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Revisiting Attitudes Toward the Police: The Impact of Law Enforcement Simulations and Education on College Students

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REVISITING ATTITUDES TOWARD THE POLICE: THE IMPACT OF LAW
ENFORCEMENT SIMULATIONS AND EDUCATION ON COLLEGE STUDENTS

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Philosophy

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Indiana University of Pennsylvania

May 2018

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Understanding the public's attitudes toward the police has been at the forefront of recent reform efforts because police organizations face growing governmental and public demands to deal with allegations of discrimination against minorities and of police misconduct. Increasing public confidence in law enforcement and enhancing relations between the police and the public has garnered the attention of criminal justice researchers and practitioners. The current study aims to extend our understanding of attitudes toward the police by examining how college students perceive the police and their services. Numerous variables have been identified from reviewing prior research as major predictors of perceptions of the police. However, the empirical research into attitudes toward the police is limited primarily to studies of adult populations even though the respondents' age appears to be positively associated with the public's opinions about the police. Only a handful of studies have been conducted about attitudes toward the police using college students as the sample.

This study fills this gap in the empirical literature by surveying college students at a medium sized, state-funded university in northwestern Pennsylvania concerning their attitudes and opinions of law enforcement in terms of police practices, services, performance, and effectiveness. The current study tests propositions about the interplay among demographic characteristics, police-student interaction, and neighborhood context. The study also examines

the effects of informal contact with police through attendance at a police hosted the “use of deadly force” training class and a “shoot, don’t shoot” simulation exercise. The results suggest that, similar to other policing research, race, major, contact experience with the police (personal and vicarious), and perceived neighborhood crime variables were key predictors of attitudes toward the police among college students. The findings also indicate the impact of attending the “use of deadly force” classroom training and attending a “shoot, don’t shoot” simulation training on individual attitudes toward the police. Specifically, the “use of deadly force” classroom training enhanced police support among college students. Policy implications are addressed as well as this study’s limitations, along with directions for future research in this area.

DEDICATION

This dissertation is dedicated to my parents, In-Sang, Lee (이인상) and Keum-Sook, Jeon (전금숙) for their inimitable support, love, and encouragement throughout my life.

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I am also thankful for the love of my grandparents, who have prayed for me throughout my life. Especially, my grandfather, who has gone home to be with the Lord, and will be forever remembered. I would also like to extend my heartfelt appreciation to the rest of my family. Space limitations preclude me from being able to mention, by name, every person in my family and the appreciation that I have for them.

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CHAPTER I

INTRODUCTION

In a democratic society, law enforcement as a government institution exist to serve and protect the public. As Goldstein (1977) states, this objective integrates numerous functions, such as recognizing potential problems, conflict resolution, protecting the public's constitutional rights, and making and maintaining a sense of security in the community (p. 35). In order for the police to achieve their objectives, they also must have public cooperation and support. Police organizations consistently are making efforts to legitimize their mission to the public they have sworn to protect and serve to garner community cooperation and support. Tyler (2004) argues that the community's participation and willingness to cooperate with police cannot be taken for granted, but must be earned through various police department initiatives targeting community involvement and police-community collaboration.

Many police organizations have devoted considerable resources to promoting collaborative relationships with the communities they serve in an attempt to increase police effectiveness in reducing crime and disorder. However, the public's participation and willingness to cooperate with police as law abiders, crime reporters, problem solvers, and informants seems to rely on the community member's confidence in and attitudes about the services rendered by law enforcement agencies (Tyler, 1990; 2001). Community members are more likely to comply with police requests and obey the laws, police rules, and decisions when the residents perceive the police as a legitimate means of legal authority (Tyler, 1990). The reporting of criminal activity within the community is more complex as community members must not only believe in the legal authority of the police as identified by Tyler (2001), but also must factor in their own safety and security. In essence, citizens' perceptions of the police function and individual safety

directly impacts policing styles, community safety, and the relations between the police and community residents (Schuck, Rosenbaum, & Hawkins, 2008).

Studying Attitudes Toward the Police

Understanding public attitudes toward the police has been at the forefront of recent reform efforts, since police organizations face growing governmental and public demands to deal with allegations of discrimination against minorities and police misconduct (Schuck & Rosenbaum, 2005). With that, increasing public confidence in the police and improving relations between the communities and the police have been of interest to criminal justice practitioners and researchers (Schuck et al., 2008; Lim, 2015).

There is an extended body of research about attitudes toward the police going back to the 1960s. According to previous studies, most Americans tend to have favorable perceptions of the police (Benson, 1981; Homant, Kennedy, & Fleming, 1984; Lundman, 1974; Mastrofski, Parks, Reiss, & Worden, 1998; Mastrofski, Parks, Reiss, & Worden, 1999; Miller & Davis, 2008; O'Brien, 1978; Radelet, 1980; Schuck et al., 2008; Thomas & Hyman, 1977; Wilson, 1975). Though the research findings are inconclusive about the best police practices, previous research consistently revealed that respondents differed about their attitudes toward police professionalism and legitimacy based on various demographic variables [e.g., race, ethnicity, age, gender, education level, and socioeconomic status] and community attributes [urban, rural, suburban, homogenous population, heterogeneous population, etc.] (Cao, Frank, & Cullen, 1996; Davis, 1990; Decker, 1981; Gau, 2010; Hindelang, 1974; Reisig & Correia, 1997; Schuck et al., 2008; Skogan, 2005; Weitzer, 2002).

Studies about residents' perceptions of the police in their communities (and in general) have focused primarily on the differences in the respondents' demographic characteristics.

Among these, perhaps the most salient are the influences of race and ethnicity on attitudes about police legitimacy and professionalism. Since the 1960s, extensive literature has documented the racial/ethnic divide in perceptions of crime and the criminal justice system. Regarding perceptions of police, many studies have confirmed that racial minority groups, especially African Americans, are more likely to have less favorable perceptions of the police and less confidence in police agencies as compared to white residents in the community (Albrecht & Green, 1977; Brandl, Frank, Worden, & Bynum, 1994; Carter, 1985; Correia, Reisig, & Lovrich, 1996; Decker, 1981; Dowler & Sparks, 2008; Flanagan & Vaughn, 1996; Frank, Brandl, Cullen, & Stichman, 1996; Lai & Zhao, 2010; Levin & Thomas, 1997; Mbuba, 2010; Miller & Davis, 2008; Reisig & Parks, 2000; Schuck, et al., 2008; Smith, Graham, & Adams, 1991; Skogan, 2005; Tyler & Wakslak, 2004; Webb & Marchal, 1995; Weitzer & Tuch, 2005; Wu, Sun, & Triplett, 2009), as well as more pessimistic views of the fairness of the criminal justice system (Henderson, Cullen, Cao, Browning, & Kopache, 1997). From a neighborhood context, it also has been shown that people who live in racially diverse communities are more likely to report unfavorable perceptions of the police and less likely to have confidence in the police and their services (Miller & Davis, 2008; Schuck et al., 2008).

In addition, the most common hypothesis in the empirical literature is that attitudes toward the police are shaped by having direct interactions with the police. Previous studies have suggested that citizen-police contact, as well as race/ethnicity, are important predictors of perceptions of police legitimacy and professionalism (Schafer et al., 2003). It has been demonstrated that negative police contacts, especially when highlighted through various media outlets, produce negative perceptions of the police (Cao et al., 1996; Davis, 1990; Decker, 1981; Gau, 2010; Hindelang, 1974; Reisig & Correia, 1997; Schuck et al., 2008; Skogan, 2005;

Weitzer, 2002). The more negative encounters people have with the police, whether actual or perceived, the less likely people will have favorable attitudes toward the police and the criminal justice system (Bradford, Stanko, & Jackson, 2009; Tyler & Fagan, 2008). Some scholars argue that police contact is a better determinant of perception of the police than demographic characteristics (Miller & Davis, 2008; Scaglione & Condon, 1980); others note that not only direct experiences, but indirect or vicarious experiences learned from family members, friends, and the media impact perceptions about the police (Hinds, 2009; Miller & Davis, 2008; Rosenbaum et al., 2005; Schuck & Rosenbaum, 2005). Additionally, many citizens and media outlets rush to premature decisions about perceived negative police-community encounters, where the police are later resolved of wrong-doing by other components within the criminal justice system. The court's finding of no police misconduct only strengthens the perception among minority communities and others of a racially biased criminal justice system.

Statement of the Problem

Various factors have been identified in previous research as predictors of attitudes toward the police and their services. Yet, the empirical research about perceptions of the police is limited primarily to studies of adult populations, even though the respondent's age appears to be positively associated with the public's opinions about police legitimacy and professionalism, with younger populations reporting less positive attitudes than older populations (Hinds, 2009; Hurst & Frank, 2000). Substantially, less attention has been paid to attitudes toward the police among young adult populations and how negative attitudes toward the police might be changed before being passed on to the next generation. Previous studies have left questions about the mechanisms that might lead young people to present more or less favorable perceptions of law enforcement.

In addition, most studies collect data from the general population, which generally reveals high levels of favorable perceptions of the police and satisfaction with their services (Mbuba, 2010). However, their perception is likely to be based on information obtained from how the mass media portrays the criminal justice system (Mbuba, 2010; Tsoudis, 2000). Previous studies have shown that highly publicized events affect citizens' views of the police and their services (Chermak, McGarrell & Gruenewald, 2006; Schuck et al., 2008; Weitzer, 2002). For example, watching reality shows related to the police, such as *COPS*, enhance favorable views of law enforcement (Eschholz, Blackwell, Gertz, & Chiricos, 2002). However, the positive effect of such shows was found mostly among white viewers, and the television formatting normally presents a favorable view of the police (Weitzer & Tuch, 2005).

Eschholz and his colleagues (2002) found that many television shows focusing on police and police practices depicted the police officers' responses as justified acts even when police officers treated citizens aggressively. The mass media, on the negative side, often covers only sensational cases of police behavior, where the media judges the event before all the facts are presented or uses limited information in support of their position about the event. Studies have found that negative views of the criminal justice system, especially policing, increases immediately or during news coverage of police brutality occurrences, such as Rodney King or Robert Mitchell (Kaminski & Jefferis, 1998; Tuch & Weitzer, 1997; Weitzer, 2002; Weitzer & Tuch, 2005). In short, there is a need to explore not only how people perceive the role of police in their communities, but also how negative perceptions might be changed based on more accurate information.

Missing from the literature about police legitimacy and professionalism are studies exploring how the informal contact with police during community events and other non-policing

activities impacts the perceptions of residents, especially those who have limited contact with police and have stereotyped police through vicarious experiences and the media (Hinds, 2009). It still remains unclear whether people's perceptions of the legitimacy and professionalism of police officers can be enhanced through informal interaction. Specifically, can the perceptions of college aged youths about police legitimacy and professionalism be changed to a more positive outlook based on interaction with the police and taking policing-related college courses or receiving material related to police training?

The focus of this dissertation is to assess the impact of police officer training on college students' perceptions toward police officer legitimacy and professionalism. Specifically, does attending police officer use of force classes and "shoot/don't shoot" simulations change the attitudes of students about police legitimacy as it relates to police/community relations.

Theoretical Framework on Attitudes Toward the Police:

Procedural Justice and Police Legitimacy

Although research about attitudes and perceptions toward the police has been published for several decades (Weitzer & Tuch, 2005b), there has not been a single theory or model related to changing people's attitudes about police that could be found to guide this research. Previous studies have attempted to narrow down the key predictors of attitudes toward the police for over four decades; yet, there has not been an agreement about these predictors or their plausible interaction effects. As Brown and Benedict (2002) articulated: "there is no consensus as to which combinations of variables explain the greatest variance in attitudes toward the police" (p. 564). Some research used community-oriented policing theory, which focuses on police-citizen contact with little success in explaining the police-community bond, especially after high profile incidents involving police officers and community members (Brandl et al., 1994; Cordner, 1997;

Ren, Cao, Lovrich, & Gaffney, 2005; Rosenbaum et al., 2005; Schuck & Rosenbaum, 2005; Skogan, 2005; Skogan, 2009; Zhao, 1994; Weitzer & Tuch, 2005a).

Other researchers assessed attitudes toward the police using methods grounded in collective efficacy theory, which emphasizes neighborhood social control (Gibson, Zhao, & Lovrich, 2002; Payne & Gainey, 2007; Reisig & Giacomazzi, 1998; Reisig & Parks, 2000; Sampson, Raudenbush, & Earls, 1997), which again offered some insight into the police-community relationship. Primarily, studies about police legitimacy and professionalism have focused on respondents' demographic characteristics (e.g., race, ethnicity, age, gender, education, and socioeconomic status) as discussed earlier. Most of these studies lacked a solid theoretical framework about procedural justice and police legitimacy (Brickley, 2014).

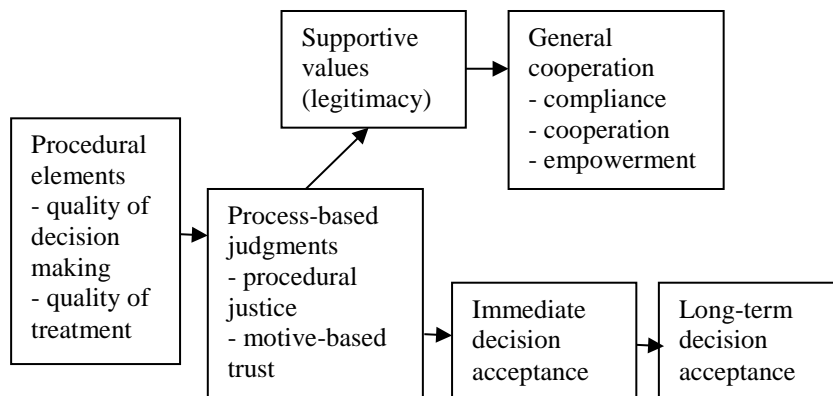


Figure 1. Tyler's model of procedural justice. (From "Procedural justice, legitimacy, and the effective rule of law" by Tyler, T. R. 2003, *Crime and Justice*, p. 284)

Though this study makes no attempt to test theory, the current study uses theory of procedural justice to examine attitudes toward the police among college students. Procedural justice refers to a process based model which emphasizes how decisions by citizens are contingent on the behavior of police and the motivation. Tyler (2003), through the procedural justice model, posited the perception of law enforcement as a legitimate source of authority is

crucial to the police-citizen contact process. He argued that it can lead to compliance through approval of decisions made by law enforcement officials. Legitimacy is linked to citizens' views of the police and their willingness to identify police authority. It is "a property of an institution or authority that leads citizens to feel obligated to obey and defer voluntarily" (Sunshine & Tyler, 2003). Being treated with respect, believing that the police officers are performing truthfully, and making decisions in a legitimate way have been shown to be important in establishing the public-police contact process and police legitimacy (Sunshine & Tyler, 2003).

Current Study

The current study aims to extend our understanding of attitudes toward the police by examining how college students perceive the police and police services. Only a handful of studies have been conducted about attitudes toward the police using college students as a sample. This study also tests propositions about the interplay between demographic characteristics (e.g., race, gender, major, socioeconomic status) and police-student interaction (formal and informal). Especially, the study focuses on the effects of informal contact with police through attendance at a police hosted the "use of deadly force" training class and a "shoot, don't shoot" simulation exercise.

The current study was conducted at a mid-sized university located in the northeastern United States. The university is comprised of approximately 11,000 undergraduate students attending one of three campuses. The respondents used in this study are located in rural areas comprised predominately by white residents, which also makes up more than 70 percent of the undergraduate student body. The current study collected a balanced number of criminology majors and non-criminology majors since one of the primary goals of this study is to examine

whether there is a difference of perception about the police between those majoring in criminology and those not majoring in criminology.

Data for the current study were collected through the use of a survey method. The current study surveyed students enrolled in criminology courses and non-criminology courses (e.g., sociology). As recommended from a previous study (Tsoudis, 2000, p. 234), the survey was implemented at the start of the semester classes and again after the respondents have completed the training exercises. The survey completed at the beginning of the semester (pre-test) provided a baseline about what the respondents' perceptions are regarding police legitimacy and professionalism. A post-test survey was collected from the respondents approximately 30 days after they had completed the classroom training and the simulation training. The pre-test provided data with which to compare to the post-test data. Respondents reported their attitudes toward police with a focus on procedural justice and police legitimacy, personal and vicarious experiences with police (formal or informal), as well as the respondent's demographic characteristics. Various statistics were used to assess respondents' attitudes toward the police based on their experiences with police and demographic variables as well as the impact of the training, if any.

Organization of the Dissertation

A general overview for the completed study has been offered in this introduction section. Chapter II (Literature Review) addresses the empirical literature related to police officer legitimacy and professionalism, to include research findings as well as previous attempts by researchers to conceptualize and operationalize these variables for assessment. This chapter is designed to offer the reader a deeper insight into the literature related to police legitimacy and professionalism, and was used to guide the researcher in the development of a comprehensive

survey instrument. The literature review begins by reviewing research about the function of police and addressing the relationship between the public and police. A summation of the empirical findings related to attitudes toward the police are offered, along with a discussion about variables often moderately or highly correlated with attitudes toward the police, as well as a discussion about the mixed findings of several of these studies. Chapter II concludes with a discussion about why this study was required to fill a void identified in the literature related to attitudes toward the police, a justification for including or omitting previous concepts and articulated propositions from previous studies, and introducing the research question and foundation for this specific study.

The literature review is followed by the methodology section (Chapter III) where the research question is detailed, along with the dependent and independent variables used in the research. Each variable was conceptualized and operationalized so they would be accurately captured on the survey. Sampling procedures are addressed along with IRB protocol and the perceived strengths and weaknesses of the research design and survey. The methodology section concludes with the statistical analysis for the study, leading into the analysis section (Chapter IV). The results of the analysis section are highlighted in the discussion and conclusion section (Chapter V), along with recommendations for future research about this topic.

CHAPTER II

LITERATURE REVIEW

Police and Community Relations

In recent years, the public's attitude towards law enforcement has vacillated as government and media have taken a particular interest in use of excessive force, racial profiling, police misconduct, and other issues regarding the police and policing. Police scholars and criminal justice practitioners have renewed attention to improve police-community relations through government funding of both criminal investigations and research about this particular issue. In question is the public's confidence in the police, a confidence often regarded as the cornerstone for police legitimacy, and ultimately determines its longevity (Barbalet, 2009; Hatry, 1999; Lee & Gibbs, 2015; Rosenbaum et al., 2005). Thus, it is important to examine how the public views the police and assesses their performance so as to increase police accountability and the public's willingness to cooperate with the police (Sunshine & Tyler, 2003; Tyler, Schulhofer, & Huq, 2010).

Positive perceptions of law enforcement by the public are vital for the feasibility of police performance (Pullin, 2012). People will have a favorable perception of police functions when the citizens feel satisfied with police policies, procedures, and services (Weitzer & Tuch, 2005). As Skogan stated (2006, p. 118), "widespread confidence in the police makes law enforcement officers' work easier and more effective;" therefore, police organizations would benefit immensely from studies identifying the predictors affecting Attitudes toward the Police (ATP).

On the whole, the police organizations' efforts have been successful in achieving their goal that the public tends to hold a rather positive view about the police and the criminal justice system (Benedict, Brown, & Bower, 2000; Benson, 1981; Cullen et al., 1996; Homant, Kennedy,

& Fleming, 1984; Kaminski & Jefferis, 1998; Lundman, 1974; Mastrofski, Parks, Reiss, & Worden, 1998; Mastrofski, Parks, Reiss, & Worden, 1999; Miller & Davis, 2008; O'Brien, 1978; Radelet, 1980; Reisig & Giacomazzi, 1998; Reisig & Parks, 2000; Schuck et al., 2008; Thomas & Hyman, 1977; Tuch & Weitzer, 1997; Wilson, 1975). However, the empirical research consistently has found that perceptions about the police and their services is rather spread across different characteristics including race, ethnicity, age, gender, and education as well as community-cohesion-related attitudes and socioeconomic conditions (Brown & Benedict, 2002; Cao et al., 1996; Davis, 1990; Decker, 1981; Gau, 2010; Hindelang, 1974; Reisig & Correia, 1997; Schuck et al., 2008; Skogan, 2005; Weitzer, 2002).

The empirical literature that is foundational to this chapter is a compendium of studies about ATP. Specific attention is given to discussions about ATP among minority groups, citizens' direct and vicarious interactions with police, and other key determinant models tied to ATP. This literature review starts with a review of the history of policing and police reform and continues with the concept of ATP and what the research about this topic has discovered, police departments attempts to incorporate these findings into policy, the impact of education about police practices on the community, and the strengths and limitations of previous research to guide the current study.

History of Policing and Police Reform

Since the early nineteenth century, policing in the United States has gone through several changes, which many researchers focusing on police practices believe are reflected in three distinct eras: the political era, the reform era, and the community era. During these policing eras, several models of policing were practiced, which included: traditional policing, community policing, problem-oriented policing, zero-tolerance policing, and homeland security policing

(Greene, 2000; Kelling & Moore, 1988; Oliver, 2006). Although the material in Table 1 is intended to offer the reader a better understanding of the five models of policing, the focus of this discussion area relates to the more general concept of three distinct eras of policing, especially the current community era.

The Political Era

As the first era of policing, the political era began in the 1840s and extended into the 1920s, with the creation of the first bona fide police agencies in the United States. The first U.S. law enforcement agencies often functioned as an enforcement arm for local political factions; thus, the term “political era”. Unlike Goldstein’s (1977) representation of the police officer’s main function as that of preserving public order, policing became parcel and part to the political machine of that time (Oliver, 2006). For police officers during the political era, policing was considered only as steady employment (Walker, 1984). Since the police officer’s function was not certain and no social agencies existed, police delivered a wide range of services from dealing with crime and criminals, assisting as social workers and community organizers, to acting as the strong arm of politicians and corporations.

Oliver (2006) noted that during the political era of policing “Although the organization of these early police had military overtones, they were largely decentralized in their deployment with poor supervision and little in the way of management” (p. 52). With this result, the police strongly were tied to politics and were very close to the citizens they policed. This triad between the police, politicians, and the community members was fostered as the politicians needed community support for re-election. The police needed the politicians to be re-elected to maintain their employment, which was not yet based on civil service. Taking care of local community

issues and local community members was the primary focus of both the police and the politicians.

The outcome of policing was largely focused on maintaining the public's satisfaction with the police, keeping appearance of order, and performing the political machine's will (Oliver, 2006). However, many scholars argued that the political era was not successful, because it was unsuitable for maintaining control, dealing with crime, or delivering social services; it also often was very brutal and corrupt (Oliver, 2006). To ensure re-election politicians could use the police power to dissuade competition or to encourage local businesses to contribute political funds to specific candidates, while refusing financial and public support for others. Permits for political opponent's rallies could be denied or police would not intervene during protests at an opponent's political rally. As Walker (1977) suggests:

The "lawlessness" of the police—their systematic corruption and non-enforcement of the laws—became one of the most paramount issues in municipal politics during the nineteenth century. Repeated reform movements arose with an eye to alter police practices. The heart of the matter was not the question of law enforcement itself but the social and political dynamics of the urban community. Police corruption was part of the political machine, a means by which party favorites were allowed to conduct illegal businesses and by which the cultural styles of different ethnic groups were preserved (p. 25).

The Reform Era

According to Kelling and Moore (1988) the reform era was the time from the 1920s through the 1970s, with the movement toward a professionalization of policing. Early in the 20th century, people began calling for police reform since the police corruption and brutality were

rampant and aggravated by their strong links to local politicians. Early reformers began envisioning policing as an independent institution separated from political machines (Kelling & Moore, 1988). Beginning in the 1920s and blossoming in the 1930s, early reformers such as FBI director J. Edgar Hoover and Berkeley's police chief August Vollmer were pioneering a new model of policing. These police reformers emphasized a centralized command structure by taking a "top down" approach (Brickley, 2014). Their primary efforts were detaching the police from intimate ties with political machines and authorizing police organizations to hire through civil service examinations in order to attain political autonomy and efficiency (Walker, 1977).

The primary focus of policing during the reform era was the image of crime-fighter and law enforcer. As being rooted in the idea of professionalism, the police authorization became more centered on crime control and established in the criminal law (Oliver, 2006). Technological innovations such as motor vehicles and two-way radios also were utilized in order to provide more efficient service and achieve more professional approaches to policing. New technology permitted rapid responses to centralized calls for service and an emphasis was placed on preventive patrols. According to Walker (1998), three main forces were fundamentally defined in the 1930s as part of the reform era: (1) the introduction of the patrol car, which allowed mobility and a faster response removing police officers from foot patrol; (2) the development of the Uniform Crime Report (UCR) which offered a standard measurement of crime and defined police success in regards to crime control through arrests and clearances; (3) O.W. Wilson's (1952) ideas of police professionalism, which emphasized crime suppression and preventive patrol as the main task of police organizations.

During the reform era, the measure of success for police departments and officers were arrests and crimes solved (crime control). In fact, these efforts filtered down to the police-public

relations by altering their relationship somewhat from approachable and affable to detached and contentious (Goldstein, 1977; Walker, 1977). Implementing the concepts of police professionalism and the focus on centralized command and control, the reform era of policing was rather successful in terms of removing political corruption and police brutality. However, the distance between police and the public created conflicts and problems as a result of the patrol officer's diminished interaction with citizens. Community involvement was necessary for law enforcement agencies to solve crimes and maintain arrest rates. As the reform era had severed community relations from the police, a new policing model was required.

The Community Era

Despite the efforts and movement towards police professionalism, tension between the police and citizens continued to exist during the 1960s. In order to efficiently function and perform their job, the police began focusing on support from citizens, which led to the new era of policing, namely the 'community era' (Kelling & Moore, 1988). In general, the community era developed in response to the declining relations between the police and the public (Marion & Oliver, 2012). Though still rooted in the law (especially in the criminal law) and the concept of professionalism, the authorization of the police largely emphasized assistance from community members (Oliver, 2006).

Unlike the reform era, the community era focuses on decentralization of police organizations (Brickley, 2014). Without utilizing a law enforcement approach, individual police officers are given the discretion and flexibility to deal with community conflicts and problems (Kelling & Moore, 1988). The tactics in use during the community era include the return to foot patrols (and/or using bicycle or horse, etc.) so as to improve relations with the community. Numerous problem-solving and information systems are utilized to solve fundamental conflicts

and other issues within the community. As a result, the outcome of the community era focuses on the citizenry's quality of life and satisfaction with the police in their local communities (Oliver, 2006).

Unlike the political and reform eras, overall the community era may more reflect Goldstein's (1977) description of police duties as preserving public order. However, many practices and efforts employed as part of the community era have not completely removed tension between police and minority communities, especially the African American community. Recent incidents, like the riots in Ferguson, Missouri and Baltimore, Maryland; and police officer involved shootings of unarmed African American's civilians in several cities has increased the tensions between minority communities and the police. The police-community tension in several cities has escalated to a point where police officers are being targeted for retaliation. According to Cosgriff (2016), police officer gunfire deaths from January 01, 2016 through November 04, 2016 are at 51 officers slain, an increase of 59% over the same time frame for 2015. Although all of these deaths are not related directly to police and community tension, the deaths do add to this tension as police officers and the community members both recognize that police encounters are becoming more deadly for all involved.

Table 1 offers comparisons of social interactions and structural components of various forms of policing occurring under the community era. Oliver (2006) identified five models of policing (e.g., Traditional, Community, Problem-oriented, Zero-tolerance, and Homeland Security) that are in use across the United States following the September 11th terrorist attack (2001) in New York City. The social interactions and structural components for each model are highlighted. Of interest is the comparison between the social interactions and structural components related to the community policing model (current policing era) and the Homeland

Security model. Oliver suggests the United States transitioned from the Community Policing model to the Homeland Security model following the 9/11 attack and the continued threat of domestic and international terrorist attacks in the United States.

Table 1

Comparisons of Social Interactions and Structural Components of Various Forms of Policing

Social Interaction /Structural Dimension	Traditional Policing	Community Policing	Problem-Oriented Policing	Zero-Tolerance Policing	Homeland Security Policing
<i>Focus of policing</i>	Law enforcement	Community building through crime prevention	Law, order, and fear problems	Order problems	Security, antiterrorism, counterterrorism, law and order
<i>Forms of intervention</i>	Reactive, based on criminal law	Proactive, on criminal, and administrative law	Mixed, on criminal, and administrative law	Proactive, uses criminal, civil, and administrative law	Proactive, on criminal law and for mitigation and preparedness
<i>Range of police activity</i>	Narrow, crime focused	Broad crime, order, fear, and quality of life focused	Narrow to broad – problem focused	Narrow, location and behavior focused	Broad, security, terrorism, crime, fear
<i>Levels of discretion at line level</i>	High and unaccountable	High and accountable to the community and local commanders	High and primarily accountable to the police administration	Low, but primarily accountable to the police administration	High and primarily accountable to the police administration
<i>Focus of police culture</i>	Inward, rejecting community	Outward, building partnerships	Mixed depending on problem, but analysis focused	Inward focused on attacking the target problem	Mixed depending on threat, threat-analysis focused
<i>Locus of decision-making</i>	Police, directed, minimizes the involvement of others	Community-police coproduction-joint responsibility and assessment	Varied, police identify problems, but with community involvement and interaction	Police directed, some linkage to other agencies where necessary	Police directed with linkage to other agencies
<i>Communication flow</i>	Downward from police to community	Horizontal between police and community	Horizontal between police and community	Downward from police to community	Downward from police to community

<i>Range of community involvement</i>	Low and passive	High and active	Mixed depending on problem set	Low and passive	Mixed depending on threat
<i>Linkage with other agencies</i>	Poor and intermittent	Participative and integrative in the overarching process	Participative and integrative depending on the problem set	Moderate and intermittent	Participative and integrative in the overarching process
<i>Type of organization and command focus</i>	Centralized command and control	Decentralized with community linkage	Decentralized with local command accountability to central administration	Centralized or decentralized but internal focus	Centralized decision making, decentralized execution
<i>Implications for organizational change/development</i>	Few, static organization fending off the environment	Many, dynamic organization focused on the environmental interactions	Varied, focused on problem resolution but with import for organization intelligence and structure	Few, limited interventions focused on target problems, using many traditional methods	Varied, focused on security and threat, but with import for intelligence and structure
<i>Measurement of success</i>	Arrest and crime rates, particularly serious Part 1 crimes	Varied, crimes, calls for service, fear reduction, use of public places, community linkages and contacts, safer neighborhoods	Varied, problems solved, minimized, displaced	Arrests, field stops, activity, location-specific reductions in targeted activity	Arrests, field stops, intelligence gathering, mitigation and preparedness

Note. From “The Fourth Era of policing: Homeland Security” by Oliver, W. M. 2006, *International Review of Law Computers & Technology*, 20(1-2), p. 56-57.

Attitudes Toward the Police

The Importance of Attitude Toward the Police (ATP)

In the United States, the police are considered the most visible government institution to the community. Citizens' views of police behavior and police work can have large ramifications for not only the legitimacy of law enforcement officers, but also for the entire criminal justice system as it relates to the concept of a social contract and formal social control. The concept of a social contract with the society legitimizes the concept that the police are not the enforcement branch for any particular group, but are sworn to uphold the laws of the nation as identified and enacted by legislatures. The police are limited in their ability to deal with crime, criminals, and other violations of society's laws without public support (Rosenbaum et al., 2005). The Community Policing Consortium (1994) states:

Community policing is, in essence, a collaboration between the police and the community that identifies and solves community problems. With the police no longer the sole guardians of law and order, all members of the community become active allies in the effort to enhance the safety and quality of neighborhoods (p. vii).

Thus, collaborative relations between police and the public are important for success in implementing community policing. In particular, negative perceptions of police can affect a citizen's willingness to assist the institution (Cooper, 2015; Renauer & Covelli, 2010; Sunshine & Tyler, 2003; Tyler & Wakslack, 2004), to support in police functions and investigations (Cooper, 2015; Renauer & Covelli, 2010; Skogan & Hartnett, 1997; Stoutland, 2001; Sunshine & Tyler, 2003), and even obey the law (Cooper, 2015; Paternoster et al., 1997; Renauer & Covelli, 2010; Stoutland, 2001; Sunshine & Tyler, 2003; Tyler, 1990). Murty, Roebuck, and

Smith (1990) also suggested that positive images of law enforcement by the citizenry are essential so as to help the police to perform their job effectively.

Although the public has had widespread suspicion or hostility toward the police, literature has shown that most Americans tend to have a favorable ATP (Benedict et al., 2000; Cao et al., 1996; Chackerian, 1974; Chermak et al., 2001; Cheurprakobkit & Bartsch, 1999; Davis, 1990; Dunham & Alpert, 1988; Furstenberg & Wellford, 1973; Gourley, 1954; Hadar & Snortum, 1975; Hindelang, 1974; Kaminski & Jefferis, 1998; Koenig, 1980; Marenin, 1983; Priest & Carter, 1999; Reisig & Giacomazzi, 1998; Scaglione & Condon, 1980a; Schuck et al., 2008; Shaw et al., 1998; Smith et al., 1991; Smith & Hawkins, 1973; Sullivan, Dunham, & Alpert, 1987; Thomas & Hyman, 1977; Zevitz & Rettammel, 1990). A recent Gallup Poll (McCarthy, 2016) conducted nationally in the United States indicated that 76% of the respondents had “a great deal of respect” for the police in their area, 17% had “some respect” for police in their area, and only 7% had “hardly any” respect for police in their area. This annual poll conducted since 1965, notes that “a great deal” of respect for police in your area is the 2nd highest ever recorded in the 41 years of polling (highest 1968 – 77%).

The Gallup Polls demographic data indicate that nonwhite respondents’ respect for police officers in their area is at 67%, which is 14 percentage points higher than 2015. Of interest is that since 2005 through 2015, nonwhite respect for police officers in their area was unchanged, remaining at 53% for an 11 year period. There are two issues with the Gallup poll data. The first is a historical issue where the data were collected as scheduled, each October, which coincides in 2016 with a rash of media awareness of police officers being ambushed and killed in many parts of the country. Reports of officers being killed at the same time the survey is being conducted

could have impacted responses. The second issue discussed in more detail is how respondents operationalized the term “respect”.

For example, by focusing on instrumental attitudes (e.g., satisfaction with police, assessment of police fairness, job performance or respect for police), Peek et al. (1978) examined “the degree to which the general public like the local police in relation to how well they like 15 other well-known organizations,” (e.g., United States, FBI, and local police) (p. 371). They used the data from a 1973 Gallup poll of 1,554 adult Americans. In general, Peek et al. (1978) found that the general public expresses a significantly more favorable view toward the United States and FBI than the local police. This research also indicated that the general public expressed a more favorable view toward the police than other organizations, including the American Medical Association (AMA), Congress, the Supreme Court, and the Press (p. 372).

A study from The Bureau of Justice Statistics and Office of Community-Oriented Policing Services that included approximately 13,000 citizens living in 12 cities showed that “Nearly 80 percent or more of the residents in each city were satisfied with the police in their neighborhood” (Smith et al., 1999, p. v). Moreover, the 2006 Gallup poll conducted a national survey with a randomly selected national sample of 1,001 American adults (18 years of age and older). They asked the public about confidence in the police, “how much confidence do you have in the police?” and “how much confidence do you have in the ability of the police to protect you from violent crime?” (Source of Criminal Justice Statistics, 2007). The result showed that 58% of citizens expressed they have a great deal of/quite a lot confidence in the police, and 61% expressed that they have a great deal of/quite a lot confidence in the police’s capability to deal with violent crime (Pastore & Maguire, 2007). However, there are clear differences in the

public's attitudes across racial and ethnic groups. While 70% of whites expressed positive views of the police, only 41% of African-Americans expressed the same sentiment (Pastore & Maguire, 2007). As such, numerous research findings suggest that the attitudes vary across different backgrounds and different communities. In addition, not only demographic variables but police-public contact variables play an important role in shaping the public's ATP. For example, it appears that the more encounters people have with the police, the less likely people have favorable attitudes toward them (Bradford et al., 2009; Tyler & Fagan, 2008).

Considering community-based policing is grounded in enhancing police-public relations (Goldstein, 1977), research related to police-public interactions, especially the variables associated with positive and negative community members' ATP should be of particular interest to police scholars and police organizations. The following section summarizes the key findings from the selected research about ATP.

Traditional Work About Attitudes Toward the Police

Although recent events have brought forth a new round of questions about police professionalism, police legitimacy, and ATP; this is not a new topic of research or public discourse. The original research that provided considerable insights about the public's perception of U.S. policing was Bellman's (1935) "police service rating scale" (Brown & Benedict, 2002). Bellman developed the scale for rating "a police organization according to certain standards" (Bellman, 1935, p. 75). His scale was created to achieve a twofold purpose: "the rating of a police organization according to certain standards, and the improvement of the service" (Bellman, 1935, p. 75). Bellman stated (1935): "This study reports an attempt to devise standard

units of measurement for police departments whereby the quality of the department can be quantitatively measured” (p. 75-76). Bellman (1935) also suggested:

This scale is by no means offered as a finished product. It is only in the beginning and experimental stages, and needs now to be subjected to practical use in order that further improvements may be made and its ultimate value determined. (p. 79)

Bellman’s police service rating scale was an important initial step to develop an assessment tool of police performance and service, but also to identify the need for assessment of police performance. However, many scholars criticized his measurement of the internal evaluation (self-assessment) of police effectiveness. Brown and Benedict (2002) and Lai (2011) have pointed out Bellman’s scale was created to conduct a departmental self-assessment rather than a public evaluation. For instance, part of the survey included asking police officers to assess their own performance (e.g., beat construction and patrol duties).

Subsequently, Parratt (1937, 1938) developed a scale similar to that of Bellman to evaluate police performance and professionalism, but used the public as respondents, who were the receivers of the services and not the providers (Brown & Benedict, 2002). Parratt argued that a citizen’s perception of police performance was required as “there are some matters involving theoretical and conceptual considerations of evaluation of police functioning” (Parratt, 1937, p. 895), suggesting that a self-reflection on one’s own proficiency might be biased. Shortly thereafter, Parratt (1938) developed an additional subscale to measure “citizen approvals or disapprovals of police administration” (p. 744). Specifically, the scale of “public and press relations and crime prevention” was included in Parratt’s work (p. 744). While studies about ATP began from the era of August Vollmer, who helped Bellman’s (1935) work, this topic has

gained much attention only within the last few decades (Brown & Benedict, 2002) as policing has transitioned from the reform era associated heavily with arrests and clearance rates to the community era, where police functions rely heavily on community support and interaction.

Since Parratt's (1937, 1938) attempt to capture the community's perception of police proficiency and professionalism, most studies about ATP have focused on its determinants and paid little attention to the dynamics and complexity of perceptions (Webb & Marshall, 1995). In general, ATP research largely has overlooked different dimensions of the independent variables. Only a few empirical studies of ATP have utilized rigorous measurement scale development techniques (Webb & Marshall, 1995). One of the well-known works in the field is Decker's (1981) research about ATP. Decker (1981) assessed respondents' ATP using multi-dimensional measures to include individual-level factors (e.g., race, age, gender, and socioeconomic status) and contextual factors (e.g., criminal victimization, crime rates). Still, his research offers no discussion about the perceived interaction of these dimensions as they relate to an individual's ATP (Webb & Marshall, 1995).

Since Decker's article published in 1981, the volume of empirical research about ATP has increased considerably. However, Webb and Marshall (1995) argue that the measurement of ATP has remained unrefined, which echoes the earlier observations of other research about ATP. Sullivan et al. (1987) provided a comprehensive review about ATP. They noted about the ATP research: "none examines the underlying structures of these attitudes or the possibility that fundamental differences exist among the various groups" (p. 179). Sullivan et al. (1987) argued that attitudes are "multidimensional, multifaceted and complex;" therefore, the research

assessing ATP should consider its appropriateness of the measure for different groups, for instance, considering age and ethnic groups (p. 179).

General/Global Evaluation of Attitudes Toward the Police

In the 1960's and early 1970's, the research about ATP was popular among police scholars and criminal justice practitioners due to the incidents that happened during the tumultuous years of social unrest and public hostility of that period (Sullivan et al., 1987). A growing number of people were concerned with the problem of how the public view the police when racial and youth violence occurred during the 1960s (Albrecht & Green, 1977). For instance, the report from the President's Commission on Law Enforcement and the Administration of Justice (1967) found that many police agencies were concerned with enhancing the police-community relations and strengthening their accountability so as to increase their legitimacy. This report, along with the opportunity for federal funding, encouraged many scholars to assess the public's opinion of the police (Sullivan et al., 1987). The primary focus of the President's Commission on Law Enforcement and the Administration of Justice (1967) report was concerning the differences in ATP identified between whites and minority populations. This report concluded that poor police-public relations had a negative impact on police officers' abilities to deal with crime and criminals:

People hostile to the police are not so likely to report violations of the law, even when they are the victims. They are even less likely to report suspicious persons or incidents, to testify as witnesses voluntarily, or to come forward and provide information ... Yet citizen assistance is crucial to law enforcement agencies if the police are to solve an appreciable portion of the crimes that are committed ... (p. 144)

The report's findings indicated that nonwhites, especially African Americans, rated police work and police behavior much lower than that of whites and other minority populations. The Kerner Commission (1968) conducted research about the public's perception of the police. The research covered 15 major U.S. cities and focused on the residents' perceptions of their local police and police officers in general. The results of the Kerner Commission report called attention to the tension between ghetto communities and the police.

As ATP research advanced from the 1970s through the 1990s, the majority of the findings suggested African Americans were significantly less positive than whites in their assessment and judgments of the police (Webb & Marshall, 1995). Some found that the race variable had a stronger association with ATP than other predictors such as age, gender, or socioeconomic status (Sullivan et al., 1987). From a research design perspective, much of this early research about ATP, which identified the African American population as less supportive of police than whites or other minorities was not vigorous in design, often being unidimensional.

Schafer et al. (2003) and Webb and Marshall (1995) noted in their research that many assessments of ATP continued to use a one-dimensional construct. In 1995, a Gallup poll asked the public about their confidence in the police with a single item, "How much confidence do you have in the police?" (Bureau of Justice Statistics, 1995, p. 133). Skogan (1978), in the surveys conducted by the U.S. Census Bureau in 1975, also used a single item to examine citizen satisfaction with police service. Respondents were asked to answer their level of agreement with the statement: "Would you say, in general, that your local police are doing a good job, an average job, or a poor job?" Similarly, Correia et al. (1996) used a single item by asking respondents' level of agreement with the statement: "Overall, the Washington State Patrol does a

good job at performing their mission” (p. 20). Although many scholars utilized a single item to examine general ATP (e.g., Cao & Zhao, 2005; Carter, 1985; Frank et al., 2005; Kusow, Wilson, & Martin, 1997; Payne & Gainey, 2007; Scaglione & Condon, 1980a; Skogan, 1978), there is an increasing body of literature that employs multiple-item to tap into the global ATP behavior and perceived satisfaction with police work.

Multidimensional Construct of Attitudes Toward the Police

Since the early 1980s, multidimensional construct of ATP has developed with the significance of complex measures of attitudes. A body of literature shows that attitudes are seldom unidimensional. Sullivan et al. (1987) argued that one-dimensional constructs of attitudes are useful only if members of a group share similar or same cognitive structures of the attitudes. In fact, attitudes are “multidimensional, multifaceted and complex” (Sullivan et al. 1987, p. 179). Sullivan et al. (1987) argued that different members of groups may have different ways of “conceptualizing aspects of policing” (p. 177). They pointed out that different age and ethnic groups may not share the same ATP.

With the significance of multiple aspects of ATP, scholars have developed different ways of conceptualizing police performance from a general/global to specific facet. Based on multifaceted measurements, Scaglione and Condon (1980b) investigated ATP and policing in general with a multidimensional scope. They assessed the ATP from black and white respondents and found that even with the use of a multi-dimensional scope, blacks had significantly less favorable views of the police than whites. Further, Scaglione and Condon (1980b) suggested that there needs to be studies which focus on the multifaceted formation of

attitudes; basically, it has been identified that there is a difference in ATP between blacks and whites, but research findings have failed to isolate the source of that difference.

Dunham and Alpert (1988) indicated that people in neighborhoods that echoed different cultures had distinct values regarding police practices. More specifically, they found the “culturally distinct” differences of conceptualization of ATP in five Miami areas (Dunham & Alpert, 1988, p. 507). By conducting factor analysis, Dunham and Alpert (1988) identified five different domains about ATP: Demeanor, Responsibility, Discretion, Ethnic, and Patrol. Lai (2011) pointed out that the measurements developed by Dunham and Alpert (1988) were regarded as the first to alter ATP research from a unidimensional to a multidimensional scope. With the focus of the fundamental and complex formation of ATP, Webb and Marshall (1995) also examined the complexity of ATP in a variety of populations including blacks, Hispanics, and whites in the metropolitan area of Omaha, Nebraska. They found that race had the greatest impact on ATP dimensions. Other factors that had a significant impact included age, gender, and contact with police.

Some researchers (e.g., Brandl et al., 1994, Reisig & Giacomazzi, 1998, Schuck & Rosenbaum, 2005) attempted to differentiate the two-dimensional model (the general and specific construct) of ATP. For example, Easton (1965) offered a general basis for global and specific ATP. He found two structures of citizens’ support: diffusive and specific support (see Easton, 1965). By adopting his framework, Dennis (1976) elaborated these two structures to evaluate the level of support for the institution. Further, White and Menke (1982), by capturing both the general and specific frameworks identified by Dennis, compared the two constructs of

ATP. They found that general measures turned out to be more favorable attitudes about the police than did the specific measure (White & Menke, 1982).

Much of the research that purportedly captured general and specific constructs of ATP produced mixed results. Some research that focused on general constructs found positive ATP (e.g., Benson, 1981; Koenig, 1980); while other studies that focused on specific constructs (e.g., police-citizen contacts) found less positive attitudes (e.g., Percy, 1980; Poister & McDavid, 1978). Brandl et al. (1994) pointed out that these discrepancies between studies were predictable since each study used different variables and measurements (e.g., nature of the sample, format and wording of questions). Although these studies failed to support the findings of similar studies, the fault was with the lack of replication and not necessarily the two constructs identified by Dennis (1976). Although the findings of these various studies offered mixed results and little support for the findings of similar studies, they each offered a perspective about how to assess ATP with multidimensional constructs. Table 2 lists several studies that have attempted to capture ATP using multidimensional assessment instruments.

Table 2

Selected Studies of Attitudes Toward the Police (ATP)

Study	Scope of Attitudes Toward the Police (ATP)	Measure of Multi-Item Combination of ATP
Webb & Marshall (1995)	Attitudes toward the police	<ol style="list-style-type: none"> 1. Officer demeanor (ODEM Scale) 2. Officer responsibility (RCC Scale) 3. Officer discretion (DISC Scale) 4. Officer patrol strategy (APS Scale) 5. Officer characteristics (OCHR Scale)
Cao et al. (1996)	Confidence in the police	<ol style="list-style-type: none"> 1. When people in my neighborhood call the police, they come right away. 2. The police do a good job in my neighborhood in making sure that no one disturbs the peace. 3. The police care a lot about the safety of the people in my neighborhood. 4. The police do a good job in protecting me against crime. 5. There are not enough police in my neighborhood to deal with crime.
Frank et al. (1996)	Satisfaction with Police	<ol style="list-style-type: none"> 1. In general, how satisfied are you with the police? 2. How good a job are the police doing controlling the street sale and use of illegal drugs in your neighborhood? 3. How good a job are the police doing to keep order on the streets and sidewalks in your neighborhood?
Huang & Vaughn (1996)	Confidence and support for police	<ol style="list-style-type: none"> 1. Crime protection 2. Crime solving 3. Crime prevention 4. Promptness 5. Friendliness 6. Fairness 7. Use of force
Reisig & Correia (1997)	Evaluations of police performance	<ol style="list-style-type: none"> 1. The [name of the policing agency] officers treat all citizens equally. 2. [Name of policing agency] officers are usually courteous. 3. Indicate the quality of service provided by [name of policing agency].

Sampson & Jeglum Bartusch (1998)	Satisfaction with police	<ol style="list-style-type: none"> 1. The police in this neighborhood are responsive to local issues. 2. The police are doing a good job in dealing with problems that really concern people in this neighborhood. 3. The police are not doing a good job in preventing crime in this neighborhood (reverse coded). 4. The police do a good job in responding to people in the neighborhood after they have been victims of crime. 5. The police are not able to maintain order on the streets and sidewalks in the neighborhoods (reverse coded).
Reisig & Parks (2000)	Satisfaction with police	<ol style="list-style-type: none"> 1. How satisfied are you with the quality of police service in your neighborhood? 2. Police provide services that neighborhood residents want? 3. How would you rate the job the police are doing in terms of working with people in your neighborhood to solve local problems?
Sims et al. (2002)	Attitudes toward the police	<ol style="list-style-type: none"> 1. Harrisburg police are quite open to the opinions of citizens. 2. Harrisburg police respond to citizens' calls for service in a timely manner. 3. Harrisburg police officers are easy to contact. 4. Rating of police on working with police in neighborhood to solve community problems.
Ho & McKean (2004)	Confidence in the police	<ol style="list-style-type: none"> 1. Asheville Police Department (APD) does a good job. 2. Police respond to minorities fairly. 3. Comfortable asking APD for assistance.
Howell et al. (2004)	Evaluations of police	<ol style="list-style-type: none"> 1. Quality of police protection. 2. Police response time. 3. Police effectiveness in apprehending suspects. 4. Police courtesy.
Hwang, McGarrell, & Benson (2005)	Satisfaction with police performance	<ol style="list-style-type: none"> 1. Police officers perform politely in handling traffic accidents or violations. 2. Police investigators in my jurisdiction are kind and helpful even when consulted on a case that is not under their jurisdiction. 3. Police officers in my jurisdiction investigate fairly regardless of the difference of social status of victims.

		<p>4. Recent reduction of work hours for officers in police substation resulted in officers in my jurisdiction performing better than in the past.</p> <p>5. I am satisfied with the police service in my jurisdiction.</p>
Nofziger & Williams (2005)	Confidence in police	<p>1. Solving crimes (finding and arresting perpetrators).</p> <p>2. Working with the community to prevent crime.</p> <p>3. Deterring crime by being a visible presence (patrolling, etc.).</p> <p>4. How well do you think the [name] PD is prepared to handle a major crisis?</p>
Ren et al. (2005)	Confidence in the police	<p>1. The police officers are usually fair.</p> <p>2. The police officers are usually courteous.</p> <p>3. The police officers are usually honest.</p> <p>4. The police officers are usually not intimidating.</p> <p>5. The police officers work with citizens together in solving problems.</p> <p>6. The police officers treat all citizens equally in general.</p> <p>7. The police officers show concern when asked questions.</p>
Rosenbaum et al. (2005)	Evaluation of police performance	<p>1. Being responsive to community concern.</p> <p>2. Preventing crime in community.</p> <p>3. Being polite to residents.</p>
Weitzer & Tuch (2005)	Satisfaction with police	<p>1. In general, how satisfied or dissatisfied are you with the police department in your city?</p> <p>2. In general, how satisfied or dissatisfied are you with the police officers who serve your neighborhood?</p>
McCluskey et al. (2008)	Satisfaction with police	<p>1. How satisfied are you with the quality of police service in your neighborhood?</p> <p>2. How strongly do you agree or disagree with that police provide services that neighborhood residents want?</p> <p>3. How would you rate the job the police are doing in terms of working with people in your neighborhood to solve local problems?</p>
O' Connor (2008)	Rating police performance	<p>1. Do you think your local police force does [rating] at enforcing laws?</p> <p>2. Do you think your local police force does [rating] at promptly responding to calls?</p> <p>3. Do you think your local police force does [rating] at being easy to talk to?</p>

		4. Do you think your local police force does [rating] at supplying information? 5. Do you think your local police force does [rating] at ensuring safety?
Dai & Johnson (2009)	Satisfaction with police	1. How satisfied are you with the police? 2. How satisfied are you with the job the police are doing working together with the residents of your neighborhood to solve local problems? 3. How satisfied are you with the job the police are doing in your neighborhood to prevent crime?
Dukes et al. (2009)	Satisfaction with police service	1. Overall, how satisfied are you with the quality of police service in your neighborhood? 2. How would you rate the job police are doing in terms of working with people in your neighborhood to solve neighborhood problems? 3. How effective are the Colorado Spring police officers in reducing citizens' fear of crime?
Sprott & Dobb (2009)	Rating police work	1. Enforcing laws 2. Promptly responding to calls 3. Being approachable 4. Providing information to the public about how to reduce crime 5. Ensuring citizen safety 6. Treating people fairly
Wu et al. (2009)	Satisfaction with police	1. The police play an important role in preventing crime in this neighborhood. 2. The police do a good job in responding to people in this neighborhood after they have been victims of crime. 3. Police are generally helpful when dealing with people in this neighborhood.
Mbuba (2010)	Attitudes toward the police	1. Police provide an important service to the community 2. Police are too harsh on crime suspects 3. Police break the law all the time 4. Police arrest only people they don't like 5. Police unfairly target racial minorities 6. Police arrest only poor people 7. Most traffic violation tickets are unfair 8. Police are corrupt; they accept bribes 9. More racial minority police officers will reduce crime 10. It's risky to report crime to the police; they'll turn around against you

		<p>11. Never volunteer information to the police; it's their duty to look for criminals</p> <p>12. Police should focus on dangerous criminals, not traffic violators</p> <p>13. Police are to blame for the high rate of crime</p> <p>14. I would recommend my child/close family member to be a police officer</p>
Lai (2011)	General and Specific attitudes toward the police	<p>General attitudes toward the police (GATP)</p> <p>1. The [name of the policing agency] officers are courteous.</p> <p>2. The [name of the policing agency] officers are respectful toward people like me.</p> <p>3. The [name of the policing agency] officers are fair.</p> <p>4. The [name of the policing agency] officers are communicated very well.</p> <p>Specific attitudes toward the police (SATP)</p> <p>1. Response time to calls for service.</p> <p>2. Police visibility.</p> <p>3. Crime prevention efforts.</p> <p>4. Interaction with citizens.</p>
Hawk-Tourtelot & Bradley-Engen (2012)	Satisfaction with police	<p>1. Generally how satisfied with the police would you say you are? (a single item)</p>
Wu (2014)	Public perceptions of the police	<p>1. Problem-solving: The police are doing a good job in dealing with problems that really concern people in this neighborhood.</p> <p>2. Police hassling: In this neighborhood, the police just hassle residents, rather than being helpful</p> <p>3. Racial profiling: Racial profiling is a problem in this neighborhood.</p> <p>4. Police bias:</p> <p>1) Whether or not they think that the police treat wealthy people better than poor people,</p> <p>2) Whether or not they think that the police treat White people better than Black people,</p> <p>3) Whether or not they think that the police treat White people better than Asians,</p> <p>4) Whether or not they think that the police treat White people better than Hispanics,</p> <p>5) Whether or not they think that the police treat English-speaking people better than non-English-speaking people</p>

Lee & Gibbs (2015)	Confidence in police	<ol style="list-style-type: none"> 1. How much confidence do you have in the police 2. I am satisfied with the police 3. The police are responsive to the community concerns in my neighborhood
Lim (2015)	Trust in the police and biased policing	<p>Trust in the police</p> <ol style="list-style-type: none"> 1. I am confident in the police. 2. The police are responsive to community concerns in my neighborhood. 3. The police are doing a good job in controlling the sale and use of illegal drugs in my neighborhood. 4. The police are doing a good job in controlling gang activities in my neighborhood. 5. The police are doing a good job in controlling violent crimes in my neighborhood. 6. I am satisfied with the police. <p>Biased policing</p> <ol style="list-style-type: none"> 1. Police officers stop or arrest people of certain racial or ethnic groups in the USA. 2. Police officers use excessive force against people of certain racial or ethnic groups in the USA. 3. People of certain racial or ethnic groups are more severely punished in the USA.
Madan & Nalla (2015)	Satisfaction with the police	<ol style="list-style-type: none"> 1. I am satisfied with the police service in my neighborhood 2. Generally, I am satisfied with the way police persons conduct themselves

Note. Adapted from “The determinants of public attitudes toward the police across racial/ethnic groups in Houston” by Lai, Y. L, 2011, Unpublished doctoral dissertation, Sam Houston State University

The Determinants of Attitudes Toward the Police: Selected Literature

Given the importance of the need for multidimensional constructs to capture respondent’s attitudes, a review of the current literature offers insight into several possible key determinants often employed to examine citizens' ATP (Brown & Benedict, 2002; Weitzer & Tuch, 2005). Though the findings are inconclusive, previous research suggests that demographic variables such as race, age, gender, and education and other variables such as neighborhood conditions, direct contact with police, indirect contact with police through friends and family, and media

exposure all play a significant role in shaping citizen's perception of police. Schafer et al., (2003) states, "...variations have been found based on respondent characteristics, neighborhood context, contact with the police and the way in which research questions are worded" (p. 422). Studies about ATP consistently have focused on these areas and found that young, minority groups, in disadvantaged neighborhoods show less positive attitudes toward the agents of law enforcement (Huebner, Schafer, & Bynum, 2004; Wu, Sun, & Triplett, 2009), each of these demographic constructs is discussed based on previous research findings related to their impact on ATP.

Demographic Determinants

Previous studies about the community members' attitudes toward the police as related to effectiveness, fairness, trustworthy, mutual respect, and other indicators of police community relations primarily have focused on demographic characteristics of the community members. Demographic variables such as race, age, gender, socioeconomic status, and education have been examined as significant determinants in shaping citizens' perceptions of the police (Brandl et al., 1994; Cao et al., 1996; Carter, 1985; Frank et al., 1996; Lai & Zhao, 2010; Madan & Nalla, 2015; Reisig & Giacomazzi, 1998; Reisig & Parks, 2000; Ren et al., 2005; Sims, Hooper, & Peterson, 2002; Schuck et al., 2008; Skogan, 1978; Webb & Marshall, 1995; Weitzer & Tuch, 2005).

The Effects of Race

Of the key demographic determinants, race has been identified through research as one of the most prominent predictors of perceptions of the police (Weitzer & Tuch, 2005). Weitzer and Tuch (2005) pointed out that race often was distinguished as an important determinant about citizens' attitude toward the police. Extensive empirical research has identified a statistically

significant racial/ethnic divide in community members' responses about the fairness and equity of the criminal justice system in general, and police officers' actions especially when policing in the minority communities, since the 1960s. Most research has indicated that racial minority group, especially African Americans, tend to hold less favorable views towards the police than other racial groups, especially whites (Albrecht & Green, 1977; Brandl et al., 1994; Carter, 1985; Correia et al., 1996; Decker, 1981; Decker & Wagner, 1981; Frank et al., 1996; Lai & Zhao, 2010; Miller & Davis, 2008; Reisig & Parks, 2000; Schuck et al., 2008; Skogan, 2005; Tyler & Wakslak, 2004; Weitzer & Tuch, 2005; Wu et al., 2009), and African Americans perceive the criminal justice system in a less favorable way than whites (Hurwitz & Peffley, 2005).

Tyler (2005) examined public trust and confidence in the police in terms of ethnic group differences and found that minority group tends to perceive greater levels of injustice when they interacted with the police than whites' reported when interacting with the police. Alpert et al. (2007) argued that this finding could be explained by that fact that minority groups are more likely to have negative interactions with the police and become involved in the criminal justice system more than any other racial group. Thus, this makes those minority groups more likely to have distrustful attitudes toward the police (Alpert, Dunham, & Smith, 2007). Yet, Mbuba (2010) argued that it remains unclear whether this notion is "a result of differential involvement in crime or selective application of the law" (p. 203).

Some researchers have asserted that the effect of race on negative attitudes toward the police is reduced when other factors are considered (e.g., socioeconomic status) (Dowler & Sparks, 2008). However, Wu et al., (2009) argued that Dowler & Sparks findings were not consistent with their study that indicated socioeconomic status does not impact a person's

opinion about the police and the criminal justice system. Wu et al. pointed out that racial minority groups at higher socioeconomic levels still were more likely hold negative views about the police than were the white citizens in the same area (Wu et al., 2009).

Research has suggested that African Americans' ATP are influenced by poor environmental conditions found in many urban areas. For example, some argued that African Americans residing in Chicago, Los Angeles, St Louis, and Philadelphia tend to hold more negative views of the police than do other residents of those cities (Skogan, 1978). However, Kusow et al. (1997) noted that there were few differences of the assessment of police when they controlled for respondent's race in a similar study of ATP in Atlanta and Denver. Further complicating the issues of race as it relates to ATP, Frank, Brandl, and Cullen (1996) reported that their research suggested that in Detroit African Americans respondents held a more positive ATP than did white respondents. Frank et al. (1996) explained this exceptional result was the result of Detroit having a population that was primarily African American, which has elected an African American Mayor, Town Council, Police Chief, and the majority of the patrol officers are African American. Frank et al. (1996) explained that: "Because Whites are now a minority in the city, it is quite possible that they hold attitudes previously reserved for 'minority'-group members" (p. 332).

Although many ATP studies related to race have focused on African American respondents, a few have focused on Hispanic groups. Studies have found that Hispanic groups as a minority also reported being treated unfairly by the police in a similar fashion as identified by African American respondents (Sullivan et al., 1987). Although research suggests that African Americans and Hispanics might report similar ATP levels, the foundation for these attitudes may

be different. For instance, Carter (1983) examined cultural dynamics of attitudes about crime and the criminal justice system among Hispanics group and found differences among the Hispanic population that were significantly different than other racial minorities. The most salient finding is that Hispanic groups report that they believe the police can reduce the occurrence of crime in the community, yet evaluate law enforcement officers less favorably than the general public (Carter, 1983). Weitzer and Tuch (2005) sampled multiple racial categories of respondents (e.g., African Americans, Hispanics, and whites) to measure their satisfaction with the police. They found that the perception of effective crime control was a strong determinant of citizens' satisfactions with the police for all groups.

A considerable body of research exists that has focused on an individual's race as an indicator of his or her ATP. Most studies indicated African Americans and Hispanics were less favorable than whites in their evaluations of police officers' performances. Certain studies identified that a respondent's race was a better predictor of his or her attitude toward the police or assessment of police duties in the community than other demographic predictors such as age, gender, socioeconomic status, or education (see Albrecht & Green, 1977).

Although the relationship between race and ATP has been accepted in much of the research, the relationships between other variables (e.g., age, gender, education, etc.) with ATP often have been confounded by mixed research results (Campbell & Schuman, 1972; Cao et al., 1998; Frank et al. 2005; Hinds 2009; Madan & Nalla, 2015; Ren et al., 2005; Rosenbaum et al. 2005; Weitzer & Tuch, 2005).

The Effects of Age

Age of the respondent often is found as a consistent determinant to predict citizens' ATP. Previous studies yielded a positive relationship between age and the public's assessment of the police. In general, research findings have suggested that older citizens tended to have more favorable attitudes toward the police and be more satisfied with police service; while younger citizens tended to have less favorable views of the police and are less satisfied with their performance (Campbell & Schuman, 1972; Decker, 1981; Dunham & Alpert, 1988; Feagin, 1970; Hadar & Snortum, 1975; Kusow, Smith & Hawkins, 1973; Murty et al., 1990; Sullivan et al., 1987; Walker, 1972; Webb & Marshall, 1995; Wilson, & Martin, 1997). Dunham and Alpert (1988), for example, examined differences of ATP for age group and ethnic group. The greatest findings were differences between adults and teens (Dunham & Alpert, 1988). Some studies showed little support for the relationship between age and ATP (Davis, 1990; Jacob, 1971).

The Effects of Gender

Prior studies related to the effects of gender on citizens' ATP have shown insignificant or inconsistent results (Benedict et al., 2000; Brown & Benedict, 2002; Cao et al., 1996; Correia et al., 1996; Frank et al., 2005; Kusow et al., 1997; Lai & Zhao, 2010; Madan & Nalla, 2015; Reisig & Correia, 1997; Reisig & Giacomazzi, 1998; Thurman & Reisig, 1996). The majority of these studies suggest that when controlling for other variables, males often hold less favorable views of the police than females, but the difference often is not statistically significant (Cao et al., 1996; Churprakobkit, 2000; Correia et al., 1996; Lai & Zhao, 2010; Reisig & Correia, 1997; Reisig & Giacomazzi, 1998; Reisig & Parks, 2000; Weitzer & Tuch, 2005).

Researchers have suggested that the differences in ATPs based on gender could be associated with several factors: 1) males were more likely engage in criminal activity than females at all ages; 2) officers treat females differently related to both the concept of chivalry and to the perception that females are less of a threat for confrontation; and 3) males stopped by the police are more likely to be confrontational leading to physical force, which results in arrests rather than warnings (Mbuba, 2007; Rowe, Vazsonyi, & Flannery, 1995; Steffensmeier & Allan, 1996). Jefferis, Kaminski, Holmes, and Hanley (1997) stated that “males are somewhat more likely than females to believe that the police use too much force” (p. 389). Jonas and Whitfield (1986) conducted research about satisfaction with police officers in New Zealand and reported that females were more likely satisfied with police officers dealing with issues than where male respondents.

Some research findings have suggested that females hold less favorable views of the police than males (Brown & Coulter, 1983; Correia et al., 1996; Gourley, 1954). Using data obtained from a statewide random sample of 892 households, Correia et al., (1996) found that females were less likely than males to have favorable views of the Washington State police. Finally, various studies indicated that gender had no effect on perceptions of the police when controlling for other variables (Benedict et al., 2000; Brown & Benedict 2002; Chermak et al., 2001; Davis, 1990; Huang & Vaughn, 1996; Jesilow et al., 1995; Kusow et al., 1997; Marenin, 1983; Murty et al., 1990; Parker et al., 1995; Percy, 1980; Reisig & Correia, 1997; Sampson & Bartusch, 1998; Smith & Hawkins, 1973; Thurman & Reisig, 1996; Worrall, 1999). Kusow et al. (1997) discovered that although gender was correlated moderately with police satisfaction, when entered into a regression analysis controlling for other variables, gender was not a statistically

significant indicator of police satisfaction, instead residential location and race were found to be the strongest police satisfaction indicators.

The Effects of Socioeconomic Status

In terms of socioeconomic status, previous studies continuously identified a moderate, positive correlation between assessment of police and socioeconomic status. Basically, those in the middle class and above report higher satisfaction with the police than those of lower socioeconomic status. Those who are less educated and residing in poverty within urban areas, often are minorities and live in disadvantaged neighborhoods. These underprivileged residents often are those most likely to have contact with the police and the contact often is negative in nature; thus, they hold a more negative view of the police than those with a higher socioeconomic status (Frank et al., 2005; Reisig & Parks, 2000).

The Effects of Education

In addition, some research has indicated that education level has an impact on ATP; suggesting that, citizens with lower levels of education showed less favorable ATP than those who possessed higher levels of education (Frank et al., 2005). However, other studies denoted the opposite result, where those reporting higher levels of education showed less favorable views toward the police than those with lower levels of education (e.g., Percy, 1980; Weitzer & Tuch, 1999). Brown and Benedict (2002) pointed out that this is significant because:

There are studies suggesting that education and liberalism are correlated (see, for example, Finney, 1974; Weil, 1995). Thus, it may be that better-educated persons are more likely to hold liberal attitudes favoring civil liberties and, as a result, view the police less favorably than those with lower levels of education. (p. 565)

Brown and Benedict's assumptions also are supported by McCarthy (2016) who noted that when ask about respect for police, respondents with the highest level of respect (a great deal) for police were white (80%), conservative (85%), republican (86%), suburban (82%), and over 55 (81%). Those who reported having a great deal of respect for police at the lowest levels were nonwhite (67%), liberal (71%), democrats (68%), urban (68%), and 18 to 34 years of age (69%). Although there is no correlation table associated with McCarthy's data, the five categories under each group would appear to be highly correlated (i.e., white, conservative, republican, suburban, over 55 and nonwhite, liberal, democrat, urban, and 18-34 years of age).

Additional research supports the correlation among the variables identified above, along with the findings that level of education has a moderate, positive correlation with income (Brunner & Wayland, 1958; Duncan & Hodge, 1963; Glenn & Taylor, 1984), but may not be associated with police satisfaction, respect for police, or ATP. That is, those with higher levels of education (i.e., those with the upper socioeconomic status) are just as likely to possess an unfavorable view of the police as those with the lower levels of education (i.e., those with the lower socioeconomic status). Brown and Benedict (2002) pointed out that "there is no consensus in the literature as to the relationship between socioeconomic status and attitudes toward the police" (p. 565).

Criminal Justice Education

While the general public relies primarily on information about police professionalism and legitimacy through the media, which may be distorted through a liberal bias, higher education provides criminal justice majors much more accurate information supported by empirical research (Surette, 1982; Tsoudis, 2000). Criminal justice majors will have significantly different

attitudes and beliefs about criminal justice systems than non-CJ majors. Several scholars have focused on students' majors or programs of study to examine ATP among college students. For example, Tsoudis (2000) found that criminal justice (CJ) education has an impact on the students' perceptions of crime, punishment, and the criminal justice system. His research indicated that CJ majors' perceptions about the entire criminal justice system (police, courts, and corrections) were significantly different and more positive than non-CJ majors' perceptions.

Vandiver and Giacomassi (1998) compared the perceptions of 323 introductory students and 45 seniors based on how well the students grasped the magnitude of crime issues (e.g., the prevalence of murder). The introductory and senior groups were comprised of both CJ majors and non-CJ majors. The study revealed that CJ seniors were more likely to have accurate perceptions about the homicide estimates than non-CJ majors and new CJ majors. While this study did not focus specifically on policing issues or ATP, the study showed that there was a marked difference of perception between those who studied and discussed criminal justice issues in an academic environment and those who did not, with those CJ seniors having a more accurate assessment of the material addressed in the survey.

Lim (2015) focused on social modeling effects and also found that CJ education had impacted the students' perceptions of the police. Using a sample of 1,089 college students at two four-year public universities, located in the American Midwest and South, her research denoted that there was a positive, moderate correlation between college students' perceptions of biased policing and the form of social modeling used by the various CJ professors. These past studies suggest that CJ education has the potential to impact (both positively and negatively) people's attitudes and beliefs about the criminal justice system. Mbuba (2010) stated "...the role of higher

education in improving public-police evaluations among population groups that conventionally view the police with suspicion needs more attention than it has so far received” (p. 210).

Overall, demographic variables (e.g., race, age, gender, socioeconomic status, and education) continuously have been considered as the cornerstone in ATP research. A review of literature has indicated that although these demographic variables often are included in the research model, the impact of these variables often are mixed, with the exception of race and age, where African Americans and those under the age of 35 often report lower satisfaction with police than do other groups. When possible, an explanation for the mixed findings about each of these variables was offered, based on the limitations identified in the research.

Neighborhood Context

Neighborhood context addresses similar issues as those related to social disorganization theory, where the characteristics of the neighborhood become an important factor related to how police respond to various incidents, more so than the race of the offender or socioeconomic status of the area. Research has focused on the relationship between neighborhood context and ATP (Lai & Zhao, 2010). Empirical research has shown that the neighborhood context has played a significant role in citizens’ opinions about the police and the criminal justice system (Jesilow et al., 1995; Reisig & Parks, 2000; Sampson & Bartusch, 1998; Weitzer & Tuch, 2005). Generally, the factors that commonly are utilized to tap into neighborhood contexts include: crime rates, fear of crime, concentrated economic disadvantage, and victimization experience (Albrecht & Green, 1977; Brown & Benedict, 2002; Cao et al., 1996; Lai & Zhao, 2010; Reisig & Giacomazzi, 1998; Ren et al., 2005; Weitzer & Tuch, 2006).

Previous studies consistently have shown that citizens who live in disadvantaged areas (e.g., poverty, overcrowding, lack of employment, high crime rates, government housing or projects, poor public schools, etc.) are more likely to hold unfavorable views of the police than others (Albrecht & Green, 1977). Kusow et al. (1997) found that residential location may affect the public's view of police more than race or socioeconomic status. Poverty is found in rural areas (e.g., West Virginia, Pennsylvania, Kentucky, etc.) as well as in urban areas, but the satisfaction with police is remarkably different, suggesting that neighborhood context may be more important in explaining this difference in ATP than poverty (Reasons, Kojima, Lewis, LaLiberte, & McGill, 2004). Additionally, African American and white suburbanites reported more satisfaction with the police and their services than African American and white central city residents (Kusow et al., 1997); again, suggesting that neighborhood context may be more important in explaining this difference in ATP than race.

The Effects of Contact With the Police

Direct Contact Experience With the Police

One of the important factors driving perceptions and evaluation of the performance of law enforcement officers and the criminal justice system is direct interactions with the police, courts, and corrections (Brunson, 2007; Chaurprakobkit, 2000; Dai & Johnson, 2009; Gau, 2010; Gau & Brunson, 2010; Renauer & Covelli, 2010; Rosenbaum et al., 2005; Schuck et al., 2008; Skogan, 2005; Tyler & Huo, 2002; Weitzer & Tuch, 2002). A considerable body of literature continuously has shown that police-citizen contact, as much as race, to be an important determinant of perceptions about the police (Schafer et al., 2003). The basis of the assumption is that personal interaction with the police, either negative or positive, will impact an individual's

views or beliefs about the police (Rosenbaum et al., 2005). Direct interactions with the police can be either voluntary or involuntary (Decker, 1981; Schuck et al., 2008; Renauer & Covelli, 2010).

Renauer and Covelli (2010) suggested that voluntary contacts with the police can include not only calling the police for assistance by the citizen, but informal police-public interactions at community meetings, citizens' police academies, or other police-related events. For involuntary interactions with the police, police questioning residents on the street or being stopped for traffic violations can be included (see Decker, 1981). Tyler and Huo (2002) pointed out that even being stopped by police officers can be judged negatively or positively. A police interaction that resulted in an individual receiving a citation or being arrested most often would be deemed by the offender as a negative interaction although the police officer is performing her duties as expected by society. Police interaction that resulted in a verbal warning for an offense may be viewed by the offender as positive [fair action] or negative [nuisance] (Renauer & Covelli, 2010).

In general, scholars have argued that people who initiate interactions with police officers also report higher satisfaction levels when assessing police officer or local police department's performances. Those individuals who have involuntary encounters with police officers report lower satisfaction levels when assessing police officer or their local police department's performance (Decker, 1981). However, some scholars note there is a fair amount of variation within the public's attitudes and beliefs about police performance and these attitudes and beliefs are extremely fluid, often shifting with the news cycle or other current events involving police actions (Rosenbaum et al., 2005).

Celebrity cases, those highlighted by the media outlets, can quickly but often temporarily sway the public's opinions about police performance (Rosenbaum et al., 2005). For instance, the shooting of an unarmed teenager in Ferguson, Mo. adversely influenced people's ATP and satisfaction with police performance. Inversely, the shooting of police officers while in the performance of their duties (Dallas, NYC, Philadelphia, etc.) garnered support for individual officers and police departments in general. A host of studies revealed that African Americans tend to report lower levels of police satisfaction, than do other races, especially whites (Rosenbaum et al., 2005). As noted, the media's portrayal of police (vicarious experiences) has a huge impact on the public's perception of police professionalism and legitimacy.

Vicarious Experiences With the Police

Research has shown personal experiences with the police have a great impact in shaping people's opinions, both positively and negatively about the police. Other research indicated that these interactions alone are insufficient to explain citizens' evaluations of the police (Rosenbaum et al., 2005). According to Rosenbaum et al. (2005), most Americans have little or no direct or personal experience with the police; their perceptions about the police are grounded in the vicarious experiences of friends and others, or from television programs and news media outlets. Findings from a national survey of nearly 90,000 residents age 16 or older in 1999 revealed that only one in five citizens had first-hand experience with the police (approximately 18,000) and only 1% of these first-hand experiences (approximately 180) involved an allegation of excessive use of force by the police. Basically, less than .2% or 2 per 1,000 of police-citizen experiences even resulted in the allegation of excessive use of force by the police officer (Langan, Greenfeld, Smith, Durose, & Levin, 2001).

Many residents develop their attitudes and beliefs about the police derived from vicariously experiencing contact with the police through other venues, including family members, friends, social networks, or mass media (Lim, 2015; Rosenbaum, et al., 2005; Schuck et al., 2008; Tsoudis, 2000). Rosenbaum et al. (2005) stated that these “learning about the police through the experiences of others is often referred to as vicarious or indirect experience. Even residents without personal encounters often hear about, or know, someone with a direct police encounter” (p. 346). However, we know very little about the effects of vicarious or indirect experience with the police on ATP.

The “vicarious experience” model (see Schuck et al., 2008) suggests that people’s opinions about the police are formed and developed through a process of observations and information acquisition about others’ contact with the police. This model explains that people’s attitudes and beliefs about the police are not shaped based on their personal contact experience with the police, but rather form and develop through the exchange of information and observations (Schuck et al., 2008). Among the sources identified for these vicarious experiences, it has been suggested that most people obtain information about police-community issues and the criminal justice system through mass media outlets, which includes both the news outlets as well as primetime television entertainment (Lim, 2005; Tsoudis, 2000).

Schueck and Rosenbaum (2005) pointed out that prior research largely has focused on objective variables (e.g., demographic characteristics) that affected people’s perceptions of the police and very little research examined the effects of more subjective variables, for instance residents’ media contacts with law enforcement. The finding of the 1999 national survey of interactions between the public and the police is a notable exception (Langan et al., 2001;

Schueck & Rosenbaum, 2005). Previous studies have shown that highly publicized events affect citizens' views of police and their services (Schuck et al., 2008; Weitzer, 2002). For example, recent police shootings in Ferguson, Missouri in 2014 and the San Bernardino, California attack in 2015 are well-known events, which demonstrate how the media can influence the public's perceptions of police.

The news media in the Ferguson, MO incident reported a police officer unlawfully killed an unarmed African American teenager. The incident drew national media attention and resulted in major riots in several U.S. cities and condemnation of police practices in how the riots were handled. Many news media outlets depicted and criticized the police response to the riots. The police officers in the riot areas were armed heavily and deployed military style weapons and equipment to control the protestors. These media reports impacted the public's perception of the police as an occupying militia and not of those who had sworn to protect and serve. In the San Bernardino, CA incident, the police were hailed by news media outlets as heroes with video televised showing multiple officers risking their lives to save citizens after an attack by two people that killed 14 people and injured 22 others. Of interest is that the officers in San Bernardino, CA were using the same military style equipment and tactics as were deployed in Ferguson, MO. It is important to note that even with the extreme differences in how the news media reported these two events, it is argued that both events garnered some positive support for the police, but the majority of the population viewed the Ferguson, MO event as negative towards the police while the majority of the population deemed the San Bernardino, CA event as positive towards the police.

Besides media exposure, police-citizen interactions involving friends, family members, or professors may shape an individual's perception about the police. These vicarious experiences may result from various experiences from other neighbors living in their area, particularly those who live in disadvantaged areas or in high crime rate areas (Schuck et al., 2008). Residents may hear about police-citizen interactions as police engage their friends, family members, or even strangers. Also, people might hear of other's contact experiences with the police through other ways, such as the social media (e.g., Facebook or Twitter) or newspapers and television. While such vicarious experiences have potential impacts on forming people's opinions about the police (Rosenbaum et al. 2005; Weitzer & Tuch 2005), little research is available about the impacts of vicarious experiences, especially as it relates to perceptions about police.

Rosenbaum et al.'s (2005) findings illustrated the importance of assessing vicarious experiences of individuals as they relate to the police. Their research findings suggest that vicarious experience play a significant role in shaping respondents' attitudes. They argued that learning through someone else's direct experience with the police does impact an individual's perception of the police (Rosenbaum et al., 2005). Furthermore, Weitzer and Tuch (2005) revealed that there was no effect of direct experiences about ATP. However, regardless of the effects of race, they found significant impacts arising from vicarious experiences as they related to an individual's ATP. Brunson (2007), by examining 40 young, African American males' direct and indirect experiences with police harassment and violence, found that vicarious experiences had a negative impact on the respondents ATP.

Limitations of Prior Studies

While there is a rich body of literature about ATP, as noted earlier, most traditional work has focused on identifying predictors of ATP and has largely ignored the basis of structure and measurement of ATP. As described above, more recent studies have found significant differences in construct of ATP, with more emphasis on multidimensional level. Specifically, early studies of ATP were a-theoretical and assessed the relationship between single predictor (e.g., race) or simple combinations of predictors and ATP (Cao et al., 1996). Many scholars have argued that such a simplistic model cannot successfully capture an individual's ATP, especially as it appears fluid based on an individual's previous real and vicarious experiences with the police, as well as environment, and current events (Cao et al., 1996; Poister & McDavid, 1978; Reisig & Parks, 2000).

Although several variables related to ATP have been suggested in previous literature (age, race, environment, etc.); surprisingly, there is very limited research about college students' ATP, and even less about how their attitudes toward the police might be changed. More specifically, little is known about how college students view police practices and whether these perceptions can be altered. Research does indicate that the better an individual is informed about the criminal justice system, the more accurate their perceptions about criminal justice issues, but the research does not extend into attempting to change perceptions specifically about the police, focusing more on general knowledge about the criminal justice system.

Haba et al. (2009) using a student sample comprised of both criminal justice majors and non-criminal justice majors found that non-white students were more likely holding unsupportive ATP than white students. They found that there were no significant differences in academic

major or gender in regard to support for the police and police organization. Yet, respondents with a stronger feminist orientation and criminal justice majors showed much more supportive attitudes for women engaging in police work.

Mbuba (2010) revealed that students' race and ethnicity was the most important predictor in determining perceptions of the police. He also found that white students hold more positive ATP than non-white students. In terms of gender, in his study, male students reported more positive opinions of the police than female students. Despite these respondents' higher education backgrounds, they reported that negative contact experience with the police resulted in a student having unfavorable views of the police.

Lambert et al. (2010), based on an international setting, conducted research about college students' ATP from United States and other countries including Bangladesh, Canada, and Nigeria. Their study revealed that American students were more likely to trust the police, to support their work, and to believe the police were friendly than respondents in the other countries (Lambert et al., 2010).

Although college students seldom are sampled about their ATP, traditional college students are of interest in that previous ATP research suggests that many college students possess attributes that could result in either increased negative ATP (age, liberal, male, etc.) or increased positive ATP (conservative, white, rural, female, etc.). ATP in college students could be associated with age as college students in the United States are between the ages of 18-24, which is "the peak of potential criminal activity" based on both the age-crime curve perspective (Stolzenberg & D'Alessia 2008, p. 79) and the application of underage drinking laws. Students' personal and vicarious experiences with police during this crime prone era, whether positive or

negative, could indirectly impact others, altering their perceptions about the police (Webb & Marshall, 1995). Payne and Salotti (2007) indicated that, “although crime generally occurs less frequently on college campuses than in the overall population, it is still a problem for students” (p. 554), and for the police who must interact with and enforce the laws on the student population while attempting to foster student (community) support to help minimize criminal activities.

The Current Study

Although research has addressed the variables related to ATP, very little is known about attempts to change an individual’s ATP. Recently, several police departments have offered civil rights leaders the opportunity to attend police training events and to become an active participant in these events in an attempt to get the civil rights leaders to understand incidents from both the community members’ perspectives as well as from the law enforcement officer’s perspective. Many of these training events involve “shoot, don’t shoot” scenarios. The concept behind this offer to attend training is to educate the civilian community leaders about the inherent dangers involved with policing and the importance of compliance by community members when interacting with the police.

Chiaromonte (2015), a news reporter, attend several of these events and noted that few African American community leaders were willing to attend the training simulations. Of those who did attend the training, their support for the recent police shootings was impacted marginally with one attendee calling for better police training and eliminating single officer patrols, but acknowledge that he would have used deadly force on several scenarios although the offender was unarmed, noting that “it all happened too fast”. One attendee stated he never

understood why officers fired so many rounds until he attended the training and fired six rounds at a suspect in one scenario, noting again the officer “in the moment” does not know how many rounds s/he has fired. Another attendee had similar thoughts after attending the training, especially about how fast the situation develops and the necessity to make split second decisions with little time for reflection. Both activists noted that community members, even if they disagree with the situation, should comply with the demands of the officer (compliance) and not attempt to litigate the situation at the scene.

CNN (2016) also sent a reporter (Carol Costello) through the “shoot, don’t shoot” training scenario sponsored at a law enforcement training center. The reporter participated in two training scenarios as a law enforcement officer. Reluctance to use deadly force in the first scenario resulted in her death (simulated). She noted that the first scenario caused her to perspire excessively and her heart monitor indicated an extreme elevation in blood pressure as the scenario unfolded. Costello noted that there were both physical changes to her during the unfolding of the scenario as well as emotional changes, both of which occurred rapidly over a 30 to 45 second time period as the scenario concluded. Costello noted the necessity for quick decisions and her wanting not to shoot the “mentally ill” suspect resulted in her death. Costello noted that the training scenarios helped her to better understand how decisions made by the police officers may appear as excessive use of force when reported to the community, but could legally be justified under the rules of engagement and the law.

Several news agencies have sent reporters through “shoot, don’t shoot” training scenarios since the Ferguson, MO shooting incident in 2014. The majority of those television news reporters who have completed the training echo the comments of the two activists who

attended the training, which is compliance with the instructions of the officers at the scene. The attendees also reported a change in their attitudes toward policing in general and their attitudes toward police and the difficulty of the law enforcement job when confronted with these scenarios. The goal of this research is to determine if there is a change in ATP among college students who attend similar “shoot, don’t shoot” training scenarios. The following chapter identifies specifics about the methods and procedures that were used in this study.

CHAPTER III

METHODOLOGY

This chapter describes the research methodology employed for the current study and is divided into three sections. The first section provides background information which includes the purpose of the study as well as the research questions. A number of hypotheses are described in this section. The second section describes the details about the intended research design (a quasi-experimental design) for the current study; a justification for inclusion of specific variables, and the procedures related to data collection. Finally, the analytic strategies and human subjects concerns for this study are included in the third section, along with strengths and limitations for the research.

Research Questions and Hypotheses

Police scholars and policy makers have attempted to examine the mechanisms that shape public attitudes toward the police (Cao et al., 1996; Correia et al., 1996; Decker, 1981; Lai & Zhao, 2010; Lai, 2011; Ren et al., 2005; Scaglione & Condon, 1980; Schuck et al., 2008; Weitzer & Tuch, 2005). While attitudes have been surveyed for over four decades, it still remains unclear about the mechanisms that form the relationship between the police and the public. Despite the considerable amount of studies about ATP, the literature studying college students' ATP is scant, as is the research about young adult's opinions and judgments about the police possibly being different from other members of society. More importantly, no study has attempted to examine whether people's perceptions of the police can be changed to a more positive perspective after having an opportunity to interact with the police and attend police training.

Using a quasi-experimental design with both a survey to measure pre and post attitudes toward the police, in conjunction with a policing lecture about the “use of deadly force” and attendance at a “shoot, don’t shoot” FireArms Training Simulator (FATS), this study filled a gap in the current literature about changing attitudes toward the police. Basically, the research attempted to determine whether positive interaction with the police in class, along with attending “shoot, don’t shoot” simulation training would enhance college students’ attitudes and perceptions of the police.

The purpose of this research was to examine the following two primary research questions. Eight research hypotheses were offered in support of these two research questions:

1. What variables impact the attitudes toward the police among college students?

H₁: There will be a statistically significant difference on attitudes toward the police in terms of race (e.g., nonwhite vs. white).

H₂: There will be a statistically significant difference on attitudes toward the police in terms of gender (e.g., male vs. female).

H₃: There will be a statistically significant difference on attitudes toward the police in terms of major (e.g., criminology vs. non-criminology).

H₄: There will be a statistically significant difference on attitudes toward the police in terms of socioeconomic status (SES) (e.g., higher level of SES vs. lower level of SES).

H₅: There will be a statistically significant difference on attitudes toward the police in terms of personal (direct) contact experience with the police (e.g., students who report having negative personal (direct) experience with the police vs. students who do not report).

H₆: There will be a statistically significant difference on attitudes toward the police in terms of vicarious (indirect) contact experience with the police (e.g., students who report having negative vicarious (indirect) experience with the police vs. students who do not report).

H₇: There will be a statistically significant difference on attitudes toward the police in terms of neighborhood context. Specifically, there will be differences between students with the perception that crime is a serious problem and negative perceived neighborhood conditions in one's neighborhood and those who do not have the same or similar perceptions.

2. Can college students' attitudes and perceptions of the police be changed to a more positive outlook based on attending "shoot, don't shoot" simulation training and the "use of deadly force" classroom training?

H₈: There will be a statistically significant difference between pre-test and post-test reported attitudes toward the police score among college students.

Research Site

The current study utilized survey data from a college student sample at a medium sized state-funded university in northwestern Pennsylvania. The sample consisted of undergraduate students (both male and female) enrolled during the Spring 2017 semester. According to university statistics, there were approximately 11,537 undergraduate students attending the university. Demographic information for these undergraduate students was reported as male (44%) and female (56%). The breakdown for undergraduate enrollment by race was

approximately 73% white, 10% African American, 4% Hispanic, and approximately 13% were identified as International, Multiracial, Asian, American Indian, Pacific Islander, and other.

Sample Selection

This dissertation project aimed to seek the views of college students about the police and compare those views across different dynamics including demographic characteristics, neighborhood context, previous police encounter (direct or vicarious), and criminology major in relation to other majors. Additionally, this study was designed to assess whether college students' views of the police could be changed in a more positive way after having positive interaction with the police in class and attending police training. With this primary purpose, the sample was selected from undergraduate students from select classes.

For this research, the student sampling frame was randomly selected from all introductory Criminology classes and Sociology classes, along with Philosophy, Journalism, and Political Science classes. The necessity to limit the class selection to these areas was based on the research design, which required the researcher to enter the specific class on four occasions and two of these occasions required the delivery of policing related material or simulator training, which encompassed the entire class periods. To gain approval for what some may deem an evasive research project, classes were identified where policing material was relevant to the class content; thus, the required class training appeared more as a guest lecturer event than a research project unrelated to the class material. Similarly, the FATS training was deemed as reinforcement for the class material and offered to further class discussion related to a topic normally discussed as part of the class.

From the compiled class list, a random selection of classes was made and the faculty members for each class were contacted and briefed about the research project. Once the faculty member approved, class dates were identified to survey the students about their attitudes toward the police. The first survey was delivered during the first few weeks of the new semester. Two class periods were then identified and approved by the faculty member responsible for the class to deliver the classroom lecture and for the students to attend the FATS training. For classes of under 25 students, the lecture was completed on one day and the FATS training on a second day. For classes with 25 students or more, the class was divided with half getting the FATS training on one day while the others received the lecture. On the second date the students were reversed with those having received the FATS training attending the lecture and those who had attended the lecture receiving the FATS training. Approximately three weeks after the training had been completed, the students were surveyed again in an attempt to capture the impact of the training.

The basic notion with a quasi-experimental design with a control group is to determine if a treatment offered between observation one and observation two had an impact on the experimental group, which is not observed in the control group. Basically, did the treatment significantly change the experimental group members' attitudes toward the police. An analysis then can be applied to determine if there was an effect (change of attitudes toward the police) over time (Shadish et al., 2002). As no two classes can be identical, they should at least be comparable in a quasi-experimental design. Thus, the classes selected for this study were from the fields of Humanities and Social Sciences. Criminology is closely related to the disciplines of Philosophy and Sociology (see Savelsberg & Sampson, 2002). Savelsberg and Sampson pointed that, within a number of theses, "Criminology has grown as a multi-disciplinary field out

of disciplines, especially sociology” (p. 99). Political Science classes were selected as the discipline relates to constitutional law and policies, many of which could be related to policing. Journalism classes were included as these are the future individuals who will report on police related incidents and shootings, and is where much of the “shoot, don’t shoot” training to those other than police officers currently is focused.

For the desired sample size, it was imperative to consider the number of cases needed per independent variables in the current research for statistical power. Mertler and Vannatta (2005) suggested that a 15 to 1 minimum ratio is appropriate for the research so as to achieve reliable results with the use of regression analysis while Meyers, Gamst, and Guarino (2005) maintained that 20 to 1 is most suitable in a regression analysis. Given the need for appropriate statistical power (with the use of OLS regression analysis) and the number of independent variables (seven independent variables included) in this research, a desirable minimum sample size required would be approximately 105 to 140. However, Meyers et al. (2005) suggested in order to reduce standard errors and achieve more reliable data, a larger sample than what is minimally required should be obtained.

In order to recruit respondents, after IRB (Institutional Review Board) approval, the researcher sent an email to the each faculty member whose class was selected from the eligibility list. The email had a letter attached acknowledging IRB approval for the project. The letter also included the research proposal, its purpose, the class time required, and a copy of both the pre- and post-treatment surveys. The letter was an introduction letter soliciting permission to discuss the research project with the faculty member (see Appendix A). The faculty member also

received a copy of the Student Consent Letter (Appendix B) and copies of the Pre and Post treatment surveys (Appendix C and Appendix D, respectively).

Research Design

Quasi-Experimental Research Design With a Survey Tool

In order to answer the primary research question, the current study utilized a one group pre-test and post-test quasi-experimental design (see Figure 2). The use of this quasi experimental design allowed the researcher to determine if the college students' perceptions of the police could be changed through a specific treatment. Once the classes were identified, a survey about attitudes toward the police was given to the respondents who were willing to participate in the research. The survey had an identifier placed on it by the student so as to maintain anonymity, but to also permit the pre-test survey score to later be matched with each respondent's post-test survey. Data analysis were conducted to determine the impact of the treatment by assessing the difference in attitudes toward the police between the two surveys. Respondents who completed both surveys, but missed one or both days of the training (classroom or simulation) were used as control groups based on the numbers in each of these three categories (no treatment, FATS only, class only).

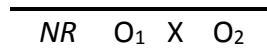


Figure 2. One group pre-test/post-test design.

Although there is no control group identified, as noted a control group could form naturally from those who complete both surveys, but do not attend the classroom training or FATS. Shadish et al. (2002) note that the untreated control group design with pre-test and post-test is one of the most common quasi-experimental designs (p. 136). In the untreated control

group design with pre-test and post-test, “The initial variant we consider uses a treatment group and a control group, with both pre-test and post-test data gathered on the same units” (Shadish et al., 2002, p. 136). Initially, a control group was contemplated, but the necessity for two surveys per class, without treatment, appeared too intrusive. Through student absences and issues related to time within classrooms, a control group did form naturally.

Survey Instrument

The survey instrument used in this study to measure attitudes toward the police attempted to capture the key variables identified in previous studies about this topic. Scholars have crafted several measurements over time to capture the relevant variables related to attitudes toward the police (Decker, 1981; Lai, 2011; Sullivan et al., 1987). For this study, the survey instruments were developed based on past studies about attitudes toward the police. Dillman (2007) pointed out that survey instrument should be designed with two primary goals in mind: nonresponse and measurement error. In this study, each survey question was carefully crafted so the respondents easily could understand what was being solicited and accurately respond to the question in order to maximize the quality of their responses as well as a reduction in nonresponses or inaccurate responses.

Key items from previous research were selected for inclusion in the survey to measure the respondents’ attitudes and perceptions about the police. Specifically, the variables were related to demographic characteristics (e.g., age, gender, household income, and educational status), neighborhood contexts (e.g., perceived neighborhood condition and perceived neighborhood crime), and police-public interaction (e.g., direct and vicarious experience with the

police). The following sections describe concepts of interest for this research, followed by the operationalization for each item in the survey.

Dependent Variable

Attitudes Toward the Police

In this study, the dependent variable is attitudes toward the police. Throughout the literature, as discussed in the Chapter II, the construct of attitudes toward the police has been conceptually and operationally defined in numerous ways. In part, this can be attributed to the issue that a lack of consensus exists among the literature pertaining to how to measure an individual's attitudes toward the police. The dependent variable, attitudes toward the police, is defined as the respondents' opinion and judgment of police behaviors including police practices, services, performance, and effectiveness (Carter, 1985; Dowler, 2002; Frank et al., 2005; Reisig & Parks, 2000; Ren et al., 2005; Schafer et al., 2003; Schuck et al., 2008). Several items were asked concerning respondents' attitudes and perceptions about the police. More specifically, a composite measure of attitudes toward the police was constructed using fourteen different items that examine 1) satisfaction with the police 2) satisfaction with police service, and 3) perceived police effectiveness. This construct was used because it considers the dynamics of attitudes toward the police unlike other studies where a single item was used.

The survey items selected for this study were based on similar measures utilized in past study by Dowler (2002), Schafer et al. (2003), Frank et al. (2005), and Rosenbaum et al. (2005). The dependent variable was operationalized using 14 statements designed to tap the respondent's attitude toward the police. In the survey, respondents were asked to indicate their agreement levels on following items: "In general, I trust the police", "I have respect for police", "The police

are helpful”, “The police are respectful toward citizens”, “The police are professional” “Police provide an important service to the community”, “Police use an appropriate amount of force when enforcing the law”, “The police protect me from crime”, “The police are friendly”, “The police are prompt in responding to crime”, “The police are fair”, “The police prevent crime”, “The police solve crime”, and “Overall satisfaction with the police.” (see Appendix C). The dependent variable was measured on a ten-point Likert scale (1 = strongly disagree to 10 = strongly agree) with a range of 14 (extreme negative attitudes toward the police) to 140 (extreme positive attitudes toward the police). A factor analysis was conducted on the fourteen items to determine if they form a unitary construct. The analysis determined there was a unitary construct with only one factor having an eigenvalue greater than one. Further discussion about the factor analysis results and that of the Cronbach’s alpha are offered in Chapter IV.

Independent Variables

Past research has indicated that an individual’s attitudes and perceptions about the police depend on a number of different predictors and contexts (Brown & Benedict, 2002; Weitzer & Tuch, 2005). Based on previous research about attitudes toward the police (see Chapter II), various independent variables were included in this study to answer the primary research questions and hypotheses. These constructs included respondents’ demographic characteristics, perceived neighborhood context, and respondents’ contact experience with the police. Multiple survey questions were used when possible to measure these variables.

Demographic Characteristics

A review of the literature indicates that individual demographics (e.g., race, age, gender, education and socioeconomic status) are significant indicators of one’s attitudes toward the

police (Brandl et al., 1994; Cao et al., 1996; Carter, 1985; Davis, 1990; Decker, 1981; Dunham & Alpert, 1988; Feagin, 1970; Frank et al., 1996; Hadar & Snortum, 1975; Lai & Zhao, 2010; Madan & Nalla, 2015; Murty et al., 1990; Reisig & Giacomazzi, 1998; Reisig & Parks, 2000; Ren et al., 2005; Sims, Hooper, & Peterson, 2002; Schuck et al., 2008; Skogan, 1978; Sullivan et al., 1987; Webb & Marshall, 1995; Weitzer & Tuch, 2005). This study used four independent variables to capture the demographic characteristics of the respondents. The demographic characteristics to be included in this study were race, age, gender, and household income. The conceptual and operational definitions for each of these variables are:

Race

In this study, the term race is used by including both racial and ethnic groups as identified by the U.S. Census Bureau – African American or Black; American Indian or Alaska Native; Asian; Hispanic, Latino, or Spanish; Native Hawaiian or Other Pacific Islander; White; or Other. Race is included, as mentioned in Chapter II, since it historically has been found to be a key predictor of attitudes toward the police. In terms of race, a substantial body of literature has revealed that African Americans tend to hold a more unfavorable view about the police than whites (Correia et al., 1996; Davis, 1990; Decker & Smith, 1980; Decker, 1981; Flanagan & Vaughn, 1996; Jefferis et al., 1997; Kaminski & Jefferis, 1998; Mastrofski et al., 1998; Murty et al., 1990; Peak et al., 1992; Reisig & Parks, 2000; Sampson & Jeglum-Bartusch, 1998; Tuch & Weitzer, 1997; Walker, 1997; Webb & Marshall, 1995). Very limited research has found that race does not have an impact on the public's attitudes toward the police (Chermak et al., 2001; Jesilow et al., 1995).

As race is a nominal level variable, the categories were coded as African American or Black (1); American Indian or Alaska Native (2); Asian (3); Hispanic, Latino, or Spanish (4); Native Hawaiian or Other Pacific Islander (5); White (6); or Other (7). Based on the demographics at the university, it was not possible through random sampling to achieve 15% in any racial category other than white (75.1%). The next highest category was African American at 13%. Additionally, the sample did not contain any respondents who self-identified as either American Indian or Alaska Native or Native Hawaiian or Other Pacific Islander. An ANOVA indicated that the three remaining categories (Hispanic, Asian, Other) were similar to whites in both demographic variables and attitudes toward the police; thus, combining all non-whites into one category methodologically was not sound. A determination was made based on the results of the ANOVA to place all other categories together other than African American and coding African American as 0 and the combined category (white, Hispanic, Asian, and Others) as 1.

Age

Age, as noted in Chapter II, is as an important indicator of an individual's attitudes toward the police, although for this study the range could be severely limited based on the sampling frame (college students). Empirical research has shown that there is a positive, moderate correlation between age and attitudes toward the police. Previous studies have indicated that younger people hold less favorable views of the police than older people (Campbell & Schuman, 1972; Decker, 1981; Dunham & Alpert, 1988; Hadar & Snortum, 1975; Feagin, 1974; Kusow, Wilson, & Martin, 1997; Murty et al., 1990; Smith & Hawkins, 1973; Sullivan et al., 1987; Walker, 1972; Webb & Marshall, 1995). Respondents were asked to self-report their age in years.

Sex

As discussed in Chapter II, the findings about the relationship between sex and attitudes toward the police are mixed (Benedict et al., 2000; Brown & Benedict, 2002; Cao et al., 1996; Correia et al., 1996; Frank et al., 2005; Kusow et al., 1997; Lai & Zhao, 2010; Madan & Nalla, 2015; Reisig & Correia, 1997; Reisig & Giacomazzi, 1998; Thurman & Reisig, 1996). In general, previous studies have found that females tend to hold more favorable views of the police than males (Cao et al., 1996; Cheurprakobkit, 2000; Correia et al., 1996; Lai & Zhao, 2010; Reisig & Correia, 1997; Reisig & Giacomazzi, 1998; Reisig & Parks, 2000; Weitzer & Tuch, 2005). Some studies indicated that an individual's sex had no effect on her or his attitudes toward the police when controlling for other variables (Benedict et al., 2000; Brown & Benedict 2002; Chermak et al., 2001; Davis, 1990; Huang & Vaughn, 1996; Jesilow et al., 1995; Kusow et al., 1997; Marenin, 1983; Murty et al., 1990; Parker et al., 1995; Percy, 1980; Sampson & Bartusch, 1998; Smith & Hawkins, 1973; Thurman & Reisig, 1996; Worrall, 1999). In this study, respondents were asked to self-report their sex, which was coded as either "female (0)" or "male (1)".

Household Income

In order to measure socioeconomic status, annual family income was included in this study. As discussed in Chapter II, research has found there is a positive, moderate correlation between socioeconomic status and attitudes toward the police (Brown & Benedict, 2002). Some studies have revealed that income levels predict attitudes toward the police (see Frank et al., 2005; Reisig & Parks, 2000). Respondents were asked to self-report their annual family income. Annual family income is an ordinal level variable, which was coded as 1 = less than \$10,000, 2 =

\$10,000 - \$20,000, 3 = \$20,001 - \$30,000, 4 = \$30,001 - \$40,000, 5 = \$40,001 - \$50,000, 6 = \$50,000 - 60,000, 7 = \$60,000 - \$100,000, and 8 = over \$100,000.

Neighborhood Context - Perceived Neighborhood Crime

This study also included some aspects of neighborhood context. Adapted by Weitzer & Tuch's (2005) study, three items were included in perceived neighborhood crime. Respondents were asked to indicate their level of agreement ranging from 1 = very unsafe to 10 = very safe with three items: 1) their assessment of neighborhood crime condition by asking "How safe do you feel being alone outside in your neighborhood [during the day/at night]" "How serious a problem is crime in your neighborhood". The response category ranged from 3 = very unsafe to 30 = very safe.

The Effects of Contact With the Police

Literature indicates that citizens' contact experience with the police have some impact on their attitudes toward the police (Weitzer & Tuch, 2005). Some scholars (Brown & Benedict, 2002; Decker, 1981) asserted that contact experience with the police was a significant predictor of attitudes toward the police. In this study, contact with the police variable was divided into two types: direct experience with the police and vicarious experience with the police.

Direct Experience With Police

Direct contacts with the police was measured with three different indicators asking respondents about personal experience of 1) unreasonable stops, 2) insulting languages, and 3) physical force by police officers in the past year. These three items were adapted from Weitzer and Tuch (2005) and Lee and Gibbs (2015), "When you were stopped by the police was the experience" (Positive - Negative - Never stopped by the police); When you talked to the police

was the conversation” Positive - Negative - Never talked to the police); Have police ever used excessive force against you? (Yes - No - Never stopped by the police). The scores were summed into a single score ranging from -3 (three negative responses) through 0 (no contact) to 3 (all positive responses). Basically, no police contact was the base (0); positive contacts were added and negative contacts were subtracted.

Vicarious Experience With Police

Vicarious experiences variables were derived from work by Schuck et al., (2008), testing two propositions about vicarious or indirect experience with the police. As discussed in Chapter II, most Americans have little or no experience with the police (Rosenbaum et al., 2005); thus, people may develop their beliefs and attitudes toward the police from vicariously experiencing contact with the police through other mechanisms [e.g., family members, friends, social networks, or mass media] (Brandl et al., 1994; Lim, 2015; Rosenbaum, et al., 2005; Schuck et al., 2008; Tsoudis, 2000). The three vicarious experiences with the police variables were included to examine the proposition that vicarious or indirect experiences with the police were associated with the respondent’s attitudes toward the police. In this study, respondents were asked “When you hear from friends about getting stopped by the police was their experience (Positive - Negative - Never stopped by the police); When you hear from friends about their conversations with the police are the stories (Positive - Negative - Never talked to the police); Have police ever used excessive force unnecessarily against anyone you personally know? (Yes - No - Never stopped by the police). The scores were summed into a single score ranging from -3 (three negative responses) through 0 (no contact) to 3 (all positive responses). Basically, no

police contact was the base (0); positive contacts were added and negative contacts were subtracted.

Major

The respondents were requested to self-report their majors. As only social science classes were surveyed in an attempt to match the research with the class material, the respondents were primarily from the College of Humanities and Social Sciences. Respondents from other colleges were included (e.g., Health and Human Services, Natural Science and Mathematics, etc.) as some social sciences classes had students from other colleges enrolled into their required social science/Liberal Studies elective classes. The literature suggested that those respondents who were seeking a degree in criminology would be more supportive of police officers than those from other departments. For this variable, non-criminology majors were coded as zero and criminology majors were coded as one. Table 3 offers a summary of the descriptive variables used in this study.

Table 3

Variable Summary

Variable Type	Concept	Measurement Level	Coding	Items
DV	Attitudes toward the police	Interval	Strongly Agree (10) – Strongly Disagree (1)	14
	<i>Demographics</i>			
IV	Race	Nominal	African American or Black (1) American Indian or Alaska Native (2), Asian (3), Hispanic, Latino, or Spanish (4), Native Hawaiian/Other Pacific Islander (5), White (6), Other (7)	1
IV	Sex	Nominal	Female (0), Male (1)	1
IV	Household income	Interval	Less than \$10,000 (1), \$10,000 - \$20,000 (2), \$20,001 - \$30,000 (3), \$30,001 - \$40,000 (4), \$40,001 - \$50,000 (5), \$50,001 - \$60,000 (6), \$60,001 - \$70,000 (7), Over \$100,000 (8)	1
IV	Direct police contact	Interval	Positive (1), Negative (-1), None (0)	3
IV	Vicarious police contact	Interval	Positive (1), Negative (-1), None (0)	3
IV	Perceived neighborhood crime	Interval	Very Safe (10) – Very Unsafe (1)	3
IV	Major	Nominal	CRIM (1), Other (0)	1

Validity

With a quasi-experimental design, it is imperative to mention that this design has inherent limitations and threats to validity. Validity is the extent to which the results from the study are truthful. Especially in the social science, threats related to internal validity, construct validity, statistical conclusion validity, and external validity could impact the research findings bringing into question the validity of the information being reported. Although validity threats can never

be eliminated and often are a trade off in that while strengthening one the researcher may be weakening another, the plausible threats to the research project must be identified and controlled for when possible. The following section discusses the relevant threats to validity in regards to a quasi-experimental design and further explains alternative ways to reduce the potential threat and achieve confidence in the study's findings.

Internal Validity

Internal validity refers to “inferences about whether observed covariation between A and B reflects a causal relationship from A to B in the form in which the variables were manipulated or measured” (Shadish et al., 2002, p. 53). In other words, internal validity is the degree of confidence based on the research design utilized in order to generate causal inferences from the data (Creswell, 2009). Threats to internal validity include selection, maturation, history, regression, ambiguous temporal precedence, testing, attrition, instrumentation, and additive and interactive effects (see Shadish et al., p. 55).

Among these threats, the nature of a quasi-experimental study produces potential threats of maturation, selection, respondent history, regression, mortality, instrumentation, and testing (Creswell, 2005). Since this research uses a quasi-experimental research encompassing a pre-test and post-test, delivered over a relatively short period of time many of the threats to internal validity could be cautiously dismissed. The most relevant internal threats to this research were identified as testing, history, and attrition. Testing refers to respondents attempting to apply previous responses to the post-test based on their memory of their responses on the pre-test. In order to reduce this threat, the surveys were completed at least 30 days apart, but not more than 60 days as this might lead to increased historical threat issues (incidents occurring outside the

study that could impact the respondents' attitudes toward the police; e.g., highly publicized shooting by police or highly publicized shooting of a police officer). Attrition also was an issue in that the respondent must be present on four separate occasions (pre-test, class training, FATS training, post-test). Although some respondents missing the training and simulation, but completing the pre-test and post-test could act as a control group, attrition was still a major concern, but was outside the researcher's control.

Construct Validity

Construct validity relates to whether the conceptual and operational definitions of the various variables used in a study truly captured the dimensions of the concept being measured. For this study, age is measured in years, which is a standard, often agreed upon measurement, as is race and gender. More difficult concepts to accurately capture in this study were the concepts of attitudes toward the police, neighborhood safety, and negative interaction with the police.

Of the 14 threats to construct validity identified by Shadish et al., (p. 73), the most prevalent for this study were Mono-Method bias, as the collection of data was reliant solely on self-reporting and Novelty-Disruption Effects in that the responses obtained from some of the respondents could have been a reaction to the novelty of the FATS training, while others might have found the class and FATS training disruptive to their normal class activities. In an attempt to minimize the latter threat, classes were selected where the classroom material and the simulator training could have been part of the normal material that would have been covered as part of the class (ethics, policing, society, constitutional law, etc.). Additionally, the second survey was not scheduled for delivery until at least 30 days after the training and simulation was completed, lessening the chance of a novelty effect. The threat of Mono-Methods was

recognized, but again for this particular study, using students as respondents, extra time was not available to add focus groups or other types of data collection to support the information collected through the survey instruments.

Statistical Conclusion Validity

Statistical conclusion validity relates to whether the correlation identified between the treatment and the outcome is valid (Shadish et al., 2002). Of the nine threats related to statistical conclusion validity identified by Shadish et al. (2002), the two identified as areas of concern for this study were Unreliability of Treatment Implementation and Extraneous Variance in the Experimental Setting. Both of these threats were related to the same area, delivery of the class material and FATS training. Although the same material was delivered to each class, conversations within the classes could have led to additional discussion and insights, which may not have occurred in the other classes; thus, the standardized treatment was expanded through class participation, but only in certain classes.

The same is true for the threat of extraneous variance in the experimental setting. If students discussed the effects of the FATS training both during the event and after completion of the simulation, different groups may have different experiences. Also, once the training was delivered and discussed in the classrooms, each faculty member, had a 30-day window to discuss this training as part of the class discussion. As a partial control for these threats, the material scheduled for delivery as part of this study were standardized as were the training simulations, but human interaction could have enhanced the material being delivered at each individual site (classroom) as could the faculty member in charge of the class during post-discussion of the material, both of which were outside the researcher's control.

External Validity

External validity refers to the ability of a researcher to take findings from the research and apply these findings to other populations or situations (Creswell, 2009). One of five threats to external validity identified by Shadish et al. (2002), Interaction with the Casual Relationship with Units appeared to be the most salient threat. Basically, this threat suggests that the effects found in a certain group may not hold true for other groups. A condition of this study was to identify classes where the material is relevant to the class discussions for the semester (e.g., Political Science, Philosophy, Sociology, Criminology, etc.) to gain entrance to the classes on four separate occasions. It was deemed unlikely that classes related to Nursing, Business, or other programs outside the social sciences would be receptive to covering two weeks of material unrelated to the class. Additionally, covering this material would not have been in the best interest of the students enrolled in those classes. Without yet having obtained the sample, based on the university's demographics, it was predicted that the application of the findings from this study would be restricted primarily to students in the social sciences, who predominately came from rural, conservative backgrounds. Future studies would be required to add to the external validity of this study's findings and the overall knowledge about the impact of training and simulations as they relate to attitudes and perceptions about the police.

Human Subject Concerns

The design of this study was to ensure the respondents were placed in a minimal risk category and was not designed to sample any protected populations. In terms of human subject concerns, ensuring anonymity for all research respondents was of importance. All respondents were treated within the ethical guidelines set forth by IUP's Institutional Review Board (IRB).

Respondents were briefed on the nature of the research and were informed that completion of the surveys were voluntary and that they could have stopped completing the survey at any time without the fear of loss of grade/points or any impact on their class standing.

The researcher took a number of necessary steps to ensure the survey responses for those who participated in this research could not be assigned to a particular respondent. First, all data obtained was reported only at the aggregate level. The surveys contained no identifying information (e.g., name or personal information) about the respondents with the exception of a cover page that requested the respondent to develop a personal identification code to be used to match the pre-test survey with the post-test survey. Once the surveys were matched, the code sheet (cover) from both surveys was removed and destroyed ensuring the respondent’s anonymity. The coded information on the survey cover sheet consisted of the following:

- Name of high school in senior year, 1st and 2nd letter _____
- Mother’s first name, 1st and 2nd letter _____
- Number representing the month you were born _____
- Number of older brothers and sisters living or deceased _____
- Birth year: circle either even number or odd number?
- 1st letter of first name: circle either A–M or N–Z?

Another human subject protection issue that needed to be addressed in detail was the issue of voluntary participation and informed consent. To ensure that all participation in this research was voluntary; each respondent in the study received an informed consent form prior to survey administration of both the pre-test and post-test. The informed consent form, which contained the contact information for the researcher, her dissertation chair, and IUP’s Mental

Health Facility, remained in the possession of the respondent, noting that completion of the survey was informed consent.

Upon entering the classroom, the researcher explained the general premise of this research, addressed any questions from the students about the research, and informed the students that there was a box in the front of the classroom for them to place their surveys in when completed. The researcher then distributed the informed consent forms and the surveys to each class member. The researcher requested the students follow along as she read the informed consent form verbatim. After completing the informed consent form, the researcher requested that the students complete the survey (front and back), starting with the identification code cover sheet. Those wishing not to participate were requested to remain in their seats and submit the blank/incomplete survey at the same time as those who had completed the survey, so they were not singled out as non-participants.

Self-reporting personal experience with the police, either direct or vicarious, could have been a sensitive issue for some respondents. For the current study, it was possible that respondents could have become upset and/or emotionally uncomfortable having had to recall police interactions as either as suspect or a victim. In order to reduce any stress and to enhance emotional well-being, the informed consent form maintained by the student listed the contact information for the researcher, her faculty adviser, and the University's Mental Health Office.

Strengths and Limitations

The major strength of this study was the use of past research to guide the development of the survey instrument. Over 40 years of attempts to measure and assess attitudes toward the police was available for review and incorporation into this study. Additionally, recent training

using similar methods to this study have been applied at the individual level, offering further guidance for this study. A second strength of this research was that both the training for the classroom and the simulator have been standardized over time through the delivery of the material to freshmen students who have little knowledge about policing; thus, the training was designed at their level of subject matter expertise.

The major limitations for this study already have been identified under the section addressing validity issues. These limitations included the standardization of material delivery related more to questions from the respondents that could have facilitate discussions not occurring during the delivery of material in other classrooms.

The second major concern was attrition. For the respondent to be included in the experimental group, the individual must have completed both the pre-test and the post-test as well as have attended the classroom training and the simulation training. Basically, the student must have attended four specific class periods, which at the freshmen level would have led to many respondents being removed from the experimental group.

A third limitation for this study was that this type of training to change attitudes toward the police has never been attempted on this scale. Training designed to target individuals, especially members of the news media and activists has occurred recently. That training was found to have positive results in changing attitudes toward the police or at least police encounters. Researchers was not identified where classroom training and FATS training were used in an attempt to enhance attitudes toward the police using college age respondents, who often possess the characteristic listed earlier as being less supportive of the police.

Summary

In this chapter, the research questions and the research hypotheses were discussed. The research site was identified and the strengths and limitations of the intended sampling procedures were detailed, along with the strengths and limitations for the selected quasi-experimental model. The nature of the research design, requiring four class visits, limits the classes available for selection. A decision was made to select classes where the research topic was relevant for discussion; thus, the material appeared both in context with the class topic and the presentation was more in line with that of a guest lecturer, with the material being reinforced through simulator training. The dependent variable (attitudes toward the police) was conceptualized and operationalized and an argument was made about how the variable would be captured through the use of a survey instrument. The independent variables also were conceptualized and operationalized, along with the justification for their inclusion in this study.

The inferences for the validity of the study's findings, using the guidelines set forth by Shadish et al. (2002), were discussed in detail with the most plausible threats being identified. Where possible an argument was made about how the threat would be controlled for, but many of the threats were identified as limitations as they were outside the control of the researcher and the research design selected. The protection of human subjects was addressed along with how the survey distribution procedures would be conducted to further enhance the protection of the respondents. The chapter concluded with the strengths and limitations of the methods selected, with the strengths coming from previous research, while the limitations were related to the lack of research about the potential for the identified treatment used in this study to impact college students' attitudes toward the police.

Chapter IV introduces the inferential statistics (Ordinary Least Squares regression – OLS) that were applied to the collected data, along with descriptive statistics for the sample and the variables of interest. Chapter IV also includes a variable correlation matrix, the results of the factor analysis and Cronbach's α test conducted on the dependent variable, along with a discussion about any independent-samples t -tests or ANOVA required to assess the differences in various independent variables.

CHAPTER IV

DATA ANALYSIS AND FINDINGS

This chapter used descriptive and inferential statistics to describe the data analysis and findings. Descriptive statistics were used to illustrate the sample's characteristics and to quantify the respondents' responses to the variables of interest used in this study. Inferential statistics were used to determine if the respondents' replies differed significantly based on the variability of certain characteristics found in the respondents sampled. A correlation matrix is provided to assess the bivariate relationship between the various variables used in Model 1. Next, the assumptions of Ordinary Least Squares (OLS) regression are discussed, and the findings from the tests conducted to meet the assumptions are presented. The results of the OLS regression analyses in hypothesis testing, which examined the association between multiple independent variables and the dependent variables included in the current study also are reported. Finally, this chapter provides a summary of the research findings.

Descriptive Statistics

In data analysis, the initial steps often are assessing the descriptive statistics to provide a better understanding of the data distribution, as well as to ensure all scores are within the identified ranges (e.g., a variable with a response set between one and ten should have no scores outside that range – coding error). The measures of central tendencies are useful in order to observe the center of the distribution and to assess plausible statistical issues (e.g., kurtosis, skewness, lack of variance, etc.). For this study, descriptive statistics were assessed to determine the respondents' demographic characteristics and their responses to the study's variables of

interest. Table 4 presents the frequencies and percentages for demographic variables including age, gender, race, economic status, and major.

Table 4

Descriptive Statistics for the Sample (Pre-Test and Post-Test)

Variable	n	%	Accumulated %
Current Age			
18	14	8.3	8.3
19	29	17.2	25.5
20	41	24.3	49.8
21	48	28.3	78.1
22	25	14.8	92.9
>23 years	12	7.1	100.0
Gender			
Female	99	58.6	58.6
Male	70	41.4	100.0
Race			
African American/Black	22	13.0	13.0
American Indian/Alaska Native	0	0.0	13.0
Asian	4	2.4	15.4
Hispanic, Latino/Spanish	11	6.5	21.9
Native Hawaiian/Other Pacific Islander	0	0.0	21.9
White	127	75.1	97.0
Other	5	3.0	100.0
Household Income			
Less than \$10,000	2	1.2	1.2
\$10,000 - \$20,000	16	9.5	10.7
\$20,001 - \$30,000	8	4.7	15.4
\$30,001 - \$40,000	12	7.1	22.5
\$40,001 - \$50,000	18	10.6	33.1
\$50,001 - \$60,000	18	10.6	43.7
\$60,001 - \$100,000	61	36.3	80.0
Over \$100,000	33	19.4	99.4
N/A	1	0.6	100.0
Major			
Criminology	63	37.3	37.3
Non-Criminology	106	62.7	100.0

Note. n = 169

Undergraduate students enrolled fulltime during the Spring 2017 semester were recruited to participate in this study. The age of the respondents ranged from 18 to 40, with a mean age of 20.64 years ($SD = 2.216$) and a mode of 21 years. The majority of respondents ($n = 157$, [92.9%]) were between the ages of 18 to 22 while only 12 respondents (7.1%) were deemed as non-traditional students (23 years old or older). As the focus of this study is attitudes toward the police, the nontraditional students were retained in the sample based on an Independent sample t test that identified no difference in police attitudes between traditional undergraduate students and nontraditional undergraduate students when assessing (restricting) by age.

The gender breakdown followed closely that reported by the university the students attended. The university officially lists the gender demographic as 57.8% female students and 42.2% male students. The sample selected from the university had 99 respondents who self-identifying as female (58.6%) and 70 respondents who self-identifying as males (41.4%).

This study's undergraduate student racial composition although consistent with the university's current undergraduate student population, contained a slightly higher percentage of blacks, Hispanics, and Asians than reported by the university. The university reports the ethnic breakdown as 72% white, 9.2% black, 4% Hispanic, and 1% Asian. In self-reporting race, this study's respondents self-identified as 127 (75.1%) white, 22 (13%) African American, 11 (6.5%) Hispanic, and 4 (2.4%) Asian. For this study, no students self-reported as American Indian/Alaska Native or as Native Hawaiian/Other Pacific Islander, which is understandable as these groups represent less than .1% of the university's student population.

In terms of the household income, 61 respondents (36.3%) reported an annual family income for household between \$60,000 and \$100,000, and 33 respondents (19.4%) indicated

their household incomes were over \$100,000. Only 2 respondents (1.2%) indicated their household incomes were less than \$10,000. The rest of respondents' household income were evenly distributed in other five different categories.

Lastly, a majority of the respondents (n = 107, 62.7%) indicated they are non-criminology major and 63 (37.3%) reported being criminology majors. The university lists that 1 in 12.69 undergraduate students are criminology majors (7.88%). For this study, criminology students were oversampled to obtain a sufficient amount to determine statistically if their attitudes about law enforcement officers differed from those students who were enrolled in majors other than criminology.

Similar to the respondents' demographic information offered in Table 4, Table 5 and 6 offer information about the respondents' reported personal and vicarious experiences with the police. Table 5 identifies whether the respondent reported personal police interaction or vicarious police interaction (hearing about police interaction from others). The first area in Table 6 indicates whether the personal police experience was deemed by the respondent to be positive (1 – 3) or negative (-1 – -3). The further the score from zero (no interaction), the more positive or negative the interaction was deemed (3 extremely positive, -3 extremely negative). The second area in Table 6 indicates whether the vicarious police experiences reported to the respondents were positive or negative, using the same scale as listed above (3 extremely positive, -3 extremely negative).

Of the 169 respondents, 154 (91.1%) reported having personal (direct) experience with the police, while 15 (8.9%) reported never having had a personal experience with the police. The majority of respondents who reported having personal experiences with the police, reported these

experiences as positive (130/154 or 84.4%). The assessment of vicarious (indirect) experience with the police was quite different. The 163 respondents who reported having friends or others relate police interaction, 61% reported negative interactions (100/163). The data in Table 5 and 6 suggests that there are substantial differences in an individual's personal encounters with the police and that same individual's vicarious encounters with the police.

Table 5

Descriptive Statistics for Experience With the Police Variable 1

Variable		n	%
Personal (Direct) experience with the police	Yes	154	91.1
	No	15	8.9
Vicarious (Indirect) experience with the police	Yes	163	96.4
	No	6	3.6

Note. n = 169

Table 6

Descriptive Statistics for Experience With the Police Variable 2

Variable		n	%
Personal (Direct) experience with the police	3	71	42.0
	2	25	14.8
	1	34	20.1
	0	15	8.9
	-1	16	9.5
	-2	1	.6
	-3	7	4.1
	Mean (SD)	1.53 (1.66)	
Vicarious (Indirect) experience with the police	3	40	23.7
	2	5	3.0
	1	20	11.8
	0	6	3.6
	-1	63	37.3
	-2	0	0
	-3	35	20.7
	Mean (SD)	-.11 (2.149)	

Note. n = 169

Table 7 indicates the results of an independent sample *t* test with a grouping variable of respondent's major (0 – other, 1 – CRIM) and the variables of interest being those related to the CJS system either through employment, incarceration, or attitude. As anticipated, respondents working on a degree in criminology had significantly more connections to the criminal justice field than did non-criminology majors. Of interest is that there was no statistical difference between the two groups related to friends, relatives, or family members incarcerated, nor with personal experiences with the police.

Table 7

Independent Sample T Test for CJS Connection

Variable	Major	Mean	n
Having a family member, a relative, or a close friend who is a police officer	Other (n = 106)	.43	46
	CRIM (n = 63)	.68**	43
Having a family member, a relative, or a close friend who works in the criminal justice system (police, courts, corrections)	Other (n = 106)	.52	55
	CRIM (n = 63)	.75**	47
Having a family member, a relative, or a close friend who currently is or has previously been incarcerated	Other (n = 106)	.39	41
	CRIM (n = 63)	.46	29
Personal experience with the police	Other (n = 106)	1.36	
	CRIM (n = 63)	1.81	
Vicarious experience with the police	Other (n = 106)	-.42	
	CRIM (n = 63)	.41*	
Attitudes toward the police (time 1 score)	Other (n = 106)	97.30	
	CRIM (n = 63)	110.52**	
Attitudes toward the police (time 2 score)	Other (n = 106)	98.24	
	CRIM (n = 63)	111.43**	
Difference between post and pre police scores	Other (n = 106)	.93	
	CRIM (n = 63)	.90	

Note. n = 169

Note. * p < .05, ** p < .01

There were significant differences between the two groups on both their pre police attitude scores and their post police attitude scores, with criminology students having attitudes more supportive of the police. Of interest is that there was no significant differences in the two groups related to the difference in pre- and post-police attitude scores, as both groups had higher post-scores than pre-scores, suggesting that some component of the treatment was effective in increasing positive police attitudes in both groups.

Description of Attitudes Toward the Police

This study's dependent variable was college students' attitudes toward the police. In order to measure this construct, fourteen questions were devised and included in the survey instrument. Respondents were asked to indicate their agreement levels on following items: "In general, I trust the police", "I have respect for police", "The police are helpful", "The police are respectful toward citizens", "The police are professional" "Police provide an important service to the community", "Police use an appropriate amount of force when enforcing the law", "The police protect me from crime", "The police are friendly", "The police are prompt in responding to crime", "The police are fair", "The police prevent crime", "The police solve crime", and "Overall satisfaction with the police." The response set for attitudes toward the police ranged from 1 = *strongly disagree* to 10 = *strongly agree*. The scales ranged from 14 – 140, with higher scores reflecting more positive attitudes toward the police.

Table 8 indicates the responses to the 14 individual questions that were used to assess attitudes toward the police. The mean score is listed for each question both for time one (t-1), which was the pre-test and for time two (t-2), which was the post-test. Additionally, Table 8 lists

the standard error of mean (SE) for each question, along with the scores for the 25th, 50th, and 75th percentiles for both the pre-test and the post-test.

Table 8

Descriptive Statistics for Attitudes Toward the Police

Variable	Mean	Mean	SE	SE	25%	25%	50%	50%	75%	75%
	(t1)	(t2)	(t1)	(t2)	(t1)	(t2)	(t1)	(t2)	(t1)	(t2)
Trust the police	7.53	7.58	.166	.162	7	7	8	8	9	9
Respect for the police	8.37	8.30	.147	.146	7	7	9	9	10	10
Police are helpful	7.69	7.81	.148	.148	7	7	8	8	9	9
Police respectful to citizens	6.98	7.18	.146	.150	6	6	7	7	8	8
Police are professional	7.39	7.44	.135	.139	7	7	7	8	9	8.5
Important service to community	8.89	8.50	.122	.139	8	7	10	9	10	10
Use appropriate force	6.52	6.82	.180	.163	5	6	7	7	8	8
Protect me from crime	7.45	7.36	.184	.183	6	6	8	8	9.5	9
Police are friendly	6.99	6.97	.148	.158	6	6	7	7	8	8
Promptly respond to crime	7.03	7.09	.162	.148	6	6	7	7	8	8
Police are fair	6.40	6.67	.152	.164	5	6	7	7	8	8
Police prevent crime	6.62	6.82	.180	.175	5	5.5	7	7	8.5	8
Police solve crime	7.08	7.12	.147	.163	6	6	7	7	8	8.5
Overall satisfaction with police	7.30	7.49	.168	.164	6	7	8	8	9	9

Note. n = 169

Although there is little change in the mean scores, of importance for this study is the change in scores in the 25th percentile for the questions related to “use of appropriate force”, “police fairness”, and “overall satisfaction with police”, which would suggest the training offered

between the pre-test and the post-test impacted those who initially rated these questions lower than the mean score for the other respondents.

Refining the Variables Using Exploratory Factor Analysis

Although the mean score for the 14 questions related to attitudes toward the police were relative similar, a factor analysis was required to determine if these questions held together as a unitary construct and could be summed as one dimension reflecting attitudes toward the police. Factor analysis is used to describe the magnitude to which dimension overlap among a set of factors (Williams, 1992). Factor analysis is important since it permits the researcher to assess the reliability of a series of responses designed to solicit information about a unitary construct (Mertler & Vannatta, 2005).

Figure 3 indicates the 14 questions held together as a unitary construct accounting for 65.48% of the variance. A single eigenvalue (9.167) signifies the questions used to capture attitudes toward the police were reliable thus, adding the items to form an attitudes toward the Police (ATP) scale was appropriate. Table 9 contains the factor analysis results. The Cronbach's alpha for this scale was .958, which indicates that the 14 questions are measuring a single construct extremely accurate (reliable). Validity will remain an issue as the assumption is the questions are a truthful measure of attitudes toward the police, but this cannot be tested, only implied by the researcher and inferred by the research consumer.

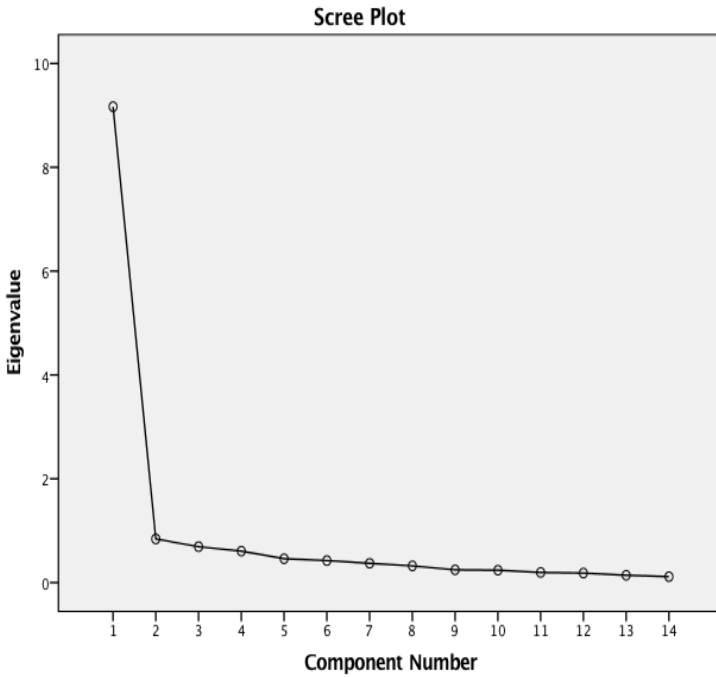


Figure 3. Scree plot.

Table 9

Results of Factor Analysis With Varimax Rotation

	Component 1
Overall, I am satisfied with the police.	.897
The police are fair.	.854
The police are respectful towards citizens.	.851
The police protect me from crime.	.851
In general, I trust the police.	.840
The police are helpful.	.840
I have respect for the police.	.834
The police are professional.	.830
The police are friendly.	.807
The police are prompt when responding to crime.	.769
The police solve crime.	.749
Police use an appropriate amount of force when enforcing the law.	.746
The police prevent crime.	.729
Police provide an important service to the community.	.704
Eigenvalues =9.167,	
% of variance = 65.482 %,	
Cronbach's alpha = .958	

Initially, the researcher believed there was the plausibility that these 14 questions would form three separate constructs related to: 1) satisfaction with the police, 2) satisfaction with police service, and 3) perceived police effectiveness. If multiple dimensions had been extracted, a determination would have been required as to whether it would be appropriate to sum these components into an ATP index. The unitary dimension observed indicated that for this sample the 14 questions could be summed into a scale, with multiple dimensions not being an issue.

The final descriptive statistic highlighted prior to model testing is that of who attended training between the pre-test and the post-test. The initial design was that all respondents would receive both classroom training related to the “use of deadly force” by law enforcement officers and FATS training. As Table 10 indicates three additional groups were formed as students in the original group were absent from class during one or both of the training dates, but were present to complete both surveys. These absences permitted for a control group, along with two partial training groups.

Table 10

Descriptive Statistics for the Pre-Test and Post-Test

Variable		n	%
Attended both class and simulation training	Yes	104	61.5 %
	No	65	38.5 %
Attended simulation training only	Yes	19	11.2 %
	No	150	88.8 %
Attended classroom training only	Yes	20	11.8 %
	No	149	88.2 %
Had neither training (survey only)	Yes	26	15.4 %
	No	143	84.6 %

Note. n = 169

For this sample, 61.5% of respondents remained in the experimental group having attended both simulation and classroom training, 11.2% attended simulation training only, 11.8% attended classroom training only, and 15.4% remained in the control group having had neither simulation nor classroom training (only survey). The impact of these two additional groups is addressed further under the model 2 discussion.

Research Question One

What variables impact the attitudes toward the police among college students?

To answer this first research question along with the seven different hypotheses mentioned earlier, multiple OLS regression was used. The independent variables included age, race, gender, major, socioeconomic status, direct and vicarious experience with the police, and perceived neighborhood condition.

Bivariate Correlations

Before performing OLS regression analysis, bivariate correlations were conducted to assess the relationship between attitudes toward the police and various independent variables. Bivariate correlation matrices also reveal the intercorrelation between explanatory variables and provide information about multicollinearity issues in OLS regression analysis (Meyers et al., 2005). Pearson's correlation coefficient (r) was used to examine the magnitude and direction of the relationship among these variables. Correlation coefficient can range from +1 (perfect linear positive relationship) through .00 (no linear relationship) to -1 (perfect linear negative relationship). In analyzing the Pearson's correlation coefficient, Cohen (1988) offered the following guidelines: small effect size = .10 to .29, medium effect size = .30 to .49, and a large effect size = .50 to 1.00, stating that "there is a certain risk inherent in offering conventional

operational definitions for those terms for use in power analysis in as diverse a field of inquiry as behavioral science” (p. 25). As a general rule of thumb, the closer r is to 1, the stronger the relationship between variables. The results from the bivariate correlations analysis are reported in Table 11.

Table 11

Bivariate Correlation Matrix

Scale items	1	2	3	4	5	6	7	8	9
1. Attitudes toward the police	1.00								
2. Perceived neighborhood crime	.364**	1.00							
3. Direct experience with the police	.477**	.238**	1.00						
4. Vicarious experience with the police	.472**	.183*	.430**	1.00					
5. Race	.377**	.233**	.178*	.363**	1.00				
6. Gender	.054	.254**	-.057	-.014	.039	1.00			
7. Major	.279**	.120	.132	.187*	.069	.022	1.00		
8. Household income	.178*	.275**	.067	.007	.223**	.077	-.006	1.00	
9. Age	.043	.108	.027	-.059	-.019	.211**	-.064	-.134	1.00

Note: * Correlation is significant at the .05 level (two-tailed)

** Correlation is significant at the .01 level (two-tailed)

When inspected closely, multiple independent variables had a significant correlation with the dependent variable, as illustrated in Table 11. Direct contact experience with the police was positively correlated with attitudes toward the police ($r = .477, p < .01$). This correlation reveals

a medium effect size, and it indicates that respondents who had a personal positive experience with the police were more likely to hold a more favorable attitude toward the police while those who had personal negative experiences with the police were more likely to hold higher negative attitudes toward the police. Respondents' vicarious experience with the police also were positively correlated with attitudes toward the police ($r = .472, p < .01$), meaning that respondents who vicariously experienced positive police interaction were more likely to hold a positive perception about the police and those who had negative vicarious experiences with the police were more likely to have negative attitudes toward the police.

Respondents' attitudes toward the police were positively correlated with one's perceived neighborhood crime ($r = .364, p < .01$). This correlation also represents a medium effect size, and it indicates that respondents who perceived a lower risk of neighborhood conditions during the day and night were more likely to hold a positive perception of the police compared to those respondents who had a higher risk of neighborhood crime conditions.

Race ($r = .377, p < .01$) is positively correlated with attitudes toward the police, but of concern is its weak or moderate correlation to four other independent variables (perceived neighborhood crime, direct experience with the police, vicarious experience with the police, and household income. A best fit for model one will be identified by determining if the model is a stronger predictor of attitudes toward police by omitting different correlated independent variables from the model.

Major ($r = .279, p < .01$) and socioeconomic status ($r = .178, p < .05$) also were positively correlated with attitudes toward the police while gender and age did not have a significant correlation with the dependent variable. These result offer only partial support for the seven

hypotheses as each variable was independently predicted to have a positive, statistically significant bivariate relationship with the dependent variable. The extent and direction of the correlations were expected, given that previous research has shown that direct and vicarious experience with the police, perceived neighborhood condition, race, and socioeconomic status can impact attitudes toward the police.

Ordinary Least Squares (OLS) Regression Assumption

Before conducting OLS regression, the assumptions diagnostics of OLS regression for the current study were checked and satisfied. OLS assumption diagnostics help to facilitate proper hypothesis testing and to ensure non-biased, desirable estimates of the sample to the population (Menard, 2002). Multicollinearity issues were first assessed through the bivariate correlation matrix (Table 11). Variance inflation factors (VIF) also indicated there were no issues with multicollinearity since the model produced VIF scores less than 4. For the normality assumption, a Normal Probability Plot (P-P Plot) of Regression Standardized Residual revealed there were no major deviations from normality for the model. Furthermore, a scatterplot of the standardized residuals was run and revealed no issues with homoscedasticity with the model. Overall, the preliminary analysis of the model indicated that there were no violations in the assumptions of linearity, normality, and homoscedasticity.

Ordinary Least Squares (OLS) Regression Analysis

Multiple Ordinary Least Squares (OLS) regression assumes linear association between variables. This type of statistical technique allows for an understanding of the relationship between the dependent variable and multiple independent variables (Lewis-Beck, 1980).

Multiple OLS regression analysis was used in the current study in order to offer a more complete

interpretation of the variables, and to answer the research question 1 and the hypotheses associated with that research question. The equation for multiple OLS regression is as follows:

Model	Equation
Model 1.	$y_{\text{attitudes toward the police}} = \beta_0 + \beta_{1x} \text{Age} + \beta_{2x} \text{Race} + \beta_{3x} \text{Gender} + \beta_{4x} \text{Personal Experience with the Police} + \beta_{5x} \text{Vicarious Experience with the Police} + \beta_{6x} \text{Perceived Neighborhood Crime} + \beta_{7x} \text{Socioeconomic Status} + \beta_{8x} \text{Major} + \varepsilon$

Figure 4. OLS regression model tested (Model 1).

Where:

y = the predicted value of the dependent variable (attitudes toward the police)

β_0 = slope of regression line (or the change in y that is associated with a change in x)

x_1 = age (in years)

x_2 = race (African American = 0, White, Hispanic, Asian, Other = 1 – Based on ANOVA)

x_3 = gender (female = 0, male = 1)

x_4 = personal experience with the police (range: -3 through 3)

x_5 = vicarious experience with the police (range: -3 through 3)

x_6 = perceived neighborhood crime (3 questions, 1 = very unsafe to 10 = very safe [3 – 30])

x_7 = socioeconomic status (8 categories, under \$10,000 through over \$100,000)

x_8 = major (other than CRIM = 0, CRIM = 1)

ε = the predicted error term

Table 12 displays the results of OLS regression testing of the hypotheses regarding the relationships between college students' attitudes toward the police and various demographic and attitudinal variables. In order to examine the effects of each variable related to attitudes toward the police, these variables (e.g., age, race, gender, perceived neighborhood crime, etc.) are regressed on the dependent variable while controlling for the other independent variables in the

model. The overall regression model was significant ($F = 15.243, p < .01$), indicating that at least one of the independent variables in the model also was significant ($t > 1.96$). This model accounted for approximately 43.3 % of the variance associated with attitudes toward the police.

Table 12

OLS Regression Model for Attitudes Toward the Police of the Total Respondents – Model 1

Variable	Attitudes Toward the Police			
	B	SE	Beta	t
Constant	46.235	15.258		3.030**
Individual factors				
Age	.586	.648	.056	.903
Gender	.100	2.944	.002	.034
Race	11.037	4.144	.177	2.663**
Household income	1.793	1.413	.082	1.269
Major (Criminology v. Non-Criminology)	8.138	2.896	.172	2.810**
Neighborhood context				
Perceived neighborhood crime	1.251	.510	.165	2.451*
Contact with the police				
Direct experience with the police	3.851	.938	.278	4.107**
Vicarious experience with the police	2.447	.759	.229	3.223**
Model <i>F</i>			15.243	
R ²			.433	

Note. $n = 169$

Note. *B* is unstandardized coefficient, *SE* is standard error, and *Beta* is standardized coefficient.

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

As suggested in the bivariate correlation matrix, for this sample the variables age and gender were not identified as statistically significant predictors of one's attitude toward the police. Also, household income, which was statistically significant in relation to ATP in the bivariate correlation was not statistically significant in the model. In the bivariate correlation matrix, household income also was correlated with race ($p < .01$) and perceived neighborhood

crime ($p < .01$), which when controlled for in the model minimized the impact of household income on ATP.

For this sample, in order of impact, direct experience with the police, vicarious experience with the police, race, major, and perceived neighborhood crime all had a statistically significant relationship with a respondent's ATP. This model indicates that research question one partially was substantiated with five hypotheses supporting the research question and two not supporting the research question (gender and household income).

The fact that one's personal and vicarious experiences are the best predictors of his or her attitudes and behaviors is understandable, whether it be toward the police or about other issues. Model one supports this assertion. In terms of experience with the police, the unstandardized coefficient for direct experience with the police was 3.851. For each one-unit increase (positive interaction) or decrease (negative interaction) in a respondent's direct experience with the police score, the respondent's ATP score increases or decreases by 3.85 points.

Vicarious experience with the police was measured identically to that of personal experience with the police. The unstandardized coefficient for vicarious experience with the police was 2.447; thus, for each one-unit increase (positive interaction) or decrease (negative interaction) in a respondent's direct experience with the police score, the respondent's ATP score increases or decreases by 2.45 points.

There was a significant statistical difference between race and one's ATP, with African Americans being less supportive of the police than the other races in the sample. The unstandardized coefficient for race, when controlling for the other variables, was 11.037. As respondents moved from African American (0) to White, Hispanic, Asian and those who self-

identified their race as “Others” (1), their ATP scores increased by 11.04 points.

There is a statistical difference between a respondent’s major and his or her ATP. Those identifying as criminology majors had significantly more ties with police officers and others in the criminal justice system than did those who were not criminology majors. Also, the fact that the respondent is a criminology major would suggest that s/he would support the occupational field for which they are preparing to enter. The unstandardized co-efficient for major, when controlling for the other variables, was 8.138. As respondents moved from non-criminology (0) to criminology (1), their ATP scores increased by 8.14 points.

Lastly, there was a statistical difference between perceived neighborhood crime and one’s ATP, with those living in higher crime areas or less safe neighborhoods being less supportive of the police, in that their ATP scores were lower than those who reported residing in safer areas. The unstandardized co-efficient for perceived neighborhood crime, when controlling for the other variables, was 1.251. For each one-unit increase in neighborhood safety score, the respondent’s ATP score increased by 1.25 points.

Overall, model one was supportive of research question one, in that five of the seven hypotheses were supported. Although the impact or strength of each variable was not predicted, personal and vicarious experience with the police were the strongest indicators of ATP, followed by major, race, and perceived neighborhood crime.

Research Question Two

Can college students’ attitudes and perceptions of the police be changed to a more positive outlook based on attending “shoot, don’t shoot” simulation training and the “use of deadly force” classroom training?

Pre-Test and Post-Test ATP Comparisons

Regarding the second research question, this study offered a pre-test and a post-test to determine the respondents' attitudes toward the police. Respondents assigned to what became the experimental group received police-related (“shoot, don’t shoot”) simulator training and the “use of deadly force” classroom training. The control group completed both surveys, but were afforded no training. During data entry, it was identified that multiple students in the experimental group had missed class on one of the training dates, expanding the experimental group to “those who received all training”, “those who received only simulator training” and “those who received only classroom training”. An ANOVA analysis of the pre-test scores indicated no statistical differences between these four groups.

Model 2 assessed the impact of various types of training as the independent variables with the difference in ATP scores (t2 score minus t1 score) being used as the dependent variable. As the impact of three forms of training were assessed, along with no training, each was dummy coded under “simulation and classroom training”, “classroom training only”, “simulation training only” or “no training”. “Simulation and classroom training”, “classroom training only”, and “no training” were entered into the model and “simulation training only” was omitted becoming the comparison variable. Model 2 (Table 13) displays the regression results for the training assessments.

Model 3 assessed the same dependent variable (t2 score minus t1 score) with the variables that were identified as significant in model one to determine if these variables impacted the difference in the pre-test versus post-test scores related to attitudes toward the police. The equation for multiple OLS regression for Model 2 and Model 3 are as follows:

Model	Equation
Model 2.	y the difference between pre-and post-test attitudes toward the police scores (the gain scores) = $\beta_0 + \beta_1x_{\text{Both Simulation and Classroom Training}} + \beta_2x_{\text{Classroom Training Only}} + \beta_3x_{\text{Neither Training}} + \varepsilon$
Model 3.	y the difference between pre-and post-test attitudes toward the police scores (the gain scores) = $\beta_0 + \beta_1x_{\text{Race}} + \beta_2x_{\text{Major}} + \beta_3x_{\text{Perceived Neighborhood Crime}} + \beta_4x_{\text{Personal Experience with the Police}} + \beta_5x_{\text{Vicarious Experience with the Police}} + \varepsilon$

Figure 5. OLS regression model tested (Model 2 and Model 3).

Model 2

Where:

y = the predicted value of the dependent variable (the change of attitudes toward the police between pre-and post-test)

β_0 = slope of regression line (or the change in y that is associated with a change in x)

x_1 = both simulation and classroom training

x_2 = attended classroom training only

x_3 = neither training

ε = the predicted error term

(simulation training only was omitted as the control variable)

Model 3

Where:

y = the predicted value of the dependent variable (the change of attitudes toward the police between pre-and post-test)

β_0 = slope of regression line (or the change in y that is associated with a change in x)

x_1 = race

x_2 = major

x_3 = perceived neighborhood crime

x_4 = personal experience with the police

x_5 = vicarious experience with the police

$\hat{\epsilon}_i$ = the predicted error term

Table 13

Attitudes Toward the Police Between Pre-Test and Post-Test – Model 2

Attitudes Toward the Police				
Model 2				
Variable	B	SE	Beta	t
Constant	-6.421	2.894		-2.219*
Interventions				
Attended classroom and simulation	8.133	3.148	.306	2.584*
Attended classroom training only	13.421	4.042	.335	3.321**
Had neither training (survey only)	4.883	3.808	.136	1.282
Model <i>F</i>		4.159		
<i>R</i> ²		.070		

Note. n = 169

Note. *B* is unstandardized coefficient, *SE* is standard error, and *Beta* is standardized coefficient.

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

Table 13 displays the results of OLS regression testing of the hypotheses regarding the relationships between college students' attitudes toward the police and various treatment effects. In order to examine the effects of each treatment related to attitudes toward the police, the effects were regressed on the dependent variable, comparing the impact of the various treatments to simulation training only, while controlling for the other forms of treatment in the model. The overall regression model was significant ($F = 4.159, p < .01$), indicating that at least one of the treatment effects in the model also was significant ($t > 1.96$). This model accounted for approximately 7% of the variance associated with attitudes toward the police. The VIFs for this

model ranged from 1.810 to 2.490, which suggests this model did not have multicollinearity issues.

Overall, the model suggests that “simulation training only” or FATS when compared to the other forms of training was ineffective in changing the respondents’ attitudes toward the police. Having no training (treatment) compared to having “simulation training only” while controlling for the other forms of training statistically was insignificant, but the model suggests that the change in scores for attitudes toward the police were approximately 5 points higher for those receiving no training when compared to those who received “simulator training only”.

The other two treatments “Attended Classroom Training Only” and “Attended both Classroom and Simulation Training” were statistically different from those who attended “Simulator Training Only”. The unstandardized co-efficient for “Attended Classroom Training Only”, compared to “Simulator Training Only” while controlling for the other treatments, was 13.421. The change in attitudes toward the police scores from time 1 (pre-test) to time 2 (post-test) for the respondents who attended only the classroom training increased by approximately 13 points compared to those who completed the firearms simulation training only while controlling for those who attended both training events and those who had attended no training events.

The unstandardized co-efficient for “Attended both Classroom and Simulation Training”, compared to “Simulator Training Only” while controlling for the other treatments, was 8.133. The change in attitudes toward the police scores from time 1 (pre-test) to time 2 (post-test) for the respondents who attended both the classroom training and the simulator training increased by approximately eight points compared to those who completed the firearms simulation training only while controlling for those who attended classroom training only and those who had

attended no training events.

Model 2 suggests that for this sample, simulator training only was the least effective training approach to increase attitudes toward the police. Classroom training only increased attitudes toward the police scores by approximately 13 points for that group when compared to the simulator training only group. Receiving both simulator training and classroom training increased attitudes toward the police scores by approximately eight points for that group when compared to the simulator training only group. When comparing those who attended no training events to those who only attended the firearms simulation event while controlling for those who attended both events and just the classroom training event, there was no statistical difference between pre- and post-test scores for attitudes toward the police. These unanticipated findings for this sample are addressed in greater detail in the discussion section.

Model 3 was generated as an internal validity assessment to verify that the changes in the attitude toward the police scores between time 1 and time 2 were not associated with demographic and attitudinal variables from Model 1. Model 1 variables (personal experience with the police, vicarious experience with the police, major, race, and socioeconomic status) accounted for 43% of the respondent's attitudes toward the police. If the change in attitudes toward the police is related to the training, none of the independent variables would have a statistically significant relationship with the dependent variable.

Table 14 displays the results of OLS regression testing of the statistically significant independent variables from model 1 in relation to change in attitudes toward the police between t1 and t2. The overall regression model was not significant ($F = .398, p > .05$), indicating that none of the independent variables had a statistically significant relationship with the dependent

variable ($t < 1.96$). This model accounted for approximately 1% of the variance associated with the change in attitudes toward the police.

Table 14

Attitudes Toward the Police Between Pre-Test and Post-Test – Model 3

Attitudes Toward the Police				
Model 3				
Variable	B	SE	Beta	t
Constant	-3.184	6.070		-.525
Individual factors				
Race	-1.639	2.998	-.046	-.547
Major (Criminology v. Non-Criminology)	-.061	2.129	-.002	-.029
Neighborhood context				
Perceived neighborhood crime	.383	.351	.090	1.091
Contact with the police				
Direct experience with the police	-.669	.686	-.086	-.976
Vicarious experience with the police	.160	.555	.026	.288
Model <i>F</i>			.398	
<i>R</i> ²			.012	

Note. $n = 169$

Note. *B* is unstandardized coefficient, *SE* is standard error, and *Beta* is standardized coefficient.

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

Summary

The purpose of this chapter was to examine college students' attitudes toward the police and the effects of "shoot, don't shoot" FATS training and the "use of deadly force" classroom training on respondents' attitudes toward the police. This was accomplished with a survey instrument, where respondents were asked about their opinions and views of police effectiveness, satisfactions with the police, and satisfactions with police service both before and after participation in simulation training or classroom training. For the first research question, OLS regression analysis was performed to identify the indicators associated with the respondents'

attitudes toward the police using different independent variables (age, race, gender, major, socioeconomic status, personal and vicarious experience with the police, and perceived neighborhood crime). For the second research question, OLS regression analyses were conducted to determine 1) which training method enhanced the respondents' attitudes toward the police and 2) whether the independent variables used in Model 1 were associated with the change in attitudes toward the police scores.

In the test of the first research question: personal and vicarious experience with the police, major, race, and perceived neighborhood crime variables were the strongest indicators of the respondents' attitudes toward the police. As prior research has identified, there was a statistical difference between race and attitude toward the police. White, Hispanic, Asian and those who self-identified their race as "Others" had higher attitude toward the police scores when compared to African Americans.

In addition, there was a statistical difference between college major and one's attitudes toward the police. Criminology students had, on average, higher attitudes toward the police scores when compared to students who are not criminology majors.

In terms of experience with the police, students who had a positive personal experience with the police had higher attitudes toward the police scores than those who had negative personal experiences with the police. As with personal experience, students who had a positive vicarious experience with the police had higher attitudes toward the police scores than those students who had negative vicarious experience with the police.

There also was a statistical difference between perceived neighborhood crime and one's attitudes toward the police. Respondents who believed they were safe being alone outside in their

neighborhood during the day and the night had higher attitudes toward the police scores than those who believed they were less safe in their neighborhoods. Socioeconomic status and gender were not significant predictors to attitudes toward the police in this study.

In the test of the second research question, “Attended Classroom and Simulation” and “Attended Classroom Training Only” were the strongest indicators of the positive difference between pre-test and post-test attitudes toward the police scores. Those respondents who participated in both the “use of deadly force” classroom training and “shoot, don’t shoot” FATS training or only attended the classroom training had significantly higher score differences between the pre-test and the post-test for attitudes toward the police. The impact of attending both training activities or only the classroom training had a positive influence on the respondents’ attitudes toward the police. An in-depth discussion of the implications of the results is presented in Chapter V.

CHAPTER V

DISCUSSION AND CONCLUSION

Positive attitudes toward the police by the public are important for the feasibility of police performance. People will have a favorable perception of the police when people feel satisfied with the police officers, police services, and police procedures. Studies have shown personal experiences with law enforcement officers and the criminal justice system, can impact both negatively and positively about how the public perceives the legitimacy of both the officers and the system. Additionally, these public perceptions can be shaped by both personal and vicarious experiences. However, the majority of Americans today have little or no direct (personal) experience with the police (Rosenbaum et al., 2005). People's perceptions about the police often are formed and developed through a process of information acquisition about others' experiences with the police (Schuck et al., 2008) or through media events to include the major news networks. Indirect (vicarious) experiences of with the police consists of stories about police encounters from friends and family, education or training, news media outlets, the internet, smartphones, and television programs. With the advancement of new technology today, the public's experience can be shared with others through multiple venues, which often are not fact checked nor offer all of the details about the police-citizen encounter.

Despite the significance of an individual's attitudes toward the police to foster a sense of community and security, there are surprisingly limited studies associated with public attitudes toward the police, especially among college students, and how their perceptions about the police were formed and how it might be changed. Therefore, the purpose of this study was twofold: to examine attitudes toward the police among college students and to determine whether positive

interaction with the police in class, along with attending “shoot, don’t shoot” FATS training could enhance college students’ attitudes and perception of the police. This chapter serves as an extension of the previous chapter, offering a more in-depth discussion of the results. Implications and limitations of the study also are discussed, followed by suggestions for future studies associated with this topic.

Discussion of Results

The findings acquired from a number of statistical analyses in this study help to offer a better comprehension of different predictors that affect attitudes toward the police among college students. Two research questions and several hypotheses were produced based on a review of the previous studies about perceptions of the police. Chapter IV focused on analyzing the data and reported the results regarding the research questions and different hypotheses in detail. This chapter offers an extension of those findings as they relate to supporting what already is known about this topic, offer perspectives about some of the unexpected findings, and summarize the results as they relate to public policy.

Attitudes Toward the Police

In terms of the first question, it was predicted that there would be a statistically significant difference on attitudes toward the police in terms of several factors among college students. The main factors included age, race, gender, major, socioeconomic status, personal and vicarious experience with the police, and neighborhood context. First, the results show that race, major, personal and vicarious experience with the police, and perceived neighborhood crime variables were key indicators associated with attitudes toward the police among college students. This finding is largely in line with what previously was identified in policing research in regards

to attitudes toward the police (Brown & Benedict, 2002; Cao et al., 1996; Weitzer & Tuch, 2006). Previous research has shown that individuals' perceptions about law enforcement depend on various predictors and context including demographic variables, the direct and indirect experience with the police, and neighborhood context (Brown & Benedict, 2002; Weitzer & Tuch, 2005).

Many of these past studies revealed that there is a statistically significant relationship between race and perception of the police. Given that the majority of the sample in this study were white who reported having never had negative personal contacts with the police and were of higher economic standing, the overall perception of the police were shown to be positive. Further, white, Hispanic, Asian and those who self-identified their race as "Others" had higher ATP scores when compared to African Americans. This finding supports the previous studies that minority community members, particularly African Americans, have less favorable perceptions of the police than other racial and ethnic groups (Frank et al., 1996; Weitzer, 1997; Weitzer & Tuch, 2005).

Of interest for this study is that although African Americans were an average of approximately 10 points lower than the other respondents on their ATP scores, they were impacted by their assigned treatment the same as the other respondents. Additionally, there appears to be multiple variables interacting that impacted the difference between the attitudes toward the police scores for African Americans and the other respondents. The African American respondents reported feeling less safe in their neighborhoods, had lower family incomes, and had more negative vicarious experiences with the police; although, many reported having positive personal experiences with the police. Although race is important in

understanding cultural and ethnic differences in attitudes toward the police, it cannot be assessed in a vacuum, as other sociological variables (safety of neighborhood, social economic status, and vicarious experiences), all impact one's perception of the police.

As would be expected, there was a significant statistical difference between undergraduate major and a respondent's attitudes toward the police. More specifically, those students who identified as criminology majors had statistically significant higher scores on the ATP scale than did non-criminology majors. This finding is interpreted as criminology majors are more likely exposed to classes and discussions related to police officers; had more positive contact with police officers in the criminology classrooms and career fairs; and reported having more associates than non-criminology majors, both of which had police officers in their family members or worked within the criminal justice system.

As personal and vicarious positive experiences with police officers were the two most significant indicators of higher scores on the ATP survey, it would seem logical that those respondents who have substantially more positive interaction with the police would rate them higher. Also, these findings are in line with previous studies about the relationship between criminal justice education and students' perceptions of criminal justice system. Finally, few students would select a field of study for which they did not have faith and trust in those whose pathway they are following.

It was predicted, as mentioned above, that there was a statistically significant relationship between contact experience with the police and attitudes toward the police. That is, respondents who had a positive direct and indirect interaction experience with the police had higher scores on the ATP survey. An issue is that most respondents had positive personal interactions with police

officers, with 130 reporting positive interactions with the police and 24 reporting negative interactions with the police. Vicariously, these numbers are reversed in that 65 respondents reported positive vicarious experiences with the police while 98 reported negative vicarious experiences with the police. It would appear that although our personal interactions with the police are mostly positive; our friends, colleagues, family members, and the media often only report to us the negative aspects of policing.

One issue related with the legitimacy of vicarious information is that of partial truth in that the police officer almost always is in the wrong when the story is received vicariously. The data for this study support this statement. Respondents do not appear to identify the disconnection between their personal experiences with the police and the vicarious information they receive about the police. For example, 5% of respondents reported physical contact with a police officer while 24% reported someone they knew told them about having physical contact with a police officer (vicarious experience). Additionally, the respondents reported 84.4% had positive personal experiences with police, compared to 15.6% reporting negative personal police experiences. Respondents reported the vicarious information they receive was 60.1% negative toward the police and 39.9% positive toward the police. These numbers are even more pronounced when the data are restricted to non-criminology majors or by race.

Non-criminology majors reported 21.4% had negative personal police experiences (7.1% for criminology majors) and 68.3% report negative vicarious police experiences (46.8% for criminology majors). For non-criminology majors, there is over a 300% increase in the negative police information received vicariously compared to the respondent's personal experience with the police. When restricting the data to African Americans, 25% report negative personal

experiences with the police (14.2% for whites, Hispanics, Asians, and others) and 96.0% report negative vicarious experiences with the police (53.6% for whites, Hispanics, Asians, and others). For African Americans, there is over a 380% increase in the negative police information received vicariously compared to the respondent's personal experience with the police. As vicarious information received about the police was the second-best indicator of attitudes toward the police, the amount of negative police information received vicariously is extremely problematic.

Lastly, there was a significant statistical difference between perceived neighborhood crime and attitudes toward the police among college students. Respondents who believed their neighborhoods were safe both during the day and the night had higher scores on the ATP scale compared to those respondents who believed their neighborhoods were less safe both during the day and the night. It is posited that the lower police scores in the neighborhoods perceived as less safe could be attributed to the police in those areas also deeming the communities as less safe. Thus, it becomes more crucial to build stronger police-resident interactions, which is deemed by the resident as a negative interaction.

The Changes in Attitudes Toward the Police Between Pre-Test and Post-Test

This research represents a first step towards examining the change of perception about the police based on firearms simulation training and the "use of deadly force" classroom training among college students. For the second question, it was predicted that there would be a statistically significant difference between pre-test and post-test reported attitudes toward the police based on training received compared to those who received no training. The results indicated that this was an accurate assessment for two of the three training programs (treatments). Both attending the "use of deadly force" classroom training and attending both

“shoot, don’t shoot” FATS training positively impacted individuals’ attitudes toward the police when compared against only attending the “shoot, don’t shoot” FATS training.

Contrary to expectations, the analysis of Model 2 indicated that only attending “shoot, don’t shoot” FATS training did not change respondents’ attitudes toward the police. The model suggested that having no training obtained similar results as having attended only the FATS training. For this training, the respondents completed a 15-minute weapons safety class focusing on loading and unloading the weapon as well as keeping the weapon pointed “down range” at all times. The weapons used were inert in that they were replicas of real weapons modified to discharge only compressed air. One officer operated the system while another officer demonstrated the interaction of the system as an example for the respondents.

Respondents were then presented several scenarios on the FATS so they could witness how fast decisions needed to be made by police officers, the stress of individuals not responding as directed, and the ramifications of making a bad decision. After each scenario, an after-action review (AAR) was completed about how the respondents handled the scenario, with input from all the respondents who were either participating or observing and the officers. Approximately 30 days after the completion of the FATS training, the respondents again were surveyed to determine if the training impacted their attitudes toward the police and duties of law enforcement officers. The results indicated that those who attended only the FATS training were not statistically different in their pre- and post-test ATP scores than those who attended no training.

Potentially, this finding may indicate that there is a differential impact for individual’s personal experience including digital experiences, as the nature of (scenario-based) simulation training provides temporal and social distance from the event and lacks an individual connection

to each respondent who participated in the training. Another explanation as to why the FATS has been effective in an older population to enhance police support is that this sample has been raised on electronic games that are very similar to video images generated by FATS. Younger respondents may not be capable of distinguishing between the real-life scenarios and implications associated with the FATS and those video games they have played where hitting “reset” permits one to start life anew.

The most effective training for increasing attitudes toward the police scores was identified as the classroom instruction about the “use of deadly force”. This training was provided by a Municipal Police Officer Education and Training Commission (MPOETC) certified trainer. As the training was presented in the respondents’ academic classrooms, it was interactive and according to many in attendance, new material not heard in the media about when the “use of deadly force” is authorized. Many students responded positively to questions about a suspect having to be armed prior to a police officer having justification to use deadly force.

The classes lasted approximately one hour and focused on various laws and U.S. Supreme Court cases and Commonwealth of Pennsylvania cases related to the “use of deadly force” by police officers. The training focused not on the fact that an individual is armed or not armed, but at what point does the officer fear for his or her life or the life of another person. Examples were offered to show how the media and even politicians focus on whether an individual was armed instead of what was occurring that could have placed the officer in fear of life.

The data indicate that this training was well received regardless of race, gender, or major of the respondent. The classes were interactive and not a lecture permitting the respondents to

ask questions and question different events they had heard about in the media or from others. The data would suggest that law enforcement agencies should educate the general public about the rules of engagement (ROE) for police officers prior to police involved shooting events. This educational awareness could both reduce shooting incidents involving police and better educate the public about the laws related to the justifiable “use of deadly force” by law enforcement officers.

The third treatment (training) was comprised of both the FATS and the “use of deadly force” class. The data suggest that this treatment effectiveness fell between that of the “use of deadly force” class only and no training. Again, the FATS training appeared to wash out the impact of the classroom training although the combined treatment did have a statistically significant impact on increasing the attitudes toward the police scores in a positive direction. Initially, this combined treatment model was anticipated to be the most effective in enhancing support for the police. It is recommended that this approach not be abandoned as its partial effectiveness could be the result of the age of this sample and this training could be extremely effective for an older population.

Implications

A plethora of research about attitudes toward the police has been conducted over the past four decades. Many studies have shown that perception of the police can be influenced by various key factors. Through a quasi-experimental design, the current study assessed a number of variables that can affect college students’ attitudes toward the police.

The findings presented here have a number of significant policy implications. First, this study supports that college students’ perceptions can be influenced by several key factors

including demographic, contact experience with the police (personal and vicarious), and neighborhood context. As mentioned earlier, this is in line with published research about the perceptions of the law enforcement (Frank et al., 1996; Miller & Davis, 2008; Reisig & Parks, 2000; Schuck et al., 2008; Skogan, 2005; Weitzer & Tuch, 2005).

More related to public policy, this study suggests that students' perceptions of the police can be changed more positively based on the receipt of accurate, factual information (e.g., attending the "use of deadly force" classroom training). This type of communication can provide the public with information that often is not disseminated, and causes additional controversy and civil unrest when the law is appropriately applied. Providing the public with accurate information about the police in a classroom or a public forum, especially in terms of the "use of deadly force", could have an influence on those in attendance far past their circle of family and friends.

Transmission of indirect contact experiences with the police is not limited to social media or social network. Importantly, it should be noted that criminology educators should be aware of their influence on college students. In addition, for police departments, they should consider taking a more proactive approach to informing the public instead of reacting after a major event in an attempt to get ahead of the media. Also, it is important for police departments through community meetings to offer training that focuses on changing the community members' attitudes, especially about vicarious information about police conduct. This type of information exchange would increase respect and the perception of fair treatment by the police in both the community and the law enforcement agencies within the community. In order to improve the relationship between the community and the police, educating both parties is important so that they can reduce antagonism.

Limitations and Directions for Future Research

Several limitations are associated with the current study. The first limitation pertains to generalizability of its findings. The sample of respondents used in this study was comprised mainly of those who self-identified as white than other races including Asian, African American, and Hispanic. This racial skewness of the sample would cause issues for generalization to a larger population outside this university. Future studies should take into account this issue by targeting different racial groups for recruitment while focusing both on college students and the local community members. In addition, the focus of this dissertation research was college students in rural Western Pennsylvania. Accordingly, the findings are not fully representative of college students at all universities across the country. Future research should consider the inclusion of college students in urban and rural areas to compare the extent of their differences and similarities about attitudes toward the police.

Another limitation related to the manner in which personal and vicarious experience with the police was measured in the current study. The pre-test and post-test survey questionnaire were utilized to measure whether their direct or indirect contact experience with the police was positive or negative. There were six questions related to the respondent's personal and vicarious experience with the police. It should be noted that these questions may not be the best indicators of interaction with the police since some students responded that their experience, either personal or vicarious, had been both positive and negative. Also, there should be other types of questions that include to assess the impact of social media and the news media on vicarious experience with the police. As noted, in many incidents involving police shootings, the main focus of both social media and the news media is that the individual was unarmed; thus, presenting a false

image of when a police officer is justified to use deadly force. There is the possibility that some of students' responses may not be accurate based on misinterpreting the question. Initially, prior surveys about measuring attitudes toward the police were used to guide this study and, were listed to strengthen the feasibility of the current study, but future research should take into account this issue by addressing the ambiguity of the survey questions in order to create a better understanding of the main variables that can influence perceptions of the police among college students.

Conclusion

This research began by asking if participating in a “shoot, don’t shoot” FATS training and the “use of deadly force” classroom training impacted individuals’ attitudes toward the police. The current study finds some interesting evidence that attending the “use of deadly force” classroom training impacts perceptions of the police. Even more important is that with accurate information, public opinion about support for law enforcement can be swayed in a positive manner. The findings suggest that the greatest impact was found in attending classroom training, which generated more favorable attitudes toward the police. In contrast, attending “shoot, don’t shoot FATS training only” had a negative impact on perceptions of the police while the results showed no statistically significant difference between this training and receiving no training.

Over the several decades, attitudes toward the police has been extensively studied through the use of many samples, statistical analyses, and research designs. The literature is replete with research that have offered considerable contributions to the study of perceptions about the police. This research provided further clarification of the variables that can enhance the deeper understanding of students’ attitudes and opinions about the police. Nevertheless,

additional studies are required to provide further clarification regarding why some college students have different perceptions about the police and what factors contribute to these attitudes. Research also must determine how best their perceptions about police can be moved in a more positive direction. This study can serve as a framework for future studies on attitudes toward the police.

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Appendix A

Letter of Access

Dear Professor,

My name is Selye Lee, and I am a doctoral candidate in the Department of Criminology and Criminal Justice. Currently, I am gathering my dissertation data for analysis. My dissertation is entitled, "Revisiting attitudes toward the police: The impact of law enforcement simulations and education on college students".

To enhance the representativeness of the sample, classes were randomly selected from all the undergraduate courses offered at IUP this spring that have a focus on law enforcement, policing, social issues related to policing, ethics, constitutional law, media coverage of police incidents, and/or policy. Your class has been randomly selected. I am requesting permission to survey your class.

This process will include distributing the survey to the students, asking them to read informed consent form, and then asking them to complete the survey. It will take approximately 15 minutes. Later in the semester a guest lecturer (IUP tenured faculty member) will discuss policing issues related to police shootings during one of your class periods. A second class period will be used to have the students use a firearms simulator used for training police officers (Shoot, Don't Shoot scenarios). A second survey (approximately 15 minutes) will be completed by the class approximately four to six weeks after the simulator training. Student participation in this project is completely voluntary. This research project was approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

If you will allow me to administer the surveys in your class and permit the guest lecturer and the simulation training (two class periods), please let me know when it is convenient. Thank you in advance for your time and assistance.

Sincerely,

Selye Lee
S.Lee30@iup.edu
724-357-1247
G-13, Wilson Hall

Appendix B

Informed Consent Form

You are invited to participate in this research study. The following information is provided in order to help you to make an informed decision whether or not to participate. If you have any questions, please do not hesitate to ask. You are eligible to participate because you are a student at Indiana University of Pennsylvania. Your class was randomly selected to participate in this study. However, you must be at least 18 years old to participate in this study. If you are under 18, you cannot participate in this study. Do not take the survey, please write “withdraw” on the front of your survey, sit quietly, and submit the survey when other students have completed it.

The purpose of this study is to examine college students’ attitudes toward police. The information gained from this study will help the researcher better understand college students’ opinions about police in our society. You are asked to complete this survey. The participation in this study will require approximately 15 minutes of your time. This study involves no risk to you and all answers will be kept completely anonymous.

If you already have completed this survey in another course this semester, do not participate again. Please write “withdraw” on the front of your survey, sit quietly, and submit the survey when other students have completed it.

Your participation in this study is voluntary. You are free to decide not to participate in this study or to withdraw at any time without adversely affecting your relationship with the investigators or IUP. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you choose to participate, you may withdraw at any time by writing the word “withdraw” on the front of your survey and submitting it when other students have completed the survey. Upon your request to withdraw, all your survey responses will be destroyed. If you choose to participate, all information will be anonymous. Your responses will be considered only in combination with those from other respondents. The information obtained in the study may be published in scientific journals or presented at scientific meetings.

If you choose to participate in this study, your consent is implied by completing and returning the survey. Please keep this Informed Consent Form for your own files. Thank you for your time and anticipated participation in this study. If you have any questions, please feel free to contact me or my dissertation advisor, Dr. John Lewis.

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Appendix C

Survey Instrument I (Pre-Test)

Pre-Test

Cover sheet: Please complete and leave attached.

After completing this cover sheet, please complete the front and back of the attached survey.

Once you have completed the survey please bring it to the front of the classroom and place it in the box provided.

Note: A cover sheet is required for this study to aid in confidentiality as you will be surveyed twice during this semester. The research design requires that the researcher be able to match your two surveys even though the surveys were completed on separate dates. Once the surveys are matched, this cover sheet will be separated from both surveys ensuring the anonymity of your responses.

Name of high school in senior year, 1st and 2nd letter _____

Mother's first name, 1st and 2nd letter _____

Number representing the month you were born _____

Number of older brothers and sisters living or deceased _____

Birth year: circle either even number or odd number?

1st letter of first name: circle either A–M or N–Z?

Three or four letter identification for your primary major _____

Attitudes About the Police

Do not complete this survey if you are under the age of 18. Though your perceptions remain important, regulations prohibit our solicitation of your responses without parental consent.

Instructions: Carefully read each question, answering them as accurately as possible.

On a scale from 1 – 10, with 1 being “strongly disagree” and 10 being “strongly agree”, please respond to statements 1 - 14.

1. In general, I trust the police. _____
2. I have respect for the police. _____
3. The police are helpful. _____
4. The police are respectful towards citizens. _____
5. The police are professional. _____
6. Police provide an important service to the community. _____
7. Police use an appropriate amount of force when enforcing the law. _____
8. The police protect me from crime. _____
9. The police are friendly. _____
10. The police are prompt when responding to crime. _____
11. The police are fair. _____
12. The police prevent crime. _____
13. The police solve crime. _____
14. Overall, I am satisfied with the police. _____

On a scale from 1 – 10, with 1 being “very unsafe” and 10 being “very safe”, please answer questions 15 - 17.

15. How safe do you feel being alone outside in your neighborhood during the day? _____
16. How safe do you feel being alone outside in your neighborhood during the night? _____
17. How serious a problem is crime in your neighborhood? _____

Please complete the questions on the reverse side

Please answer questions 18 – 23 by circling the appropriate response.

18. When you were stopped by the police was the experience generally
Positive Negative Never stopped by the police
19. When you talked to the police was the conversation generally
Positive Negative Never talked to the police
20. Have police ever used excessive force against you?
Yes No Never stopped by the police
21. When you hear from friends about getting stopped by the police was their experience
Positive Negative Never stopped by the police
22. When you hear from friends about their conversations with the police are the stories
Positive Negative Never talked to the police
23. Have police ever used excessive force unnecessarily against anyone you personally know?
Yes No Never stopped by the police

Please answer questions 24 – 27 by checking the appropriate line or lines.

24. Race (check one or more lines)

- | | |
|---|---|
| <input type="checkbox"/> African American or Black | <input type="checkbox"/> Hispanic, Latino, or Spanish |
| <input type="checkbox"/> American Indian or Alaska Native | <input type="checkbox"/> Native Hawaiian/Other Pacific Islander |
| <input type="checkbox"/> Asian | <input type="checkbox"/> White |
| <input type="checkbox"/> Other | |

25. Age: Age in years at your last birthday _____

26. Gender (please circle one) Female Male

27. Which best identifies the annual family income for the household you were raised in

- | | | |
|---|--|--|
| <input type="checkbox"/> less than \$10,000 | <input type="checkbox"/> \$10,000 - \$20,000 | <input type="checkbox"/> \$20,001 - \$30,000 |
| <input type="checkbox"/> \$30,001 - \$40,000 | <input type="checkbox"/> \$40,001 - \$50,000 | <input type="checkbox"/> \$50,001 - \$60,000 |
| <input type="checkbox"/> \$60,001 - \$100,000 | <input type="checkbox"/> over \$100,000 | |

Thank you for your participation

Appendix D

Survey Instrument II (Post-Test)

Post-Test

Cover sheet: Please complete and leave attached.

After completing this cover sheet, please complete the front and back of the attached survey.

Once you have completed the survey please bring it to the front of the classroom and place it in the box provided.

Note: A cover sheet is required for this study to aid in confidentiality as you will be surveyed twice during this semester. The research design requires that the researcher be able to match your two surveys even though the surveys were completed on separate dates. Once the surveys are matched, this cover sheet will be separated from both surveys ensuring the anonymity of your responses.

Name of high school in senior year, 1st and 2nd letter _____

Mother's first name, 1st and 2nd letter _____

Number representing the month you were born _____

Number of older brothers and sisters living or deceased _____

Birth year: circle either even number or odd number?

1st letter of first name: circle either A-M or N-Z?

Three or four letter identification for your primary major _____

Attitudes About the Police

Do not complete this survey if you are under the age of 18. Though your perceptions remain important, regulations prohibit our solicitation of your responses without parental consent.

Instructions: Carefully read each question, answering them as accurately as possible.

On a scale from 1 – 10, with 1 being “strongly disagree” and 10 being “strongly agree”, please respond to statements 1 - 14.

1. In general, I trust the police. _____
2. I have respect for the police. _____
3. The police are helpful. _____
4. The police are respectful towards citizens. _____
5. The police are professional. _____
6. Police provide an important service to the community. _____
7. Police use an appropriate amount of force when enforcing the law. _____
8. The police protect me from crime. _____
9. The police are friendly. _____
10. The police are prompt when responding to crime. _____
11. The police are fair. _____
12. The police prevent crime. _____
13. The police solve crime. _____
14. Overall, I am satisfied with the police. _____

On a scale from 1 – 10, with 1 being “very unsafe” and 10 being “very safe”, please answer questions 15 - 17.

15. How safe do you feel being alone outside in your neighborhood during the day? _____
16. How safe do you feel being alone outside in your neighborhood during the night? _____
17. How serious a problem is crime in your neighborhood? _____

Please complete the questions on the reverse side

Please answer questions 18 – 29 by circling the appropriate response.

18. When you are stopped by the police is the experience generally
Positive Negative Never stopped by the police
19. When you talk to the police is the conversation generally
Positive Negative Never talked to the police
20. Have police ever used excessive force against you?
Yes No Never stopped by the police
21. When you hear from friends about getting stopped by the police was their experience
Positive Negative Never stopped by the police
22. When you hear from friends about their conversations with the police are the stories
Positive Negative Never talked to the police
23. Have police ever used force unnecessarily against anyone you personally know?
Yes No Never stopped by the police
24. Do you have a family member, a relative, or a close friend
who is a police officer? Yes No
25. Do you have a family member, a relative, or a close friend
who works in the criminal justice system (police, courts, corrections)? Yes No
26. Do you have a family member, a relative, or a close friend
who currently is or has previously been incarcerated? Yes No
27. Did you attend the class addressing the use of deadly force in the classroom? Yes No
28. Did you attend the simulation training for Shoot, Don't Shoot? Yes No
29. Did you complete the first survey, similar to this one? Yes No

Thank you for your participation