effects observed. Managing oversight of this model is key to the successful delivery of the training nationwide. Some approaches outlined by Mowbray et al. (2003) might be helpful in this pursuit, including the development of a fidelity checklist for TTT sites. This checklist should include many of the elements of fidelity, including both core concepts and delivery mechanisms, outlined in this evaluation. In addition to this checklist, Blue Courage should develop a delivery plan for interested departments to follow based on Bertam, Blase and Fixsen's (2015) implementation drivers that includes: proper qualifications for instructors, guidelines for required practice and coaching, common approaches for facilitating delivery of the training like reducing other obligations for instructors, and pushing department leadership to play an active role in training delivery. These approaches would help illuminate the finding that the TTT and Direct Training models produced similar findings, identify potential areas of inconsistency in delivery in the Direct Training model, give needed support to departments and strengthen the delivery of the training through the TTT model.

The last program recommendation for the Blue Courage training involves the development of an additional training delivery model. One of the groups most impacted by the training were sergeants. Sergeants play a critical role as intermediaries between leadership and

line-level officers in police departments and as direct supervisors of line-level officers (Engel, 2001). As such these officers play a key role in the delivery of police services to the public, because of their capacity to guide line-level officers in their discretionary decision making, and also serve a valuable role in department culture. Because sergeants are a small fraction of all officers in a department, targeting these officers for the training would allow for the efficient distribution of the training to a group that could serve as a locus for several different changes within host departments.

### **Limitations and Directions for Future Research**

This dissertation serves as the first assessment of the Blue Courage training. While it provides valuable insight into several important issues in contemporary policing it also has several weaknesses in design. This section will outline the key limitations in the analysis design and offer some directions for future research to address these limitations and pursue additional areas that arose during the evaluation

The first weakness of the evaluation is the lack of a control group against which to compare treatment effects. As discussed previously, the one-group pretest-posttest design is rather weak at controlling several key threats to validity including history effects, maturation and testing effects (Shadish, Cook, and Campbell, 2002). As discussed previously, the nature of the measure of interest limits the concern of these effects to a degree. Despite this, other more robust research designs, including the use of random assignment, would allow comparisons to a viable control group and strengthen the conclusions of this dissertation (Shadish, Cook, and Campbell, 2002). This design would help account for possible selection effects in the sampling as well. Considering the nature of the intervention, it may be difficult to convince police practitioners to agree to a design where personnel are randomly assigned into a control group,

effectively withholding treatment from those officers. An adequate compromise in this situation may be the use of propensity score matching to identify a group of officers to serve as a control group (Dehejia and Wahba, 2006). Future research designs should consider these approaches.

One of the strengths of the survey research design for the data used in this dissertation is that post-test surveys were not administered to officers until one month after they had completed the training. This feature was designed to capture measures in officers after the excitement of the training had worn off. While this month lapse is helpful, the powerful effects of police culture suggest that the observed changes may erode after time. Following officers for a period after the training, perhaps after six or twelve months, may shed light on the ways in which new attitudes interact with existing culture and might help identify areas for additional intervention aimed at sustaining change in officers.

One way to identify how officers manage this process would be to interview them. At several stages of the evaluation interviews with officers who participated in the training seemed a tool that should answer additional questions that arose from the analysis. How did officers of guardianship and warrior orientations engage with different messages in the training? Why did officers from rural departments see the largest gains in the Discretion measure? Why did officers appear to remain stable in their cynicism despite the Nobility module being observed as the highest quality section in the training? Why did highly cynical officers receive *larger gains* in attitudes towards mental and emotional wellness? How do officers internalize change from the training and incorporate that change into their lives and work? All of these questions could be answered with interviews of officers who participated in the training. These interviews would add depth and richness to the quantitative assessment of officer outcomes described above, and

would enrich our understanding of the Blue Courage training's impact on officers, the departments within which they work and policing as a field.

A hanging question regarding the impact of the Blue Courage training is that little is currently known about how the training effects organizational and cultural change in the departments that training participants work. Changing the culture of policing is a stated goal of the training, and the organizational level is the locus of police culture (Reuss-Ianni, 1983; Schein, 2005; Crank, 2010). Blue Courage recently started field testing a survey instrument called the Blue Courage Agency Index. This instrument is designed to collect information from department leadership about the policies, procedures and other structures within a police department that would be designed to support officer health and wellness, including mental and emotional wellness. This instrument also collects data on perceptions of police culture and components of the department (e.g. the use of police award ceremonies and training) that influence culture. This instrument, in addition to interviews with key department staff, could be built into future evaluations of the Blue Courage training to assess department level changes over time. This work is key to understanding the impact of the training on police departments, powerful institutions that the organizational literature argues are key to understanding the health and wellness of officers as well as the delivery of police services to the public (Schein, 2005).

## APPENDICES

## APPENDIX A

Pretest and Posttest Survey Instrument for *Blue Courage: The Heart and Mind of the Guardian*

1. I exercise several times a week to stay as healthy as possible.  
Never  
Seldom  
Often  
Always
2. I follow a clear plan to improve myself.  
Never  
Seldom  
Often  
Always
3. It is difficult for me to maintain a healthy lifestyle.  
Never  
Seldom  
Often  
Always
4. Police work strains my personal and family relationships.  
Never  
Seldom  
Often  
Always
5. I eat right to stay as healthy as possible.  
Never  
Seldom  
Often  
Always
6. My emotions get the better of me during stressful situations.  
Never  
Seldom  
Often  
Always
7. It is hard to maintain a sense of personal well-being on this job.  
Never  
Seldom  
Often  
Always



8. I practice some form of breathing exercises, meditation, or yoga to improve my mental well-being.

Never  
Seldom  
Often  
Always

9. It is hard to maintain a positive attitude on this job.

Never  
Seldom  
Often  
Always

10. I work at maintaining my emotional health.

Never  
Seldom  
Often  
Always

11. I make time to do things that can help maintain and improve my spiritual health.

Never  
Seldom  
Often  
Always

12. As an officer it is difficult to stay positive.

Never  
Seldom  
Often  
Always

13. Being unhappy lowers my job performance.

Never  
Seldom  
Often  
Always

14. I find ways to stay positive on the job.

Never  
Seldom  
Often  
Always

15. I have empathy for most people in the community.  
Never  
Seldom  
Often  
Always
16. I take steps to maintain my emotional well-being.  
Never  
Seldom  
Often  
Always
17. Police work is very satisfying.  
Never  
Seldom  
Often  
Always
18. I enjoy helping people in my work.  
Never  
Seldom  
Often  
Always
19. Listening and talking to citizens is the best way to resolve most issues.  
Never  
Seldom  
Often  
Always
20. I get treated with respect by the people I deal with on the job.  
Never  
Seldom  
Often  
Always
21. With community members, I try to explain the reasons for my actions.  
Never  
Seldom  
Often  
Always

22. People I deal with feel that have been treated with respect.  
Never  
Seldom  
Often  
Always
23. It is important that people feel they have been treated with respect.  
Never  
Seldom  
Often  
Always
24. The people I deal with feel that I have treated them fairly.  
Never  
Seldom  
Often  
Always
25. It is important that people are respectful in the way they talk to me.  
Never  
Seldom  
Often  
Always
26. Doing things by the book is more important than exercising independent judgement.  
Never  
Seldom  
Often  
Always
27. I know what is best in my area of responsibility.  
Never  
Seldom  
Often  
Always
28. Training is more important than experience.  
Never  
Seldom  
Often  
Always

29. The process of police work is as important as the final outcome.

Never  
Seldom  
Often  
Always

30. I follow "the rules," even if it doesn't result in the best outcome.

Never  
Seldom  
Often  
Always

31. It is best if you act now and worry about explaining later.

Never  
Seldom  
Often  
Always

32. You have to bend the rules to do the right thing.

Never  
Seldom  
Often  
Always

33. The sacrifices I make to be a police officer are worth it.

Never  
Seldom  
Often  
Always

34. The community looks up to me for my career choice.

Never  
Seldom  
Often  
Always

35. If I were starting out I would choose this profession again.

Never  
Seldom  
Often  
Always

36. I would recommend this job to most people today.

Never  
Seldom  
Often  
Always

37. Policing is a rewarding profession.

Never  
Seldom  
Often  
Always

38. As an officer I do good things for the community.

Never  
Seldom  
Often  
Always

39. Please select today's date.

---

40. What is your age?

20 or under  
21-30  
31-40  
41-50  
51-60  
60+

41. Please enter your total years of experience in law enforcement (round to nearest year).

---

42. Current rank:

Officer/Deputy  
Detective  
Sergeant  
Lieutenant or above  
Chief/Sheriff (assistant or deputy chief)  
Other (please specify)

43. Current assignment:

Patrol  
Investigation  
Administration  
Other (please specify)

44. Are you active military or a reservist (former or currently)?  
Yes  
No
45. What is your gender identity?  
Male  
Female  
Transgender
46. Education:  
High School/GED  
Some College  
Associates Degree (AA/AS)  
Bachelors Degree (BA/BS)  
Masters Degree (MA/MS/MBA, etc.)  
Doctorate (PhD/MD)  
Law Degree (JD)
47. Ethnicity:  
Hispanic or Latino/a  
Non-Hispanic or Latino/a  
Other (please specify)
48. Race:  
African American/Black  
Caucasian/White  
American Indian/ Alaskan Native  
Asian  
Native Hawaiian/Other Pacific Islander  
Two or more races  
Other (please specify)
49. What agency type most closely describes your agency?  
Urban (primarily city core/business district)  
Suburban (primarily residential/single-family housing)  
Rural (primarily sparsely populated and/or agricultural and farming)
50. Have you previously received Blue Courage training?  
No  
Yes (please provide the year you received the training)
51. Was your attendance at the Blue Courage training optional or mandated by your agency?  
Optional/Voluntary  
Mandatory  
N/A  
Other (please specify)

52. Type of instructor for your Blue Courage training:

- State academy instructor
- Agency-trained instructor
- Official Blue Courage staff member
- unsure/don't know
- N/A

53. What was the length of your Blue Courage training?

- Less than 8 hours
- 8 hours
- 16 hours
- 32 hours (Train the Trainer course)
- Immersed in another curriculum (e.g. basic academy curriculum)
- N/A

54. Whom did your most recent Blue Courage training include?

- Officer were all from one agency
- Officers were from multiple agencies
- N/A

55. What city was the location of your most recent or upcoming Blue Courage class?

\_\_\_\_\_

56. What state was the location of your most recent or upcoming Blue Courage class?

\_\_\_\_\_

## APPENDIX B

### Semi-Structured Survey Instrument for the Blue Courage Instructors at the Research Site



***Competency Drivers:***

**Staff Selection**

How were the instructors selected to teach Blue Courage?

Is this how you were selected?

Any defining characteristics of the instructors, anything that sets them apart?

**Staff Training**

What was your experience with the Blue Courage Academy?

Did you feel prepared to teach Blue Courage after the Academy?

If Yes: Why? / If not: What else would you have needed to feel prepared?

**Staff Coaching**

Did you ever reach out to Blue Courage Staff for assistance or to use a “Coaching Call?”

Ever visit their website to look at materials or recorded module presentations?

Did [the training director] or anyone in the training facility ever coach or practice with you?

---

***Leadership Drivers:*****Technical**

Have you felt supported by department leadership during this process?

---

***Organizational Drivers:***

**Facilitative Administration**

What are your obligations outside of being a Blue Courage Instructor?

How many Hours per week on average does that take up?

Logistically, did [the research site] do anything to facilitate your ability to instruct Blue Courage?

Were you pulled off assignment elsewhere?

Did they give you any time for instructor preparation?

Other?

**Decision Support: Data System**

Did the instructors ever meet to discuss the training after the Academy?

What was discussed?

Was there ever a discussion about meeting during the in-service training to assess how things were going?

What was discussed or done?

---

***General***

Overall, how was your experience with the Blue Courage Academy?

With being an Instructor?

How do you think the Blue Courage Training taught in in-service at [the research site] went overall?

Why?

For your portion/module?

Why?

What do you think about the Blue Courage training in general outside of your experience?

What would make it more or less successful?

## APPENDIX C

### Scale Reliability Analysis for Blue Courage Domains

Physical Wellness (Cronbach's alpha = .744):

- "I exercise several times a week to stay as healthy as possible."
- "I follow a clear plan to improve myself."
- "It is difficult for me to maintain a healthy lifestyle." (reverse coded)
- "I eat right to stay as healthy as possible."

Emotional Wellness (Cronbach's alpha = .736):

- "My emotions get the better of me during stressful situations." (reverse coded)
- "It is hard to maintain a sense of personal well-being on this job." (reverse coded)
- "It is hard to maintain a positive attitude on this job." (reverse coded)
- "I work at maintaining my emotional health."
- "I make time to do things that can help maintain and improve my spiritual health."
- "I take steps to maintain my emotional well-being."

Positive Mindset (Cronbach's alpha = .786)

- "As an officer it is difficult to stay positive." (reverse coded)
- "I find ways to stay positive on the job."
- "Police work is very satisfying."
- "I enjoy helping people in my work."

Respect (Cronbach's alpha = .790)

- "Listening and talking to citizens is the best way to resolve most issues."
- "I get treated with respect by the people I deal with on the job."
- "With community members, I try to explain the reasons for my actions."
- "People I deal with feel that have been treated with respect."
- "It is important that people feel they have been treated with respect."
- "The people I deal with feel that I have treated them fairly."

Discretion (Cronbach's alpha = .554)

- "Doing things by the book is more important than exercising independent judgement." (reverse coded)
- "Training is more important than experience." (reverse coded)
- "I follow 'the rules,' even if it doesn't result in the best outcome." (reverse coded)
- "You have to bend the rules to do the right thing."

Cynicism (Cronbach's alpha = .850)

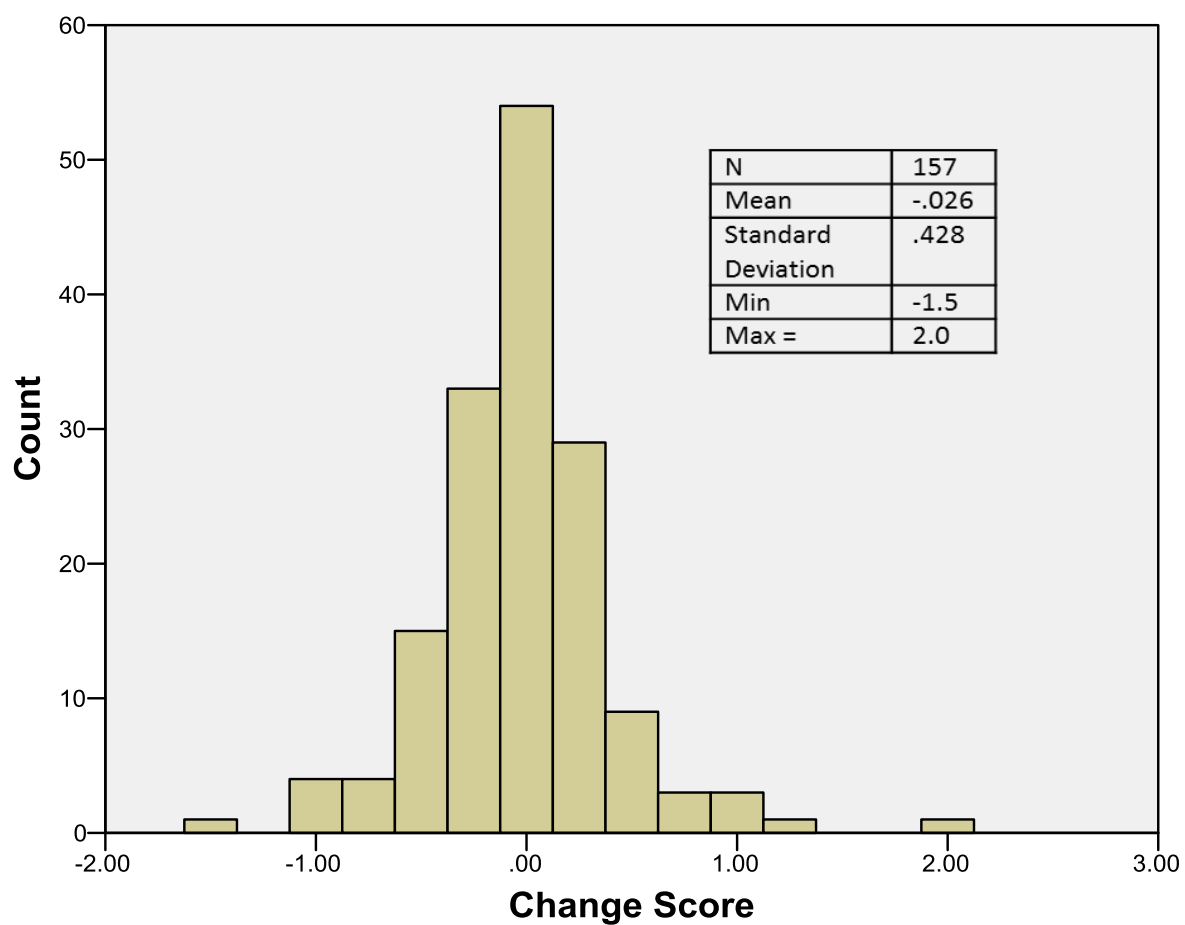
- "The sacrifices I make to be a police officer are worth it." (reverse coded)
- "The community looks up to me for my career choice." (reverse coded)
- "If I were starting out I would choose this profession again." (reverse coded)
- "I would recommend this job to most people today." (reverse coded)
- "Policing is a rewarding profession." (reverse coded)
- "As an officer I do good things for the community." (reverse coded)

## APPENDIX D

### Histograms and Descriptive Statistics for Change Scores



**Figure 6. Change in Physical Wellness**



**Figure 7. Change in Emotional Wellness**

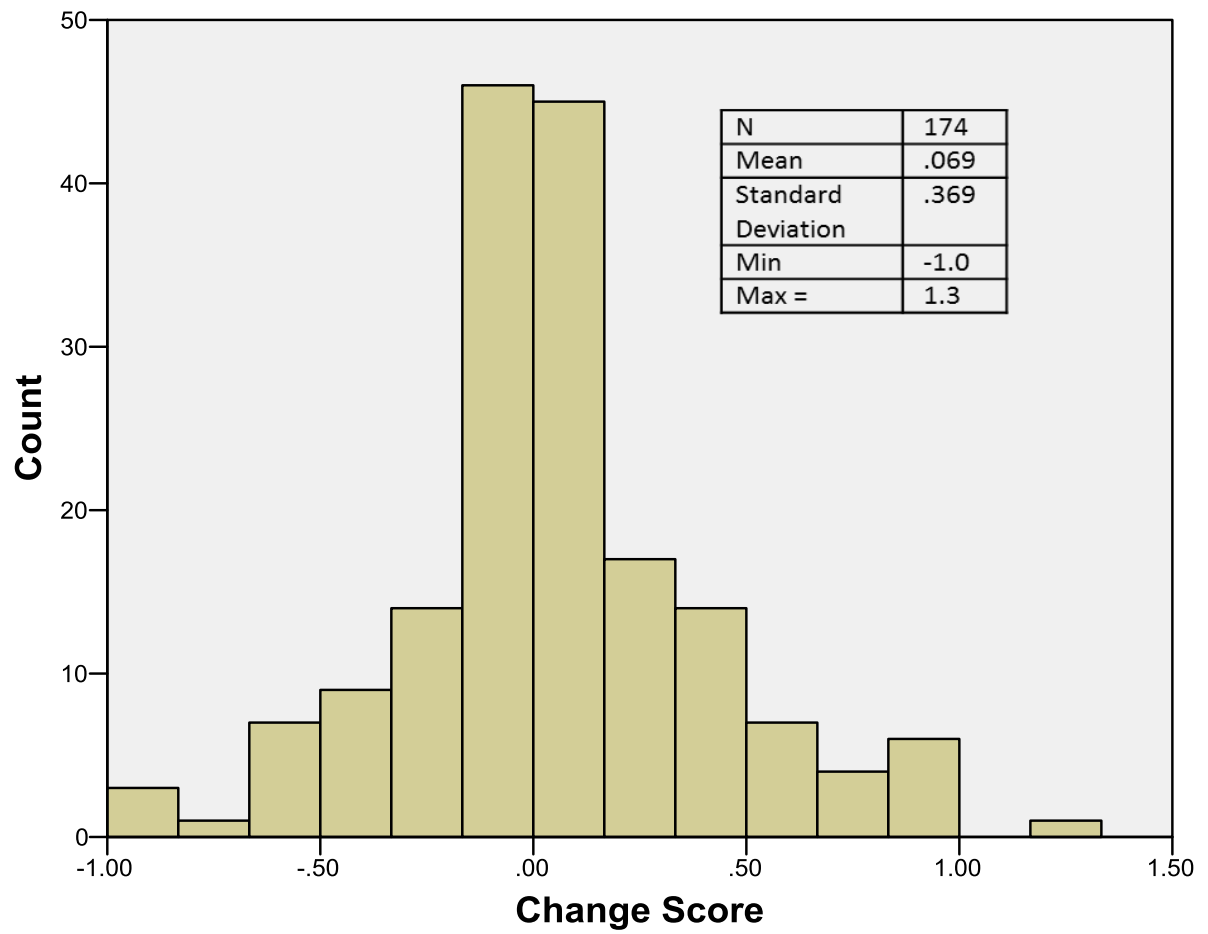
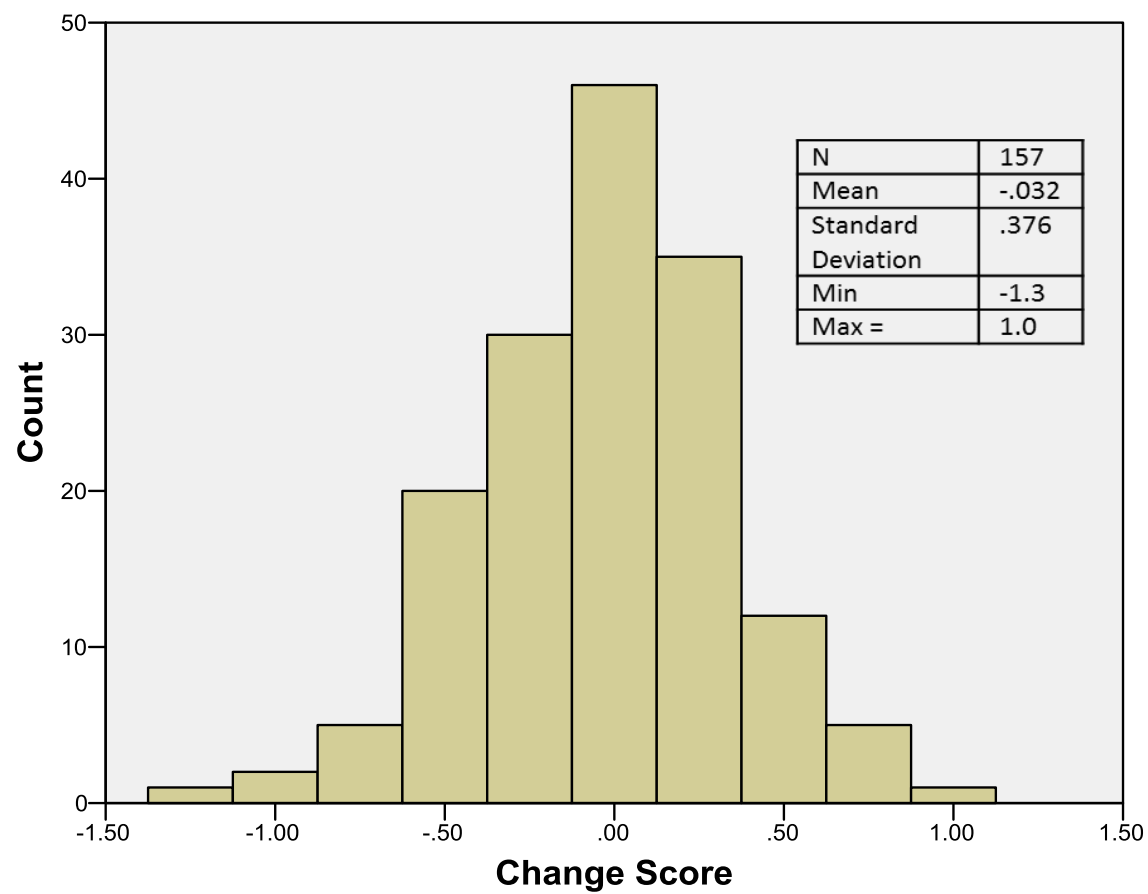


Figure 8. Change in Positive Mindset



**Figure 9. Change in Respect**

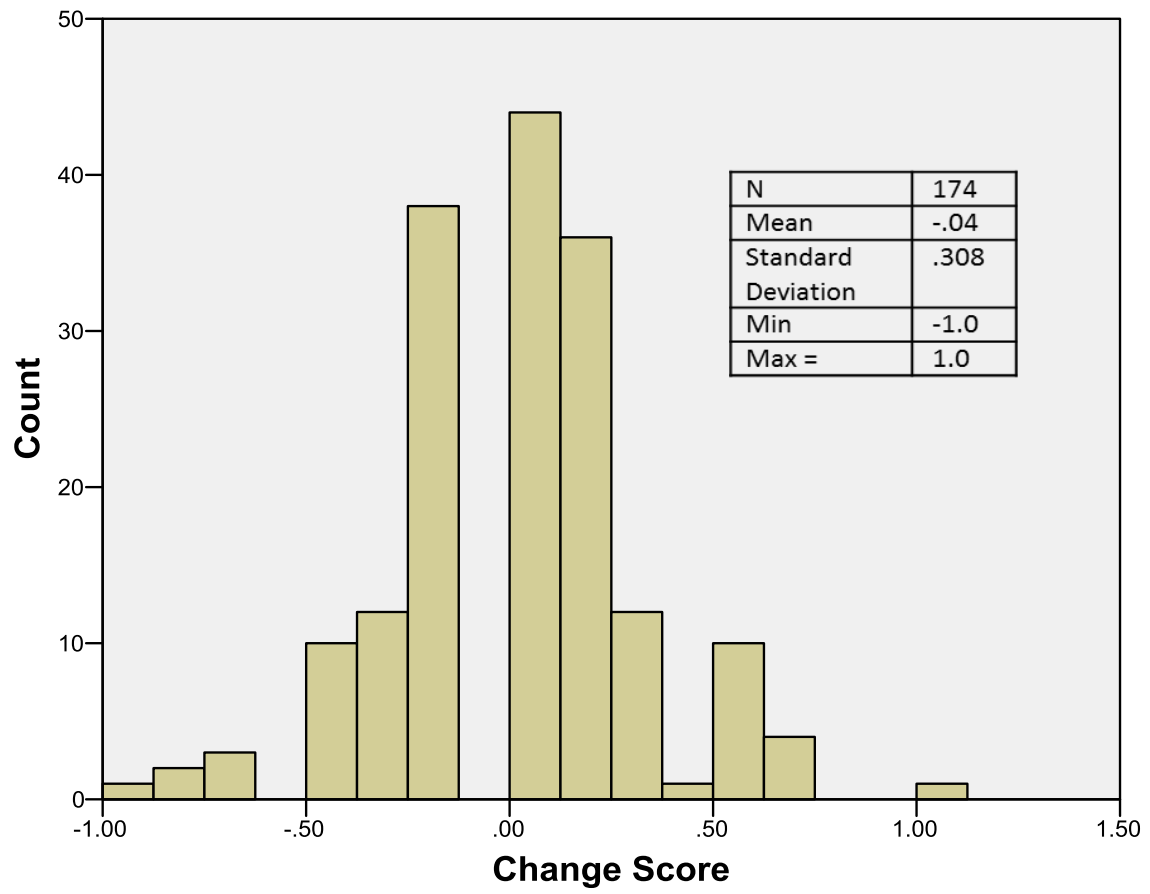
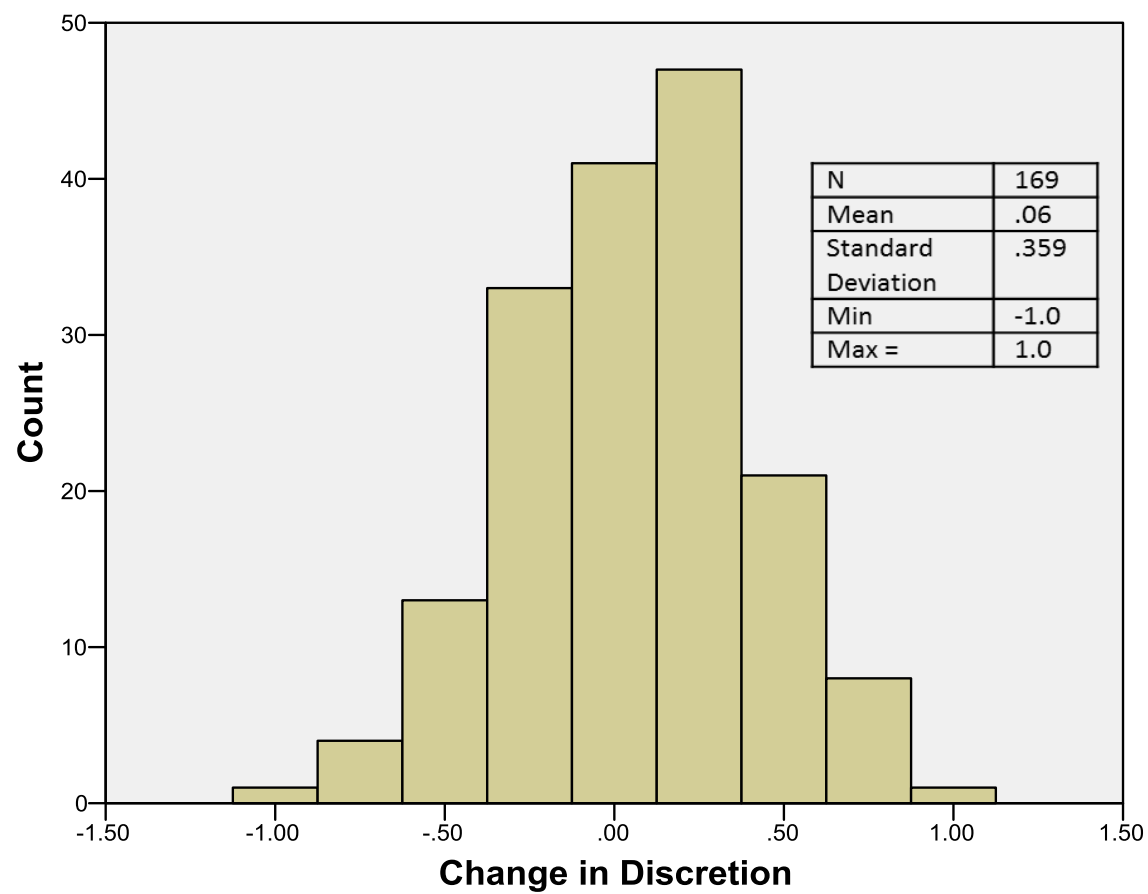
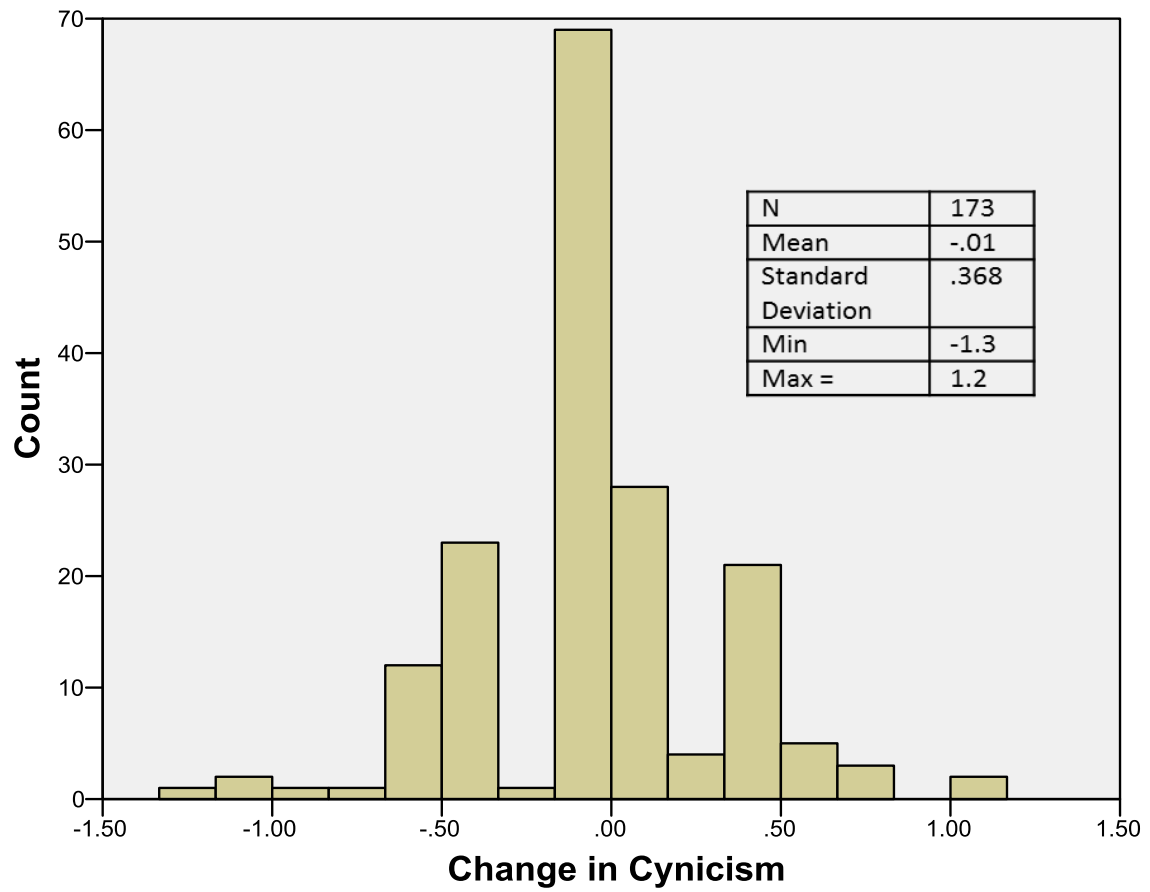


Figure 10. Change in Discretion



**Figure 11. Change in Cynicism**



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## REFERENCES

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